ANALOG DEVICES

想像を超える可能性を

AHEAD OF WHAT'S POSSIBLE™

高精度製品／シグナル・チェーン ソリューション

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目次

アナログ・デバイセズ高精度テクノロジーグループ責任者からのご挨拶

高精度テクノロジーのパートナーとしてアナログ・デバイセズ社をお選びいただき、重ねて御礼申し上げます。

業界、そして世界がかつてない速度で変化している中、アナログ・デバイセズのみならず、お客様も様々な課題に直面しています。アナログ・デバイセズの50年以上にわたる発展は、現実世界とデジタルの世界をつなぐリーダーとなるという思考の下、イノベーション、お客様との協力関係、絶えず変化するこの業界での継続的発展を基盤としており、高精度テクノロジーグループは今後もこの理念を持って活動していきます。

変化に対応するための高性能、高精度シグナル・チェーン・ソリューションのサポート

今日では、計測器、産業、ヘルスケア、通信、データ・センター、オートモーティブ、コンスーマ、エネルギー、セキュリティ、IoTなど、あらゆる市場でかつてない同時並行的な変化が起きており、ユビキタス・センシングというメガトレンドと合わせて、高精度テクノロジーに対する圧倒的な需要を喚起しています。その中で重要なことは、使いやすく、性能に重点を置いた高精度テクノロジー・ソリューションを一手に供給できるパートナーに対する顧客からの大きな要望もあります。充実したシグナル・チェーン・ソリューションで顧客の課題を解決できるだけでなく、市場投入までの時間を短縮し、成功を最大化できるパートナーが求められているのです。アナログ・デバイセズの高精度テクノロジーは、世界が発展し続ける中、お客様が従来からの課題のみならず、増え続ける新たな課題にもいち早く対処できるようにサポートし続けます。

最新版の高精度テクノロジー・セレクション・ガイドには、より幅広く多様になった各種の高性能シグナル・チェーン・ソリューションを掲載しています。本書でご紹介するのは、アナログ・デバイセズが提供する高精度テクノロジー・シグナル・チェーン・ソリューションのごく一部ですが、世界中でお客様が抱えるあらゆる課題にアナログ・デバイセズの高精度テクノロジーが提供できる価値がますます高まったことは、十分ご理解いただけるでしょう。

2社の製品開発の専門知識がひとつに

旧リニアテクノロジー社との統合により、アナログ・デバイセズが提供する高精度製品は高精度コンバータ（ADCおよびDAC）、アンプ、乗算器および除算器、コンパレータ、高精度変調器／復調器、センサー、リファレンス、スイッチ、マルチプレクサをはじめ15,000種類以上となりました。アナログ・デバイセズは、常に世界の高性能・高精度ソリューション業界をリードしており、今後も製品の拡充は続きます。2社の高精度シグナル・チェーン・ソリューションを統合した本書をご利用になれば、アナログ・デバイセズの高性能製品の最新情報を簡単に調べることができ、シグナル・チェーン設計に最適な最新部品を見つけていただくことができます。アナログ・デバイセズの製品ポートフォリオは非常に幅広いため、すべての高精度部品を記載することはできませんでした。入手可能なすべての製品についてお知りになりたい場合や、必要な部品が本ガイドに記載されていない場合は、*analog.com/jp* にアクセスしてください。

新製品のチェックが簡単に

今後の設計に役立つ最新情報として、「新製品リスト」および注目すべき最新の部品を特集したページも盛り込んでいます。

ツールとサポート

設計プロセス全体を簡素化するために、このガイドでは、アナログ・デバイセズの高性能、高精度製品の紹介だけでなく、無料設計ツール、ラピッド・プロトタイピング・プラットフォーム、Circuits from the Lab® リファレンス・デザイン、EngineerZone® テクニカル・フォーラムなど、豊富な設計・開発リソースも提供しています。

業界にとっても、アナログ・デバイセズにとってもエキサイティングな時代が来ています。アナログ・デバイセズの豊富なシグナル・チェーン・ソリューションをエンドマーケット・ソリューションの差別化にご利用いただくことで、当社の革新的な技術ソリューションがお客様の製品開発課題の解決に寄与できることを光栄に思います。

敬具

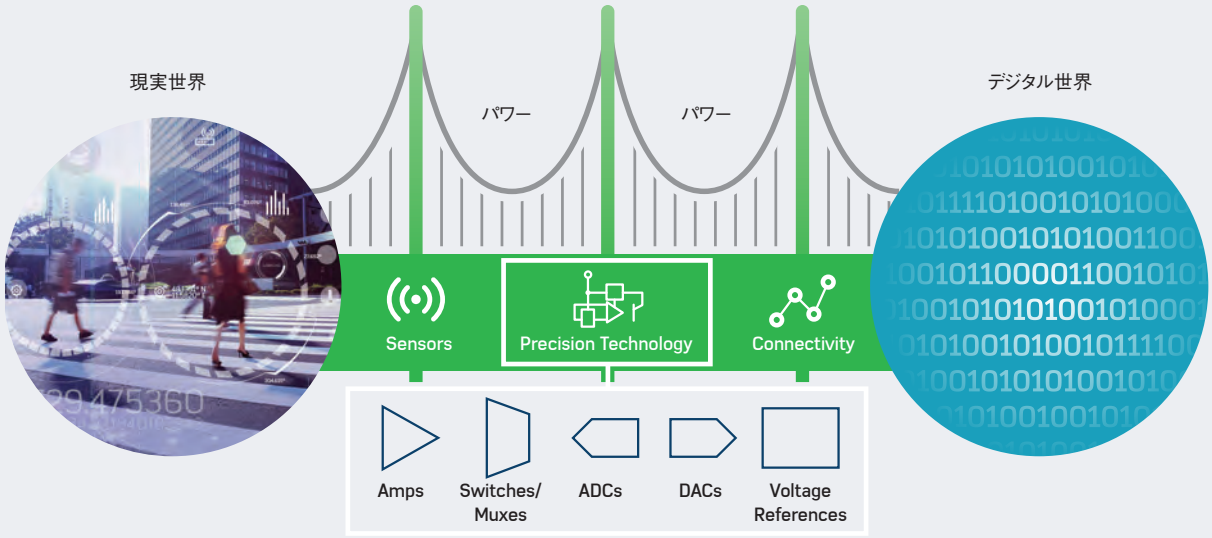
Leo McHugh
高精度テクノロジーグループ ヴァイス・プレジデント

はじめに

高精度シグナル・チェーン・ソリューション

オペアンプ、高精度コンバータ（ADCおよびDAC）、デジタル・ポテンショメータ、温度センサー、電圧リファレンス、スイッチ、マルチプレクサといった最も幅広いポートフォリオを持つアナログ・デバイセズは、お客様の最も厳しい設計課題の解決を手助けします。アナログ・デバイセズは、試験および計測、産業用オートメーション、オートモーティブ、ヘルスケア、航空宇宙および防衛、通信など、さまざまなアプリケーションのソリューションに取り組むお客様の設計ニーズに対応する、15000種類を超える高精度リニアICを提供しています。これらの包括的な製品ラインとあわせて、優れたカスタマー・サポートや、無料設計ツール、Circuits from the Lab実用回路集、EngineerZoneテクニカル・フォーラムなど、豊富な高精度製品の設計・開発リソースを利用することができます。

未来への高精度技術



現実世界とデジタル世界をつなぐ

アナログ・デバイセズの高精度ソリューションは、計測と保護、コンディショニングとアクイジション、合成と駆動が求められる垂直市場セグメントのあらゆるアプリケーションで使用されています。

計測

ヘルスケア

コンスーマ

オートモーティブ

エネルギー&産業

航空宇宙&防衛

通信

製品一覧

オペアンプ

高精度（V_{os} < 1mV、TCV_{os} < 2μV/°C）アンプ / Precision (V_{os} <1 mV and TCV_{os} <2 μV/°C) Amplifiers

Part Number	Number of Amps	V_{os} (max) (μV)	V_{os} TC (typ) (μV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
ADA4625-1	1	80	0.2	0.075	18	48	3.3	0.15	4	5	36	8-lead SOIC-EP	EAR99
LT1997-2	1	80	0.5	5	1	0.75	37	0.9	0.35	3.3	50	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
LTC6260	4	400	1.5	75	1.3	0.24	38	2	0.02	1.8	5.25	10-lead MSOP	EAR99

ゼロドリフト・アンプ / Zero-Drift Amplifiers

Part Number	Number of Amps	V_{os} (max) (μV)	V_{os} TC (max) (μV/°C)	I_{BIAS} (max) (pA)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LTC2064	2	5	0.02	20	0.02	0.004	220	4.6	0.001	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
LTC2066	1	5	0.02	35	0.1	0.018	80	1.7	0.008	1.7	5.25	5-lead SOT-23, 6-lead SC70	EAR99
LTC2067	2	5	0.02	35	0.1	0.018	80	1.7	0.008	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
LTC2058	2	5	0.025	100	2.5	1.6	9	0.2	0.95	4.75	36	12-lead MSOP-EP, 8-lead SOIC-EP	EAR99

低ノイズ（V_{NOISE} ≤ 5nV/√Hz）アンプ / Low Noise (V_{NOISE} ≤5 nV/√Hz) Amplifiers

Part Number	Number of Amps	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	V_S Span (min) (V)	V_S Span (max) (V)	I_Q/Amp (typ) (mA)	V_{os} (max) (μV)	V_{os} TC (max) (μV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	Package	ECCN Code
ADA4625-1	1	3.3	0.15	5	36	4	80	2.1	0.075	18	48	8-lead SOIC-EP	EAR99
LTC2058	2	9	0.2	4.75	36	0.95	5	0.025	0.1	2.5	1.6	12-lead MSOP-EP, 8-lead SOIC-EP	EAR99
LT6274	1	10	1	9	32	1.6	400	10	500	40	2200	5-lead SOT-23	EAR99

低消費電力（I_Q/Amp < 0.5mA）アンプ / Low Power (I_Q/Amp <0.5 mA) Amplifiers

Part Number	Number of Amps	I_Q/Amp (typ) (μA)	Shut-down	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	I_{BIAS} (max) (nA)	V_{os} (max) (μV)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LTC2064	2	1.4	Yes	0.02	0.004	0.02	5	220	4.6	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
LTC2066	1	7.5	Yes	0.1	0.018	0.035	5	80	1.7	1.7	5.25	5-lead SOT-23, 6-lead SC70	EAR99
LTC2067	2	7.5	Yes	0.1	0.018	0.035	5	80	1.7	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
LTC6260	4	20	No	14.3	0.24	75	400	38	2	1.8	5.25	10-lead MSOP	EAR99
LT1997-2	1	350	Yes	11	0.75	5	80	37	0.9	3.3	50	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99

低入力バイアス電流（I_{BIAS} < 75pA）アンプ / Low Input Bias Current (I_{BIAS} <75 pA) Amplifiers

Part Number	Number of Amps	I_{BIAS} (max) (pA)	V_{os} (max) (μV)	V_{os} TC (max) (μV/°C)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LTC2064	2	20	5	0.02	220	4.6	0.02	0.004	0.001	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
LTC2066	1	35	5	0.02	80	1.7	0.1	0.018	0.008	1.7	5.25	5-lead SOT-23, 6-lead SC70	EAR99
LTC2067	2	35	5	0.02	80	1.7	0.1	0.018	0.008	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
ADA4625-1	1	75	80	2.1	3.3	0.15	18	48	4	5	36	8-lead SOIC-EP	EAR99
LTC2058	2	100	5	0.025	9	0.2	2.5	1.6	0.95	4.75	36	12-lead MSOP-EP, 8-lead SOIC-EP	EAR99

製品一覧

過電圧保護／Over-the-Top（OVP/OTT）アンプ / Overvoltage Protection/Over-the-Top (OVP/OTT) Amplifiers

Part Number	Number of Amps	Overvoltage Protection/ Over-the-Top	Rail to Rail	V_s Span (min) (V)	V_s Span (max) (V)	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	I_Q/Amp (typ) (mA)	Package	ECCN Code
LT1997-2	1	OTT	Both	3.3	50	80	1.5	55	1	0.75	37	0.9	3.85	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99

高電圧（V ≥ 30V）高精度アンプ / High Voltage (V ≥30 V) Precision Amplifiers

Part Number	Number of Amps	V_s Span (min) (V)	V_s Span (max) (V)	I_Q/Amp (typ) (mA)	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	Package	ECCN Code
LT1997-2	1	3.3	50	0.35	80	1.5	5	37	0.9	1	0.75	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
LTC2058	2	4.75	36	0.95	5	0.025	0.1	9	0.2	2.5	1.6	12-lead MSOP-EP, 8-lead SOIC-EP	EAR99
ADA4625-1	1	5	36	4	80	2.1	0.075	3.3	0.15	18	48	8-lead SOIC-EP	EAR99
LT6274	1	9	32	1.6	400	10	500	10	1	40	2200	5-lead SOT-23	EAR99

高速（BW ≥ 50MHz）アンプ / High Speed (BW ≥50 MHz) Amplifiers

Part Number	Number of Amps	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (typ) (nA)	V_{os} (typ) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LT6274	1	40	2200	100	150	10	1.6	9	32	5-lead SOT-23	EAR99

高速（BW ≥ 50MHz）、低ノイズ・アンプ / High Speed (BW ≥ 50 MHz), Low Noise Amplifiers

Part Number	Number of Amps	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (typ) (nA)	V_{os} (typ) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LT6274	1	40	2200	100	150	10	1.6	9	32	5-lead SOT-23	EAR99

ADCドライバ／差動アンプ / ADC Drivers/Differential Amplifiers

Part Number	Number of Channels	BW –3 dB (typ) (MHz)	Gain Set	Gain (min) (dB)	Gain (max) (dB)	V_{NOISE} Density (typ) (nV/√Hz)	Distortion 2nd Harmonic (typ) (dBc)	Distortion 3rd Harmonic (typ) (dBc)	I_s (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Input type	Package	ECCN Code
ADA4945-1	1	200	Resistor			6.2	–140	–148	4	2.7	11	Differential	16-lead LFCSP (1.6 mm EP)	EAR99

差電圧アンプ / Difference Amplifiers

Part Number	Number of Amps	Common-Mode In (min) (V)	Common-Mode In (max) (V)	Gain (min) (V/V)	Gain (max) (V/V)	BW—Low Gain (typ) (MHz)	Slew Rate (typ) (V/µs)	I_Q/Amp (max) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Input Beyond Supply	Package	ECCN Code
LT1997-2	1	–255	255	0.1	0.25	1	0.75	0.4	3.3	50	Yes	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
LT1990-10	1	–250	250	10	10	0.1	0.4	0.18	2.4	36	No	SOIC, 150 mil 8-lead MSOP	EAR99
LT6376	1	–230	230	10	10	0.16	4.1	0.4	3.3	50	Yes	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99

電流検出アンプ / Current Sense Amplifiers

Part Number	Common-Mode In (min) (V)	Common-Mode In (max) (V)	V_{os} (max) (mV)	Gain (V/V)	BW –3 dB (typ) (MHz)	V_s Span (min) (V)	V_s Span (max) (V)	V_{in} Direction	Filter Option	Automotive	Package	ECCN Code
LTC6115	5	100	0.5	Resistor set	0.5	5	100	Unidirectional	No	Yes	12-lead MSOP	EAR99

製品一覧

高精度ADC

µModuleデータ・アクイジション・システム / µModule Data Acquisition Systems

Resolution	Input Type	Max Output Data Rate		
		≤500 kSPS	≤1 MSPS	≤2 MSPS
18-bit	Fully differential			ADAQ4003

同時サンプリングADC（高分解能） / Simultaneous Sampling ADCs (High Resolution)

Input Type	Channels	≤200 kSPS/Channel	≤400 kSPS/Channel	≤700 kSPS/Channel	≤1 MSPS/Channel	≤2 MSPS/Channel	≤5 MSPS/Channel
24-Bit							
Fully differential/ single-ended	16	AD4111 AD4112					
16-Bit							
Fully differential	2				AD7903		AD7380

同時サンプリングADC / Simultaneous Sampling ADCs

Input Type	Channels	<150 kSPS/Channel	≤400 kSPS/Channel	≤1 MSPS/Channel	≤2 MSPS/Channel	≤5 MSPS/Channel
14-Bit						
Fully differential	2			AD7264		AD7381

絶縁型シグマ・デルタ・モジュレータ / Isolated Σ-Δ Modulators

Channels	Interface	Integrated	Isolated Working Voltage		
			400 V rms	750 V rms Reinforced	884 V rms
1	CMOS			ADuM7701 ADuM7701-8	

高精度DAC

電流ソース／シンクDAC / Current Source-Sink DACs

		Interface	Channels	Current Sink		Current Source	
				Part Number	Output Range	Part Number	Output Ranges
Resolution	16-Bit	SPI	5			LTC2662-16 LTC2652-16	Software selectable all channels: 3.125 mA, 6.25 mA, 12.5 mA, 25 mA, 50 mA, 100 mA, 200 mA, 300 mA
	14-Bit	SPI	6			AD5770R	Software selectable all channels: 3.125 mA, 6.25 mA, 12.5 mA, 25 mA, 50 mA, 100 mA, 200 mA, 300 mA, and a switch to V_{ss} to sink current
	12-Bit	SPI	5			LTC2662-12 LTC2652-12	Software selectable all channels: 3.125 mA, 6.25 mA, 12.5 mA, 25 mA, 50 mA, 100 mA, 200 mA, 300 mA

電圧リファレンス

高安定電圧リファレンス / High Stability Voltage References

Part Number	Output Voltage (V)	Tempco (ppm/°C) (max)	Initial Accuracy (%) (max)	Supply Voltage Range (V)	ISY (Max)	Output Current Source/ Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
ADR4525	2.5	1	0.02, 0.04	3.0 to 15	950 µA	–10 to +10	1.25	0.6	0°C to 70°C	Series	SOIC	EAR99
LT6657	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	1.5, 3	0.1	1.3 to 40	1.2 mA	±10		0.5	–40°C to +125°C	Series	8-lead MSOP	EAR99
LTC6655LN	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	2, 5	0.025, 0.05	3.0 to 13.2	5 mA	±10		0.25	–40°C to +125°C	Series	8-lead MSOP, 8-lead LS	EAR99

製品一覧

オートモーティブ認定リファレンス / Automotive Qualified References

Part Number	Output Voltage (V)	Initial Accuracy (%) (Max)	Supply Voltage Range (V)	ISY (max)	Tempco (ppm/°C) (max)	Output Current Source/Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
LT6657	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.1	1.3 to 40	1.2 mA	1.5, 3	±10		0.5	–40°C to +125°C	Series	MS-8	EAR99
ADR4525	2.5	0.02	3.0 to 15	950 µA	2	–10 to +10	1.25	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR3512	1.2	0.1	2.3 to 5.5	100 µA	4, 8	–3 to +10	8	6.7	–40°C to +125°C	Series	MSOP	EAR99
ADR3525	2.5	0.1	2.7 to 5.5	100 µA	5, 8	–3 to +10	18	7.2	–40°C to +125°C	Series	MSOP	EAR99
ADR3530	3	0.1	3.2 to 5.5	100 µA	5, 8	–3 to +10	22	7.3	–40°C to +125°C	Series	MSOP	EAR99
ADR3533	3.3	0.1	3.5 to 5.5	100 µA	5, 8	–3 to +10	25	7.6	–40°C to +125°C	Series	MSOP	EAR99
ADR3540	4.096	0.1	4.3 to 5.5	100 µA	5, 8	–3 to +10	29	7.1	–40°C to +125°C	Series	MSOP	EAR99
ADR3550	5	0.1	5.2 to 5.5	100 µA	5, 8	–3 to +10	35	7.0	–40°C to +125°C	Series	MSOP	EAR99
ADR365 (H-grade)	5	0.16	5.3 to 15	190 µA	25	–1 to +5	12.8	2.6	–40°C to +150°C	Series	SOT-23	EAR99
LT6654	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.05, 0.1	1.75 to 36	350 µA	10, 20	±10		1.6	–40°C to +125°C	Series	SOT-23	EAR99
ADR5041	2.5	0.1, 0.2			75, 100		19.2	7.7	–40°C to +125°C	Shunt	SOT-23	EAR99
ADR5044	4.096	0.1, 0.2			75, 100		32.2	7.9	–40°C to +125°C	Shunt	SOT-23	EAR99

高出力電流リファレンス / High Output Current References

Part Number	Output Voltage (V)	Initial Accuracy (%) (max)	Supply Voltage Range (V)	ISY (max)	Tempco (ppm/°C) (max)	Output Current Source/ Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
LT6658	1.2, 1.8, 2.5, 3, 3.3, 5	0.05, 0.1	5 to 36	2 mA	10, 20	+150/–20		1.6	–40°C to +125°C	Series	16-lead DFN, 16-lead MSOP-EP	EAR99

標準電圧リファレンス—直列モード動作 / Standard REF – Series Mode

Part Number	Output Voltage (V)	Initial Accuracy (%) (max)	Supply Voltage Range (V)	ISY (max)	Tempco (ppm/°C) (max)	Output Current Source/Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
LT6657	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.1	1.3 to 40	1.2 mA	1.5, 3	±10		0.5	–40°C to +125°C	Series	8-lead MSOP	EAR99
LTC6655	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.025, 0.05	3.0 to 13.2	5 mA	2, 5	±10		0.25	–40°C to +125°C	Series	8-lead MSOP	EAR99
ADR3512W	1.2	0.1	2.3 to 5.5	100 µA	4, 8	–3 to +10	8	6.7	–40°C to +125°C	Series	MSOP	EAR99
ADR3525W	2.5	0.1	2.7 to 5.5	100 µA	5, 8	–3 to +10	18	7.2	–40°C to +125°C	Series	MSOP	EAR99
ADR3530W	3	0.1	3.2 to 5.5	100 µA	5, 8	–3 to +10	22	7.3	–40°C to +125°C	Series	MSOP	EAR99
ADR3533W	3.3	0.1	3.5 to 5.5	100 µA	5, 8	–3 to +10	25	7.6	–40°C to +125°C	Series	MSOP	EAR99
ADR3540W	4.096	0.1	4.3 to 5.5	100 µA	5, 8	–3 to +10	29	7.1	–40°C to +125°C	Series	MSOP	EAR99
ADR3550W	5	0.1	5.2 to 5.5	100 µA	5, 8	–3 to +10	35	7.0	–40°C to +125°C	Series	MSOP	EAR99
ADR3412	1.2	0.1	2.3 to 5.5	100 µA	8	–3 to +10	8	6.7	–40°C to +125°C	Series	SOT-23	EAR99
ADR3420	2.048	0.1	2.3 to 5.5	100 µA	8	–3 to +10	15	7.3	–40°C to +125°C	Series	SOT-23	EAR99
ADR3425	2.5	0.1	2.7 to 5.5	100 µA	8	–3 to +10	18	7.2	–40°C to +125°C	Series	SOT-23	EAR99
ADR3430	3	0.1	3.2 to 5.5	100 µA	8	–3 to +10	22	7.3	–40°C to +125°C	Series	SOT-23	EAR99
ADR3433	3.3	0.1	3.5 to 5.5	100 µA	8	–3 to +10	25	7.6	–40°C to +125°C	Series	SOT-23	EAR99
ADR3440	4.096	0.1	4.3 to 5.5	100 µA	8	–3 to +10	29	7.1	–40°C to +125°C	Series	SOT-23	EAR99
ADR3450	5	0.1	5.2 to 5.5	100 µA	8	–3 to +10	35	7.0	–40°C to +125°C	Series	SOT-23	EAR99
LT6654	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.05, 0.1	1.75 to 36	350 µA	10, 20	±10		1.6	–55°C to +125°C	Series	SOT-23	EAR99
LT6658	1.2, 1.8, 2.5, 3, 3.3, 5	0.05, 0.1	5 to 36	2 mA	10, 20	+150/–20		1.6	–40°C to +125°C	Series	16-lead MSE	EAR99

製品一覧

標準電圧リファレンス—シャント・モード動作 / Standard REF – Shunt Mode

Part Number	Output Voltage (V)	Initial Accuracy (%)	Current Range		Tempco (ppm/°C) (max)	Output Impedance (Ω)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
			Min	Max (mA)			µV p-p	ppm p-p				
LT6657	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.1	2.5 mA	11	1.5, 3			0.5	–40°C to +125°C	Shunt	8-lead MSOP	EAR99
ADR5040	2.048	0.1, 0.2	50 µA	15	75, 100	0.2	16.8	8.2	–40°C to +125°C	Shunt	SC70, SOT-23	EAR99
ADR5041	2.5	0.1, 0.2	50 µA	15	75, 100	0.2	19.2	7.7	–40°C to +125°C	Shunt	SC70, SOT-23	EAR99
ADR5043	3	0.1, 0.2	50 µA	15	75, 100	0.2	25.8	8.6	–40°C to +125°C	Shunt	SC70, SOT-23	EAR99
ADR5044	4.096	0.1, 0.2	50 µA	15	75, 100	0.2	32.2	7.9	–40°C to +125°C	Shunt	SC70, SOT-23	EAR99
ADR5045	5	0.1, 0.2	50 µA	15	75, 100	0.2	39.6	7.9	–40°C to +125°C	Shunt	SC70, SOT-23	EAR99

スイッチとマルチプレクサ

MEMSスイッチ、0Hz/DC～RF性能、ドライバ内蔵 / 0 Hz/DC to RF Performance, MEMS Switches with Integrated Driver

Part Number	Configuration	Specifications									Interface	HBM ESD Level—RF Pins (kV)	Package	ECCN Code
		RON (Ω) (typ)	Off Leakage (nA) (typ)	Frequency Response (Hz) (min)	Frequency Response (GHz) (max)	Insertion Loss (dB) (typ)	Off Isolation (dB) (typ)	IIP3 (dBm) (typ)	Input Power (dBm) (max)	Specified at Frequency (GHz)				
ADGM1304	(4:1) × 1	1.6	0.5	0	14	0.26	24	69	36	2.5	Parallel	0.1	LFCSP	EAR99
ADGM1004	(4:1) × 1	1.8	0.5	0	13	0.45	24	67	32	2.5	Parallel	5	LFCSP	EAR99

デジタル・エラー検出とSPI+インターフェース制御 / SPI+ Interface with Digital Error Detection

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})							Interface	Package	ECCN Code
						Single				Dual					
		R_{ON} (Ω) (typ)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	3.3	5	12	36	±5	±15	±20			
ADGS1412	SPST × 4	1.5	0.15	20	170		•	•		•	•		SPI+	LFCSP	EAR99
ADGS5412	SPST × 4	9.8	0.1	245	167			•	•		•	•	SPI+	LFCSP	EAR99
ADGS1212	SPST × 4	120	0.02	0.9	1000			•		•	•		SPI+	LFCSP	EAR99
ADGS1612	SPST × 4	1	0.2	120	34	•	•	•		•			SPI+	LFCSP	EAR99
ADGS5414	SPST × 8	13.5	0.15	125	200			•	•		•	•	SPI+	LFCSP	EAR99
ADGS1208/ADGS1209	8:1 diff, 4:1 mux	120	0.02	0.4	550			•			•		SPI+	LFCSP	EAR99
ADGS1408/ADGS1409	8:1 diff, 4:1 mux	4	0.1	50	60		•	•		•	•		SPI+	LFCSP	EAR99

SPI+: 動作モードが複数ある SPI デバイス

過電圧検出と保護付き: -55V OVP～+55V OVP / Overvoltage Detection and Protection: –55 V OVP to +55 V OVP

Part Number	Configuration	HBM ESD Level (kV)	Specifications					Characterization Voltages (V_{NOM})				Interface	Package	ECCN Code
			R_{ON} (Ω) (typ)	R_{ON} Flatness (Ω)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	Single		Dual				
								12	36	±15	±20			
ADG5436F	SPDT × 2	6	10	0.6	0.3	654	108	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5243F	SPDT × 3	3.5	270	7	0.3	0.8	350	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5208F/ADG5209F	8:1 diff, 4:1 mux	3.5	250	6.5	0.3	0.4	190/290	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5248F/ADG5249F	8:1 diff, 4:1 mux	3.5	250	6.5	0.3	0.8	190/320	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99

高温動作保証品 / High Temperature

Part Number	Configuration	Temperature Range	Specifications				Characterization Voltages (VNOM)							Interface	Package	ECCN Code
			R_{ON} (Ω) (max)	On Leakage (nA) (max)	Q_{INJ} (pC)	BW (MHz)	Single				Dual					
							3	5	12	36	±2.5	±15	±20			
ADG798	8:1 mux	–55°C to +210°C	10	2600	3	55	•	•			•			Parallel	Ceramic flatpack, ceramic flatpack RFG	EAR99
ADG5298	8:1 mux	–55°C to +210°C	400	70	0.2	110			•	•		•	•	Parallel	Ceramic flatpack, ceramic flatpack RFG	EAR99

製品一覧

温度センサー

アナログ出力 / Analog Output

Part Number	Interface	Function/ Resolution	Max Accuracy	Operating Range (°C)	Supply Range (V)	Max Current	Packages	Features	ECCN Code
ADT5912	Voltage output	10 mV/K	±0.1°C @ –20°C to +90°C	–40 to +125	–4.75 to +5.2	–2 mA	4-lead LFCSP	2-terminal temperature transducer	EAR99

デジタル出力 / Digital Output

Part Number	Interface	Function/ Resolution	Max Accuracy	Operating Range (°C)	Supply Range (V)	Max Current	Packages	Features	ECCN Code
ADT7422	I²C/SMBus	16-bit local	±0.1°C @ 37°C to 39°C	–40 to +150	2.7 to 5.5	270 µA	16-lead LFCSP	16-bit digital temperature sensor, critical temperature indicator, programmable interrupt	EAR99

オペアンプ

高精度（V_{os} < 1mV、TCV_{os} < 2μV/°C）アンプ / Precision (V_{os} <1 mV and TCV_{os} <2 μV/°C) Amplifiers

Part Number	Number of Amps	V_{os} (max) (μV)	V_{os} TC (typ) (μV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	V_{NOISE} Density (typ) ($nV/\sqrt{Hz}$)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
ADA4625-1 ***New***	1	80	0.2	0.075	18	48	3.3	0.15	4	5	36	8-lead SOIC-EP	EAR99
LT1997-2 ***New***	1	80	0.5	5	1	0.75	37	0.9	0.35	3.3	50	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
LTC6260 ***New***	4	400	1.5	75	1.3	0.24	38	2	0.02	1.8	5.25	10-lead MSOP	EAR99
LT1001	1	25	0.2	2	0.8	0.25	9.6	0.3	1.5	6	44	8-lead PDIP, 8-lead SOIC	EAR99
LT1007	1	25	0.2	35	8	2.5	2.5	0.06	2.6	4	44	8-lead PDIP, 8-lead SOIC	EAR99
LT1012	1	25	0.2	0.1	1	0.2	14	0.5	0.37	2.4	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1037	1	25	0.2	35	60	15	2.5	0.06	2.6	8	44	8-lead PDIP, 8-lead SOIC	EAR99
LTC6078	2	25	0.2	0.001	0.75	0.05	18	1	0.054	2.7	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6079	4	25	0.3	0.001	0.75	0.05	18	1	0.054	2.7	5.5	16-lead SSOP, 16-lead DFN	EAR99
AD708	2	30	0.1	1	0.9	0.3	9.6	0.23	2.75	6	36	8-lead PDIP, 8-lead CerDIP	EAR99
LT6020	2	30	0.2	1	0.4	5	50	1.1	0.09	3	30	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
LT6020-1	2	30	0.2	1	0.4	5	50	1.1	0.09	3	30	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
LT6023	2	30	0.5	3	0.04	1.45	132		0.018	3	30	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
LT6023-1	2	30	0.5	3	0.04	1.45	132		0.018	3	30	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
LT6010	1	35	0.2	0.11	0.33	0.09	14	0.4	0.135	2.7	40	8-lead SOIC, 8-lead DFN	EAR99
LT6013	1	35	0.2	0.25	1.6	0.2	9.5	0.2	0.145	2.7	40	8-lead SOIC, 8-lead DFN	EAR99
ADA4077-1	1	35	0.25	1	3.9	1	7	0.25	0.4	5	30	8-lead SOIC, 8-lead MSOP	EAR99
ADA4077-2	2	35	0.25	1	3.9	1	7	0.25	0.4	5	30	8-lead SOIC, 8-lead MSOP	EAR99
ADA4530-1	1	40	0.13	0.000	2	1.4	14	4	0.9	4.5	16	8-lead SOIC	EAR99
AD797	1	40	0.2	900	110	20	0.9	0.05	10.5	10	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1028	1	40	0.2	90	75	15	0.85	0.035	7.4	8	44	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
LT1128	1	40	0.2	90	20	6	0.85	0.035	7.4	8	44	8-lead PDIP, 8-lead SOIC	EAR99
LT1077	1	40	0.4	9	0.23	0.08	27	0.5	0.048	2.2	44	8-lead PDIP, 8-lead SOIC	EAR99
AD8676	2	50	0.2	2	10	2.5	2.8	0.1	2.9	10	30	8-lead SOIC, 8-lead MSOP	EAR99
LT1006	1	50	0.2	15	0.6	0.4	22	0.55	0.34	4	44	8-lead PDIP, 8-lead SOIC	EAR99
LT6018	1	50	0.2	150	15	30	1.2	0.03	7.2	8	33	8-lead SOIC-EP, 12-lead DFN	EAR99
ADA4077-4	4	50	0.25	1	3.9	1	7	0.25	0.4	5	30	14-lead SOIC, 14-lead TSSOP	EAR99
LT1024	2	50	0.25	0.12	1	0.2	14	0.5	0.38	4	40	14-lead PDIP	EAR99
LT1097	1	50	0.3	0.25	0.7	0.2	14	0.5	0.35	2	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1881	2	50	0.3	0.2	1	0.35	14	0.5	0.65	2.4	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1884	2	50	0.3	0.4	2	0.9	9.5	0.4	0.65	2.4	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1991	1	50	0.3	5	0.56	0.12	46	0.35	0.1	2.4	40	10-lead MSOP, 10-lead DFN	EAR99
LT1996	1	50	0.3	5	0.56	0.12	18	0.35	0.1	2.7	36	10-lead MSOP, 10-lead DFN	EAR99
LT6015	1	50	0.75	5	3.2	0.75	18	0.5	0.315	3	50	5-lead SOT-23	EAR99
LT6016	2	50	0.75	5	3.2	0.75	18	0.5	0.315	3	50	8-lead MSOP	EAR99
LT6017	4	50	0.75	5	3.2	0.75	18	0.5	0.315	3	50	22-lead DFN	EAR99
LT1112	2	60	0.15	0.25	0.75	0.3	14	0.3	0.35	2	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1002	2	60	0.2	3	0.8	0.25	9.6	0.35	1.53	6	44	14-lead PDIP	EAR99
LT1677	1	60	0.2	20	7.2	2.5	3.2	0.09	2.75	2.5	44	8-lead PDIP, 8-lead SOIC	EAR99
LT6011	2	60	0.2	0.3	0.33	0.09	14	0.4	0.135	2.4	40	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT6012	4	60	0.2	0.3	0.33	0.09	14	0.4	0.135	2.4	40	14-lead SOIC, 16-lead SSOP	EAR99
LT6014	2	60	0.2	0.4	1.6	0.2	9.5	0.2	0.145	2.7	40	8-lead SOIC, 8-lead DFN	EAR99
LT1114	4	60	0.3	0.25	0.75	0.3	14	0.3	0.35	2	40	14-lead PDIP, 16-lead SOIC	EAR99
LT1997-3	1	60	0.5	5	1.1	0.75	50	1.4	0.35	3.3	50	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99

オペアンプ

高精度（V_{os} < 1mV、TCV_{os} < 2μV/°C）アンプ（続き） / Precision (V_{os} <1 mV and TCV_{os} <2 μV/°C) Amplifiers (Continued)

Part Number	Number of Amps	V_{os} (max) (μV)	V_{os} TC (typ) (μV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	I_O/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN code
ADA4177-1	1	60	1	1	3.5	1.5	8	0.175	0.5	10	30	8-lead SOIC, 8-lead MSOP	EAR99
ADA4177-2	2	60	1	1	3.5	1.5	8	0.175	0.5	10	30	8-lead SOIC, 8-lead MSOP	EAR99
ADA4177-4	4	60	1	1	3.5	1.5	8	0.175	0.5	10	30	14-lead SOIC, 14-lead TSSOP	EAR99
AD8616	2	60	1.5	0.001	24	12	7	2.4	1.7	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8618	4	60	1.5	0.001	24	12	7	2.4	2	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
LTC6081	2	70	0.2	0.001	3.6	1	13	1.3	0.33	2.7	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6082	4	70	0.2	0.001	3.6	1	13	1.3	0.33	2.7	5.5	16-lead SSOP, 16-lead DFN	EAR99
LT1124	2	70	0.3	20	12.5	4.5	2.7	0.07	2.3	8	44	8-lead PDIP, 8-lead SOIC	EAR99
LT1126	2	70	0.3	20	65	11	2.7	0.07	2.6	8	44	8-lead PDIP, 8-lead SOIC	EAR99
LT1078	2	70	0.4	8	0.2	0.07	28	0.6	0.038	2.2	44	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
LT2078	2	70	0.4	8	0.2	0.07	28	0.6	0.035	2.3	44	8-lead SOIC	EAR99
LT2178	2	70	0.4	5	0.06	0.025	49	0.9	0.013	2.2	44	8-lead SOIC	EAR99
LT1178	2	70	0.6	5	0.085	0.04	49	0.9	0.012	2	44	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
AD8671	1	75	0.5	12	10	4	2.8	0.077	3.5	8	36	8-lead SOIC, 8-lead MSOP	EAR99
AD8672	2	75	0.5	12	10	4	2.8	0.077	3.5	8	36	8-lead SOIC, 8-lead MSOP	EAR99
AD8675	1	75	0.6	2	10	2.5	2.8	0.1	2.9	10	30	8-lead SOIC, 8-lead MSOP	EAR99
AD8674	4	75	0.8	12	10	4	2.8	0.077	3.5	8	36	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4350	1	80	0.1	0.001	175	100	5		8.5	3.3	12	28-lead TSSOP	EAR99
LT1882	4	80	0.3	0.5	1	0.35	14	0.5	0.65	2.4	40	14-lead SOIC	EAR99
LT1885	4	80	0.3	0.9	2	0.9	9.5	0.4	0.65	2.4	40	14-lead SOIC	EAR99
LT1125	4	90	0.3	20	12.5	4.5	2.7	0.07	2.3	8	44	14-lead PDIP, 16-lead SOIC	EAR99
LT1127	4	90	0.3	20	65	11	2.7	0.07	2.6	8	44	14-lead PDIP, 16-lead SOIC	EAR99
LT1218	1	90	1	70	0.3	0.1	33		0.37	2	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1218L	1	90	1	70	0.3	0.1	33		0.37	2	16	8-lead PDIP, 8-lead SOIC	EAR99
LT1219	1	90	1	70	0.15	0.05	33		0.37	2	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1219L	1	90	1	70	0.15	0.05	33		0.37	2	16	8-lead PDIP, 8-lead SOIC	EAR99
AD706	2	100	0.2	0.2	0.8	0.15	15	0.5	0.6	4	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1079	4	100	0.4	8	0.2	0.07	28	0.6	0.038	2.2	44	14-lead PDIP, 16-lead SOIC	EAR99
LT1079MJ	4	100	0.4	8	0.2	0.07	28	0.6	0.038	2.2	44	14-lead PDIP, 16-lead SOIC	EAR99
LT1678	2	100	0.4	20	20	6	3.9	0.09	2	3	36	8-lead SOIC	EAR99
LT1679	4	100	0.4	20	20	6	3.9		2	3	36	14-lead SOIC	EAR99
AD8610	1	100	0.5	0.01	25	60	6	1.8	3.5	10	26	8-lead SOIC, 8-lead MSOP	EAR99
ADA4084-1	1	100	0.5	250	15.9	4.6	3.9	0.1	0.625	3	30	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4084-2	2	100	0.5	250	15.9	4.6	3.9	0.1	0.625	3	30	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4084-4	4	100	0.5	250	15.9	4.6	3.9	0.1	0.625	3	30	16-lead LFCSP, 14-lead TSSOP	EAR99
LT2179	4	100	0.5	5	0.06	0.025	49	0.9	0.013	2.2	44	14-lead SOIC, 8-lead SOIC	EAR99
LT1179	4	100	0.6	5	0.085	0.04	49	0.9	0.012	2	44	14-lead PDIP, 16-lead SOIC	EAR99
LTC6244	2	100	0.7	0.075	50	35	8	1.5	6.25	2.8	6	8-lead MSOP, 8-lead DFN	EAR99
LTC6244HV	2	100	0.7	0.075	50	35	8	1.5	6.25	2.8	12	8-lead MSOP, 8-lead DFN	EAR99
LT2079	4	110	0.6	8	0.2	0.07	28	0.6	0.035	2.3	44	14-lead SOIC	EAR99
LT1008	1	120	0.2	0.1	1	0.2	14	0.5	0.38	4	40	8-lead PDIP, 8-lead SOIC	EAR99
AD8597	1	120	0.8	200	10	16	1.07	0.076	5.7	9	30	8-lead LFCSP, 8-lead SOIC	EAR99
AD8599	2	120	0.8	200	10	16	1.07	0.076	5.7	9	36	8-lead SOIC	EAR99
ADA4500-2	2	120	0.9	0.002	10	5.5	14.5	2	1.55	2.7	5.5	8-lead LFCSP, 8-lead MSOP	EAR99

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高精度（V_{os} < 1mV、TCV_{os} < 2μV/°C）アンプ（続き） / Precision (V_{os} <1 mV and TCV_{os} <2 μV/°C) Amplifiers (Continued)

Part Number	Number of Amps	V_{os} (max) (μV)	V_{os} TC (typ) (μV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN code
ADA4806-1	1	125	0.2	800	30	160	5.2		0.57	3	10	8-lead SOT-23	EAR99
AD8622	2	125	0.5	0.2	0.56	0.48	11	0.2	0.215	5	36	8-lead SOIC, 8-lead MSOP	EAR99
AD8624	4	125	0.5	0.2	0.56	0.48	11	0.2	0.215	5	36	16-lead LFCSP, 14-lead TSSOP	EAR99
ADA4004-1	1	125	0.7	90	12	2.7	1.8	0.15	2.2	10	30	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4004-2	2	125	0.7	90	12	2.7	1.8	0.15	2.2	10	30	8-lead SOIC, 8-lead MSOP	EAR99
ADA4004-4	4	125	0.7	90	12	2.7	1.8	0.15	2.2	10	30	16-lead LFCSP, 14-lead SOIC	EAR99
ADA4807-1	1	125	0.7	1600	200	225	3.3	0.16	1	2.7	11	6-lead SC70, 6-lead SOT-23	EAR99
ADA4807-2	2	125	0.7	1600	200	225	3.3	0.16	1	2.7	11	10-lead LFCSP, 8-lead MSOP	EAR99
LTC6241	2	125	0.7	0.075	18	10	7	1	1.8	2.8	6	8-lead SOIC, 8-lead DFN	EAR99
LTC6241HV	2	125	0.7	0.075	18	10	7	1	1.8	2.8	12	8-lead SOIC, 8-lead DFN	EAR99
LTC6242	4	125	0.7	0.075	18	10	7	1	1.8	2.8	6	16-lead SSOP, 16-lead DFN	EAR99
LTC6242HV	4	125	0.7	0.075	18	10	7	1	1.8	2.8	12	16-lead SSOP, 16-lead DFN	EAR99
ADA4898-1	1	125	1	400	50	55	0.9		8.1	9	36	8-lead SOIC-EP	EAR99
ADA4898-2	2	125	1	400	50	55	0.9		7.9	9	36	8-lead SOIC-EP	EAR99
AD8677	1	130	0.5	1	0.6	0.2	10	0.25	1.3	8	36	8-lead SOIC, 5-lead TSOT	EAR99
LT1493	4	130	1	100	4.5	1.8	16.5	0.33	0.425	2.1	36	16-lead SOIC	EAR99
AD704	4	150	0.2	0.27	0.8	0.15	15	0.5	0.6	4	36	20-lead LCC, 14-lead PDIP, 16-lead SOIC—wide	EAR99
LT1013	2	150	0.3	20	0.8	0.4	22	0.55	0.35	4	44	8-lead PDIP, 8-lead SOIC	EAR99
LT1013AMH	2	150	0.3	20	0.8	0.4	22	0.55	0.35	4	44	8-lead PDIP, 8-lead SOIC	EAR99
LT1014	4	150	0.3	20	0.8	0.4	22	0.55	0.35	4	44	14-lead PDIP, 16-lead SOIC	EAR99
LT1880	1	150	0.3	0.9	1.1	0.55	13	0.5	1.2	2.4	40	5-lead SOT-23	EAR99
AD8620	2	150	0.5	0.01	25	60	6	1.8	3.5	10	26	8-lead SOIC	EAR99
ADA4661-2	2	150	0.6	0.015	4	2.2	18	3	0.63	3	18	8-lead LFCSP, 8-lead MSOP	EAR99
LT1211	2	150	0.7	100	13	7	12	0.25	1.3	2.5	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1211MJ8	2	150	0.7	100	13	7	12	0.25	1.3	2.5	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1213	2	150	0.75	160	28	8.5	10	0.2	2.7	2.5	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1213MJ8	2	150	0.75	160	28	8.5	10	0.2	2.7	2.5	36	8-lead PDIP, 8-lead SOIC	EAR99
AD844	1	150	1	250		2000	2		6.5	9	36	8-lead PDIP, 8-lead CerDIP, 16-lead SOIC—wide, chips or die	EAR99
AD8664	4	160	2	0.001	4	3.5	10	2.5	1.55	5	16	14-lead SOIC, 14-lead TSSOP	EAR99
LT1007X		160		95	8	1.2			2.8	10	30		EAR99
ADA4807-4	4	175	0.7	1600	200	225	3.3	0.16	1	2.7	11	14-lead TSSOP	EAR99
LTC6240	1	175	0.7	0.001	18	10	7	0.55	2	2.8	6	8-lead SOIC, 5-lead SOT-23	EAR99
LTC6240HV	1	175	0.7	0.001	18	10	7	0.55	2	2.8	12	8-lead SOIC, 5-lead SOT-23	EAR99
LT1492	2	180	1	100	4.5	1.8	16.5	0.33	0.425	2.1	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1115	1	200	0.5	380	70	15	0.9		8.5	8	44	8-lead PDIP, 16-lead SOIC	EAR99
ADA4627-1	1	200	1	0.005	19	56	4.8	0.7	7	9	36	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4637-1	1	200	1	0.005	79.9	170	4.8	0.7	7	9	30	8-lead LFCSP, 8-lead SOIC	EAR99
LT1636	1	225	1	8	0.2	0.07	52	0.7	0.042	2.6	44	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
AD8634	2	250	0.35	200	9.7	5	4.2	0.13	1.1	3	30	Chips or die, 8-lead flatpack, 8-lead SOIC	EAR99
AD8655	1	250	0.4	0.01	28	11	2.7		4.5	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8656	2	250	0.4	0.01	28	11	2.7		4.5	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
LT1022	1	250	1.3	0.05	8.5	26	14	2.5	5.2	20	40	8-lead PDIP	EAR99

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高精度（V_{os} < 1mV、TCV_{os} < 2μV/°C）アンプ（続き） / Precision (V_{os} <1 mV and TCV_{os} <2 μV/°C) Amplifiers (Continued)

Part Number	Number of Amps	V_{os} (max) (μV)	V_{os} TC (typ) (μV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	I_O/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN code
LT1212	4	275	1	125	13	7	12	0.25	1.3	2.5	36	14-lead PDIP, 16-lead SOIC	EAR99
LT1214	4	275	1	200	28	8.5	10	0.2	2.7	2.5	36	14-lead PDIP, 16-lead SOIC	EAR99
AD8603	1	300	1	0.001	0.316	0.1	22	2.3	0.05	1.8	5	5-lead TSOT	EAR99
AD8605	1	300	1	0.001	10	5	6.5	2.3	1.2	2.7	5	5-ball WLCSP, 5-lead SOT-23	EAR99
AD8606	2	300	1	0.001	10	5	6.5	2.3	1.2	2.7	5	8-ball WLCSP, 8-lead SOIC, 8-lead MSOP	EAR99
AD8607	2	300	1	0.001	0.316	0.1	22	2.3	0.05	1.8	5	8-lead SOIC, 8-lead MSOP	EAR99
AD8609	4	300	1	0.001	0.316	0.1	22	2.3	0.04	1.8	5	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4096-2	2	300	1	25	0.786	0.4	27	0.7	0.06	3	30	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4096-4	4	300	1	25	0.786	0.4	27	0.7	0.06	3	30	16-lead LFCSP, 14-lead TSSOP	EAR99
ADA4841-1	1	300	1	5300	35	13	2.1		1.2	2.7	12	8-lead SOIC, 6-lead SOT-23	EAR99
ADA4841-2	2	300	1	5300	35	13	2.1		1.2	2.7	12	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP, chips or die	EAR99
LT1215	2	300	1	500	23	30	12	0.4	4.75	2.5	36	8-lead PDIP, 8-lead SOIC	EAR99
AD8608	4	300	1.5	0.001	10	5	6.5	2.3	1.2	2.7	5	Chips or die, 14-lead SOIC, 14-lead TSSOP	EAR99
AD8663	1	300	1.5	0.045	0.54	0.3	21	2.5	0.285	5	16	8-lead LFCSP, 8-lead SOIC	EAR99
AD8667	2	300	1.5	0.045	0.54	0.3	21	2.5	0.285	5	16	8-lead SOIC, 8-lead MSOP	EAR99
AD8669	4	300	1.5	0.045	0.54	0.3	21	2.5	0.285	5	16	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4895-1	1	350	0.15	6000	1500	943	1	0.099	3	3	10	8-lead SOIC, 6-lead SOT-23	EAR99
ADA4895-2	2	350	0.15	6000	1500	943	1	0.099	3	3	10	10-lead MSOP	EAR99
LT6231	2	350	0.5	10,000	215	70	1.1	0.18	3.3	3	12.6	8-lead SOIC, 8-lead DFN	EAR99
LT6232	4	350	0.5	10,000	215	70	1.1	0.18	3.3	3	12.6	16-lead SSOP	EAR99
LT6234	2	350	0.5	3000	60	17	1.9	0.22	1.15	3	12.6	8-lead SOIC, 8-lead DFN	EAR99
LT6235	4	350	0.5	3000	60	17	1.9	0.22	1.15	3	12.6	16-lead SSOP	EAR99
LT1637	1	350	1	50	1	0.35	27	0.6	0.19	2.7	44	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1800	1	350	1.5	250	80	25	8.5	1.4	1.6	2.3	12.6	8-lead SOIC, 5-lead SOT-23	EAR99
LT1801	2	350	1.5	250	80	25	8.5	1.4	1.6	2.3	12.6	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1802	4	350	1.5	250	80	25	8.5	1.4	1.6	2.3	12.6	14-lead SOIC	EAR99
LT6220	1	350	1.5	150	60	20	10	0.5	0.9	2.2	12.6	8-lead SOIC, 5-lead SOT-23	EAR99
LT6221	2	350	1.5	150	60	20	10	0.5	0.9	2.2	12.6	8-lead SOIC, 8-lead DFN	EAR99
LT6222	4	350	1.5	150	60	20	10	0.5	0.9	2.2	12.6	16-lead SSOP	EAR99
LTC6255	1	350	1.5	50	6.5	1.8	21	2.5	0.06	1.8	5.25	6-lead SOT-23, 6-lead DFN	EAR99
LTC6256	2	350	1.5	50	6.5	1.8	21	2.5	0.065	1.8	5.25	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC6257	4	350	1.5	50	6.5	1.8	21	2.5	0.065	1.8	5.25	16-lead MSOP	EAR99
AD8657	2	350	2	0.02	0.23	0.08	45	5	0.022	2.7	18	8-lead LFCSP, 8-lead MSOP	EAR99
AD8659	4	350	2	0.02	0.23	0.08	45	5	0.022	2.7	18	16-lead LFCSP, 14-lead SOIC	EAR99
ADA4622-1	1	350	2	0.01	8	23	12.5	0.75	0.715	5	30	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4622-2	2	350	2	0.01	8	23	12.5	0.75	0.665	5	30	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4622-4	4	350	2	0.01	8	23	12.5	0.75	0.665	5	30	16-lead LFCSP, 14-lead SOIC	EAR99

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高精度（V_{os} < 1mV、TCV_{os} < 2μV/°C）アンプ（続き） / Precision (V_{os} <1 mV and TCV_{os} <2 μV/°C) Amplifiers (Continued)

Part Number	Number of Amps	V_{os} (max) (μV)	V_{os} TC (typ) (μV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	V_{NOISE} Density (typ) ($nV/\sqrt{Hz}$)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN code
LT1494	1	375	0.4	1	0.003	0.001	185	4	0.001	2.1	36	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1495	2	375	0.4	1	0.003	0.001	185	4	0.001	2.1	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1496	4	375	0.4	1	0.003	0.001	185	4	0.001	2.1	36	14-lead PDIP, 14-lead SOIC	EAR99
LT1672	1	375	0.4	1	0.012	0.005	185	4	0.002	2.1	36	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1673	2	375	0.4	1	0.012	0.005	185	4	0.002	2.1	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1674	4	375	0.4	1	0.012	0.005	185	4	0.002	2.1	36	14-lead PDIP, 14-lead SOIC	EAR99
LT1466L	2	390	2	14	0.12	0.04	45		0.06	2	16	8-lead PDIP, 8-lead SOIC	EAR99
LT1467L	4	390	2	14	0.12	0.04	45		0.06	2	16	16-lead SOIC	EAR99
LTC6261	1	400	0.4	100	30	7	13	1.25	0.245	1.8	5.25	6-lead SOT-23, 6-lead DFN	EAR99
LTC6262	2	400	0.4	100	30	7	13	1.25	0.245	1.8	5.25	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 6-lead DFN, 8-lead DFN	EAR99
LTC6263	4	400	0.4	750	30	7	13	1.25	0.245	1.8	5.25	16-lead MSOP	EAR99
ADA4610-2	2	400	0.5	0.025	16.3	25	7.3	0.45	1.6	10	36	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
AD8510	1	400	1	0.08	8	20	7.6		2.5	9	30	8-lead SOIC, 8-lead MSOP	EAR99
AD8512	2	400	1	0.08	8	20	7.6		2.5	9	30	8-lead SOIC, 8-lead MSOP	EAR99
ADA4610-4	4	400	1	0.025	16.3	25	7.3	0.45	1.6	10	36	16-lead LFCSP, 14-lead SOIC	EAR99
LTC6258	1	400	1.5	75	1.3	0.24	38	2	0.02	1.8	5.25	6-lead SOT-23, 6-lead DFN	EAR99
LTC6259	2	400	1.5	75	1.3	0.24	38	2	0.02	1.8	5.25	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LT1216	4	450	2	600	23	30	12	0.4	4.75	2.5	36	14-lead PDIP, 16-lead SOIC	EAR99
LT1498	2	475	0.5	650	10.5	4.5	12	0.4	1.7	2.2	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1499	4	475	0.5	650	10.5	4.5	12	0.4	1.7	2.2	36	14-lead SOIC	EAR99
LT1366	2	475	2	35	0.4	0.13	29		0.34	2	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1368	2	475	2	35	0.16	0.065	29		0.34	2	36	8-lead PDIP, 8-lead SOIC	EAR99
ADA4896-2	2	500	0.2	17,000	90	120	1	0.099	3	3	10	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4897-1	1	500	0.2	17,000	90	120	1	0.099	3	3	10	8-lead SOIC, 6-lead SOT-23	EAR99
ADA4897-2	2	500	0.2	17,000	90	120	1	0.099	3	3	10	Chips or die, 10-lead MSOP	EAR99
LT6230	1	500	0.5	10,000	215	70	1.1	0.18	3.3	3	12.6	6-lead SOT-23	EAR99
LT6230-10	1	500	0.5	10,000	1450	250	1.1	0.18	3.3	3	12.6	6-lead SOT-23	EAR99
LT6233	1	500	0.5	3000	60	15	1.9	0.22	1.15	3	12.6	6-lead SOT-23	EAR99
LT6233-10	1	500	0.5	3000	375	80	1.9	0.22	1.15	3	12.6	6-lead SOT-23	EAR99
LT6236	1	500	0.5	10,000	215	60	1.1	0.18	3.15	3	12.6	6-lead SOT-23	EAR99
LT6237	2	500	0.5	10,000	215	60	1.1	0.18	3.15	3	12.6	8-lead MSOP, 8-lead DFN	EAR99
LT6238	4	500	0.5	10,000	215	60	1.1	0.18	3.15	3	12.6	16-lead SSOP	EAR99
AD8601	1	500	2	0.06	8.4	6	18		0.75	2.7	5	5-lead SOT-23	EAR99
AD8602	2	500	2	0.06	8.4	6	18		0.75	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
LT1490A	2	500	2	8	0.18	0.06	50	1	0.04	2	44	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT6003	1	500	2	0.09	0.002	0.001	325	3	0.001	1.6	16	5-lead SOT-23, 4-lead DFN	EAR99
LT6004	2	500	2	0.09	0.002	0.001	325	3	0.001	1.6	16	8-lead MSOP, 8-lead DFN	EAR99
LTC6246	1	500	2	350	180	90	4.2		0.95	2.5	5.25	6-lead SOT-23	EAR99
LTC6247	2	500	2	350	180	90	4.2		0.95	2.5	5.25	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99

オペアンプ

高精度（V_{os} < 1mV、TCV_{os} < 2μV/°C）アンプ（続き） / Precision (V_{os} <1 mV and TCV_{os} <2 μV/°C) Amplifiers (Continued)

Part Number	Number of Amps	V_{os} (max) (μV)	V_{os} TC (typ) (μV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	I_O/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN code
LTC6248	4	500	2	350	180	90	4.2		0.95	2.5	5.25	16-lead MSOP	EAR99
LT1806	1	550	1.5	4000	325	125	3.5	0.8	9	2.5	12.6	8-lead SOIC, 6-lead SOT-23	EAR99
LT1807	2	550	1.5	4000	325	125	3.5	0.8	9	2.5	12.6	8-lead SOIC, 8-lead MSOP	EAR99
AD8604	4	600	2	0.06	8.4	6	18		0.75	2.7	5.5	14-lead SOIC, 16-lead QSOP, 14-lead TSSOP	EAR99
LT1638	2	600	2	50	1.2	0.38	20	1	0.17	2.5	44	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1639	4	600	2	50	1.075	0.38	20	1	0.17	2.5	44	14-lead PDIP, 14-lead SOIC	EAR99
LT6001	2	600	2	5	0.05	0.015	75		0.013	1.8	18	8-lead MSOP, 10-lead DFN	EAR99
LT6005	4	650	2	0.09	0.002	0.001	325	3	0.001	1.6	16	16-lead SSOP, 16-lead DFN	EAR99
LT6000	1	750	2	5	0.05	0.015	75		0.013	1.8	18	6-lead DFN	EAR99
LT6002	4	750	2	5	0.05	0.015	75		0.013	1.8	18	16-lead SSOP, 16-lead DFN	EAR99
LTC6084	2	750	2	0.04	1.5	0.5	31	3	0.11	2.5	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6085	4	750	2	0.04	1.5	0.5	31	3	0.11	2.5	5.5	16-lead SSOP, 16-lead DFN	EAR99
LTC6087	2	750	2	0.04	14	7.2	12	5.8	1.05	2.7	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6088	4	750	2	0.04	14	7.2	12	5.8	1.05	2.7	5.5	16-lead SSOP, 16-lead DFN	EAR99
LT1367	4	800	2	35	0.4	0.13	29		0.34	2	36	14-lead SOIC	EAR99
LT1369	4	800	2	35	0.16	0.065	29		0.34	2	36	14-lead SOIC	EAR99
LT1782	1	800	2	15	0.2	0.07	50	1	0.04	2.2	18	5-lead SOT-23, 6-lead SOT-23	EAR99
LT1783	1	800	2	80	1.25	0.42	20	0.6	0.21	2.2	18	5-lead SOT-23, 6-lead SOT-23	EAR99
AD8027	1	900	1.5	6,000	190	100	4.3		6.5	2.7	12	8-lead SOIC, 6-lead SOT-23	EAR99
AD8028	2	900	1.5	6000	190	100	4.3		6.5	2.7	12	Chips or die, 8-lead SOIC, 10-lead MSOP	EAR99
AD829	1	1000	0.3	7000	750	230	1.7		5.3	9	36	20-lead LCC, 8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
ADA4075-2	2	1000	0.3	100	6.5	12	2.8	0.06	2.25	9	36	8-lead LFCSP, 8-lead SOIC	EAR99
AD8021	1	1000	0.5	11,300	1000	130	2.1		7.8	4.5	24	8-lead SOIC, 8-lead MSOP	EAR99
AD8067	1	1000	1	0.005	200	640	6.6		7	5	24	5-lead SOT-23	EAR99
AD8513	4	1000	1.7	0.08	8	20	7.6		2.5	9	30	14-lead SOIC, 14-lead TSSOP	EAR99
AD820	1	1000	2	0.01	1.8	3	13	2	0.9	5	30	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1491A	4	1000	2	8	0.18	0.06	50	1	0.04	2	44	14-lead PDIP, 14-lead SOIC, 16-lead DFN	EAR99

オペアンプ

LTC2063/LTC2064: 電源電流2µA、低入力バイアス電流のゼロドリフト・オペアンプ

主な特長

- 低電源電流: 2µA（最大値）
- オフセット電圧: 5µV
- オフセット電圧のドリフト: 0.02µV/°C（最大値）
- 入力バイアス電流
  - 3pA（代表値）
  - 30pA（最大値）、-40°C～+85°C
  - 100pA（最大値）、-40°C～+125°C
- EMIフィルタ内蔵（1.8GHzでの除去比: 114 dB）
- シャットダウン電流: 170nA（最大値）

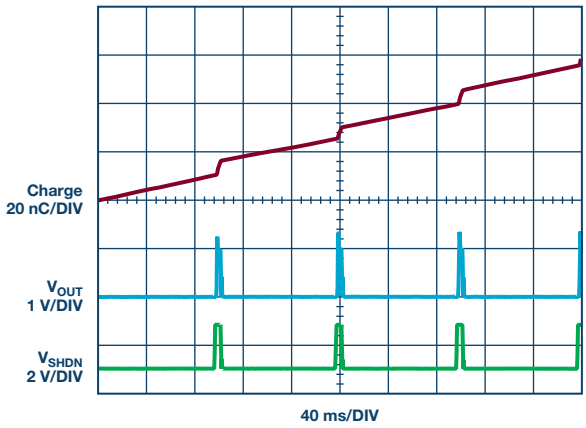
利点

- ゼロドリフトと超低電源電流を組み合わせることにより、マイクロパワー・アプリケーションで高精度を実現
- 電源電圧範囲が1.7V～5.25Vで、小型のバッテリ・スタックでの使用が可能
- 入力バイアス電流が低いことから、マイクロパワー・アプリケーションでは一般的な大きな抵抗に対応
- RRIO、小型パッケージ、EMIフィルタ内蔵により、一般的な使用に適した特性を提供
- シャットダウン・モードでの静止電流が小さく、電源投入時の電荷損失が最小限に抑えられていることで、携帯システムに最適

アプリケーション

- ワイヤレス・メッシュ・ネットワークでのシグナル・コンディショニング
- ポータブル機器システム
- 低消費電力のセンサー・コンディショニング
- ガス検出
- 温度測定
- 医療機器
- 環境発電アプリケーション
- 低消費電力の電流検出

デューティ・サイクルによるシステムの消費電力の低減



ゼロドリフト・アンプ / Zero-Drift Amplifiers

Part Number	Number of Amps	V_{OS} (max) (µV)	V_{OS} TC (max) (µV/°C)	I_{BIAS} (max) (pA)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LTC2064 ***New***	2	5	0.02	20	0.02	0.004	220	4.6	0.001	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
LTC2066 ***New***	1	5	0.02	35	0.1	0.018	80	1.7	0.008	1.7	5.25	5-lead SOT-23, 6-lead SC70	EAR99
LTC2067 ***New***	2	5	0.02	35	0.1	0.018	80	1.7	0.008	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
LTC2058 ***New***	2	5	0.025	100	2.5	1.6	9	0.2	0.95	4.75	36	12-lead MSOP-EP, 8-lead SOIC-EP	EAR99
ADA4528-1	1	2.5	0.015	200	3.4	0.5	5.9	0.099	1.4	2.2	5.5	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4528-2	2	2.5	0.015	250	3.4	0.5	5.9	0.099	1.4	2.2	5.5	8-lead LFCSP, 8-lead LFCSP, 8-lead MSOP	EAR99
LTC2050	1	3	0.03	75	3	2		1.5	0.8	2.7	6	8-lead SOIC, 5-lead SOT-23, 6-lead SOT-23	EAR99
LTC2050HV	1	3	0.03	75	3	2		1.5	0.8	2.7	11	8-lead SOIC, 5-lead SOT-23, 6-lead SOT-23	EAR99
LTC2051	2	3	0.03	75	3	2		1.5	0.85	2.7	6	8-lead SOIC, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC2051HV	2	3	0.03	75	3	2		1.5	0.85	2.7	11	8-lead SOIC, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC2052	4	3	0.03	75	3	2		1.5	0.85	2.7	6	14-lead SOIC, 16-lead SSOP	EAR99
LTC2052HV	4	3	0.03	75	3	2		1.5	0.85	2.7	11	14-lead SOIC, 16-lead SSOP	EAR99
LTC2054	1	3	0.03	150	0.5	0.5		1.6	0.14	2.7	6	5-lead SOT-23	EAR99
LTC2054HV	1	3	0.03	150	0.5	0.5		1.6	0.175	2.7	11	5-lead SOT-23	EAR99
LTC2055	2	3	0.03	150	0.5	0.5		1.6	0.13	2.7	6	8-lead MSOP, 8-lead DFN	EAR99
LTC2055HV	2	3	0.03	150	0.5	0.5		1.6	0.15	2.7	11	8-lead MSOP, 8-lead DFN	EAR99
LTC2057	1	4	0.015	200	1.5	1.2	11	0.2	0.8	4.75	36	8-lead SOIC, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC2057HV	1	4	0.015	200	1.5	1.2	11	0.2	0.8	4.75	60	8-lead SOIC, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99

オペアンプ

ゼロドリフト・アンプ（続き） / Zero-Drift Amplifiers (Continued)

Part Number	Number of Amps	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	I_{BIAS} (max) (pA)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	V_{NOISE} Density (typ) ($nV/\sqrt{Hz}$)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
ADA4638-1	1	4.5	0.8	90	1.5	1.5	66	1.2	0.85	4.5	30	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4522-1	1	5	0.015	150	2.7	1.7	5.8	0.117	0.84	4.5	55	8-lead SOIC, 8-lead MSOP	EAR99
ADA4522-2	2	5	0.015	150	2.7	1.7	5.8	0.117	0.83	4.5	55	8-lead SOIC, 8-lead MSOP	EAR99
ADA4522-4	4	5	0.015	150	2.7	1.7	5.8	0.117	0.83	4.5	55	14-lead SOIC, 14-lead TSSOP	EAR99
AD8628	1	5	0.02	100	2.5	1	22	0.5	0.85	2.7	5.5	8-lead SOIC, 5-lead SOT-23, 5-lead TSOT	EAR99
AD8629	2	5	0.02	100	2.5	1	22	0.5	0.85	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8630	4	5	0.02	300	2.5	1	22	0.5	0.85	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
LTC2063	1	5	0.02	20	0.02	0.004	220	4.6	0.001	1.7	5.25	5-lead SOT-23, 6-lead SC70	EAR99
AD8551	1	5	0.04	50	1.5	0.4	42	1	0.975	2.7	5	8-lead SOIC, 8-lead MSOP	EAR99
AD8552	2	5	0.04	50	1.5	0.4	42	1	0.975	2.7	5	8-lead SOIC, 8-lead TSSOP	EAR99
AD8554	4	5	0.04	50	1.5	0.4	42	1	0.975	2.7	5	14-lead SOIC, 14-lead TSSOP	EAR99
AD8571	1	5	0.04	50	1.5	0.4	51	1.3	0.975	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8572	2	5	0.04	50	1.5	0.4	51	1.3	0.975	2.7	5.5	8-lead SOIC, 8-lead TSSOP	EAR99
AD8574	4	5	0.04	50	1.5	0.4	51	1.3	0.975	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
LTC1050	1	5	0.05	30	2.5	4	90	1.6	1	4.75	18	14-lead PDIP, 8-lead PDIP, 8-lead SOIC	EAR99
LTC1051	2	5	0.05	65	2.5	4	70	1.5	1	4.75	16.5	8-lead PDIP, 16-lead SOIC	EAR99
LTC1052	1	5	0.05	30	1.2	4	30	1.5	1.7	4.75	18	14-lead PDIP, 8-lead PDIP, 16-lead SOIC	EAR99
LTC1053	4	5	0.05	65	2.5	4	70	1.5	1	4.75	16.5	14-lead PDIP, 18-lead SOIC	EAR99
LTC1151	2	5	0.05	100	2	2.5		1.5	0.9	4.75	36	8-lead PDIP, 16-lead SOIC	EAR99
AD8638	1	9	0.06	75	1.5	2	60	1.2	1.5	4.5	16	8-lead SOIC, 5-lead SOT-23	EAR99
AD8639	2	9	0.06	75	1.5	2	60	1.2	1.5	4.5	16	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
LTC1047	2	10	0.05	30	0.2	0.2		3.5	0.06	4.75	16	8-lead PDIP, 16-lead SOIC	EAR99
LTC1150	1	10	0.05	100	2.5	3		1.8	0.8	4.75	32	8-lead PDIP, 8-lead SOIC	EAR99
LTC1250	1	10	0.05	200	1.5	10	15	0.75	3	4.75	18	8-lead PDIP, 8-lead SOIC	EAR99
LTC1049	1	10	0.1	50	0.8	0.8	80	3	0.2	4.75	18	8-lead PDIP, 8-lead SOIC	EAR99
LTC1152	1	10	0.1	100	0.7	0.5	100	2	2.2	3	14	8-lead PDIP, 8-lead SOIC	EAR99
AD8538	1	13	0.1	25	0.43	0.4	50	2	0.18	2.7	5	8-lead SOIC, 5-lead TSOT	EAR99
AD8539	2	15	0.1	60	0.43	0.4	52	1.2	0.21	2.7	5	8-lead SOIC, 8-lead MSOP	EAR99
ADA4051-2	2	15	0.1	70	0.125	0.06	95	1.96	0.013	0	5	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4051-1	1	17	0.1	70	0.125	0.06	95	1.96	0.015	0	5	5-lead SC70, 5-lead SOT-23	EAR99

オペアンプ

ADA4625-1: 36V、18MHz、低ノイズ、高速セトリング単電源、RRO、JFETオペアンプ

主な特長

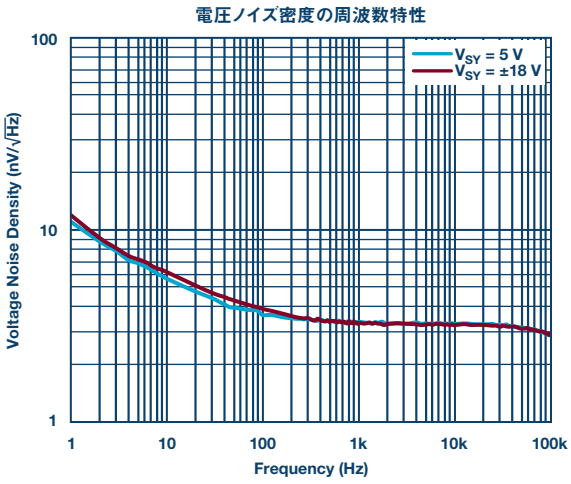
- 単電源動作:
  - 入力電圧範囲に負電源レールを含む
  - レールtoレール出力によりダイナミック・レンジを最大化
- 低ノイズ:
  - 1kHzで3.3nV/√Hz（代表値）
  - 0.15µV p-p、0.1Hz～10Hz
- 高速: 18MHz帯域、スルー・レート48V/µs（代表値）
- セトリング・タイム:
  - 0.5µs（0.1%まで）、0.7µs（0.01%まで）（10Vステップ）
- 低オフセット電圧: 25°C時 ±80µV（最大値）、
  低オフセット電圧ドリフト: 1.2µV/°C（最大値）
- 低入力バイアス電流: 25°C時 75pA（最大値）

利点

- 3nVの電圧ノイズにより、トランスインピーダンス回路で高感度を実現
- 帯域幅／スルー・レート／セトリング・タイムでマルチチャンネルのデータ・アクイジション・システムのシステム・スループットを向上
- 低い入力バイアス電流とノイズにより、PLLの動的スプリアスを低減
- PLLシステムの位相ジッタと動的スプリアスを低減

アプリケーション

- PLLフィルタ
- パルス信号光フォトダイオード
- データ・アクイジション・システム
- 高速計測器



低ノイズ（V_{NOISE} ≤ 5nV/√Hz）アンプ / Low Noise (V_{NOISE} ≤5 nV/√Hz) Amplifiers

Part Number	Number of Amps	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	V_S Span (min) (V)	V_S Span (max) (V)	I_O/Amp (typ) (mA)	V_{OS} (max) (µV)	V_{OS} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	Package	ECCN Code
ADA4625-1 ***New***	1	3.3	0.15	5	36	4	80	2.1	0.075	18	48	8-lead SOIC-EP	EAR99
LTC2058 ***New***	2	9	0.2	4.75	36	0.95	5	0.025	0.1	2.5	1.6	12-lead MSOP-EP, 8-lead SOIC-EP	EAR99
LT6274 ***New***	1	10	1	9	32	1.6	400	10	500	40	2200	5-lead SOT-23	EAR99
LT1028	1	0.85	0.035	8	44	7.4	40	0.8	90	75	15	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
LT1128	1	0.85	0.035	8	44	7.4	40	0.8	90	20	6	8-lead PDIP, 8-lead SOIC	EAR99
ADA4898-2	2	0.9		9	36	7.9	125		400	50	55	8-lead SOIC-EP	EAR99
ADA4898-1	1	0.9		9	36	8.1	125		400	50	55	8-lead SOIC-EP	EAR99
LT1115	1	0.9		8	44	8.5	200		380	70	15	8-lead PDIP, 16-lead SOIC	EAR99
AD797	1	0.9	0.05	10	36	10.5	40	1	900	110	20	8-lead PDIP, 8-lead SOIC	EAR99
AD8099	1	0.95		5	12	15	500		13,000	3800	470	8-lead LFCSP, 8-lead SOIC-EP	EAR99
LT6200	1	0.95	0.6	2.5	12.6	20	1000	24	40,000	165	44	8-lead SOIC, 6-lead SOT-23	EAR99
LT6200-10	1	0.95	0.6	2.5	12.6	20	1000	24	40,000	1450	340	8-lead SOIC, 6-lead SOT-23	EAR99
LT6200-5	1	0.95	0.6	2.5	12.6	20	1000	24	40,000	750	210	8-lead SOIC, 6-lead SOT-23	EAR99
LT6201	2	0.95	0.6	2.5	12.6	20	1000	24	40,000	165	50	8-lead SOIC, 8-lead DFN	EAR99
ADA4895-1	1	1	0.099	3	10	3	350		6000	1500	943	8-lead SOIC, 6-lead SOT-23	EAR99
ADA4895-2	2	1	0.099	3	10	3	350		6000	1500	943	10-lead MSOP	EAR99
ADA4896-2	2	1	0.099	3	10	3	500		17,000	90	120	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4897-1	1	1	0.099	3	10	3	500		17,000	90	120	8-lead SOIC, 6-lead SOT-23	EAR99

オペアンプ

低ノイズ(V_{NOISE} ≤ 5nV/√Hz)アンプ(続き) / Low Noise (V_{NOISE} ≤5 nV/√Hz) Amplifiers (Continued)

Part Number	Number of Amps	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	V_S Span (min) (V)	V_S Span (max) (V)	I_Q/Amp (typ) (mA)	V_{OS} (max) (µV)	V_{OS} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	Package	ECCN Code
ADA4897-2	2	1	0.099	3	10	3	500		17,000	90	120	Chips or die, 10-lead MSOP	EAR99
ADA4899-1	1	1		4.5	12	14.7	230		1000	280	310	8-lead LFCSP, 8-lead SOIC-EP	EAR99
AD8597	1	1.07	0.076	9	30	5.7	120	2.2	200	10	16	8-lead LFCSP, 8-lead SOIC	EAR99
AD8599	2	1.07	0.076	9	36	5.7	120	2.2	200	10	16	8-lead SOIC	EAR99
LT6236	1	1.1	0.18	3	12.6	3.15	500	2	10,000	215	60	6-lead SOT-23	EAR99
LT6237	2	1.1	0.18	3	12.6	3.15	500	2	10,000	215	60	8-lead MSOP, 8-lead DFN	EAR99
LT6238	4	1.1	0.18	3	12.6	3.15	500	2	10,000	215	60	16-lead SSOP	EAR99
LT6230	1	1.1	0.18	3	12.6	3.3	500	3	10,000	215	70	6-lead SOT-23	EAR99
LT6230-10	1	1.1	0.18	3	12.6	3.3	500	3	10,000	1450	250	6-lead SOT-23	EAR99
LT6231	2	1.1	0.18	3	12.6	3.3	350	3	10,000	215	70	8-lead SOIC, 8-lead DFN	EAR99
LT6232	4	1.1	0.18	3	12.6	3.3	350	3	10,000	215	70	16-lead SSOP	EAR99
LT6018	1	1.2	0.03	8	33	7.2	50	0.5	150	15	30	8-lead SOIC-EP, 12-lead DFN	EAR99
ADA4800	1	1.5		4	17	1.4	41,000		0	0	415	6-lead LFCSP, chips or die	EAR99
AD8004	4	1.5		4	12	14	3500		110,000	250	3000	14-lead SOIC	EAR99
AD8000	1	1.6	0.02	4.5	12	13.5	10,000		45,000	0	4100	8-lead LFCSP, 8-lead SOIC-EP	EAR99
AD829	1	1.7		9	36	5.3	1000		7000	750	230	20-lead LCC, 8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
LT1993-10	1	1.7		4	5.5	100	6500		0	700	1100	16-lead QFN	EAR99
ADA4004-1	1	1.8	0.15	10	30	2.2	125	1	90	12	2.7	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4004-2	2	1.8	0.15	10	30	2.2	125	1	90	12	2.7	8-lead SOIC, 8-lead MSOP	EAR99
ADA4004-4	4	1.8	0.15	10	30	2.2	125	1	90	12	2.7	16-lead LFCSP, 14-lead SOIC	EAR99
AD8003	3	1.8		4.5	10	9.5	9300		50,000	1650	3800	24-lead LFCSP, chips or die	EAR99
AD815	2	1.85		10	36	15	8000		5000	0	900		EAR99
LT6233	1	1.9	0.22	3	12.6	1.15	500	3	3000	60	15	6-lead SOT-23	EAR99
LT6233-10	1	1.9	0.22	3	12.6	1.15	500	3	3000	375	80	6-lead SOT-23	EAR99
LT6234	2	1.9	0.22	3	12.6	1.15	350	3	3000	60	17	8-lead SOIC, 8-lead DFN	EAR99
LT6235	4	1.9	0.22	3	12.6	1.15	350	3	3000	60	17	16-lead SSOP	EAR99
LT6202	1	1.9	0.8	2.5	12.6	2.8	500	24	7000	100	25	8-lead SOIC, 5-lead SOT-23	EAR99
LT6203	2	1.9	0.8	2.5	12.6	2.8	500	24	7000	100	25	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT6204	4	1.9	0.8	2.5	12.6	2.8	500	24	7000	100	25	14-lead SOIC, 16-lead SSOP	EAR99
AD8017	2	1.9		4.4	12	7	3000		45,000	0	1600	8-lead SOIC	EAR99
AD8009	1	1.9		5	12	14	5000		150,000	0	5500	8-lead SOIC, 5-lead SOT-23, chips or die	EAR99
AD811	1	1.9		9	36	14.5	3000		5000	0	400	20-lead LCC, 8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, 16-lead SOIC—wide, LCC:cer leadless chip carr, chips or die	EAR99
AD8011	1	2		3	12	1	5000		15,000	0	1100	8-lead PDIP, 8-lead SOIC	EAR99
LT6203X	2	2	0.8	2.5	12.6	3.3	500		7000	83	24	8-lead SOIC	EAR99
AD8001	1	2		6	12	5	5500		25,000	880	1200	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, 5-lead SOT-23, chips or die	EAR99
AD8023	3	2		4.2	15	6.2	5000		45,000	0	1200	14-lead SOIC, chips or die	EAR99
AD844	1	2		9	36	6.5	150		250	0	2000	8-lead PDIP, 8-lead CerDIP 16-lead SOIC—wide, chips or die	EAR99
AD8002	2	2		6	12	10	6000		25,000	600	1200	8-lead SOIC, 8-lead MSOP	EAR99
AD8079	2	2		6	12	10	15,000		6000	260	800	8-lead SOIC	EAR99
AD8010	1	2		9	12	15.5	12,000		135,000	0	800	8-lead PDIP, 8-lead SOIC, 16-lead SOIC—wide	EAR99

オペアンプ

低ノイズ（V_{NOISE} ≤ 5nV/√Hz）アンプ（続き） / Low Noise (V_{NOISE} ≤5 nV/√Hz) Amplifiers (Continued)

Part Number	Number of Amps	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	V_S Span (min) (V)	V_S Span (max) (V)	I_O/Amp (typ) (mA)	V_{OS} (max) (µV)	V_{OS} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	Package	ECCN Code
ADA4841-1	1	2.1		2.7	12	1.2	300		5300	35	13	8-lead SOIC, 6-lead SOT-23	EAR99
ADA4841-2	2	2.1		2.7	12	1.2	300		5300	35	13	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP, chips or die	EAR99
AD8021	1	2.1		4.5	24	7.8	1000		11,300	1000	130	8-lead SOIC, 8-lead MSOP	EAR99
ADA4870	1	2.1		10	40	32.5	10,000		23,000	0	2500	PSOP_3 430 mil with heatsink, chips or die	EAR99
LT1993-4	1	2.15		4	5.5	100	6500		0	900	1100	16-lead QFN	EAR99
LTC6360	1	2.3		4.75	5.25	13.6	250		30,000	1000	135	8-lead MSOP-EP, 8-lead DFN	EAR99
ADA4311-1	2	2.4		12	12	11.8	3000		16,000	0	1050	10-lead MSOP_ED	EAR99
AD8012	2	2.5		3	12	1.7	4000		12,000	0	2250	8-lead SOIC, 8-lead MSOP	EAR99
LT1007	1	2.5	0.06	4	44	2.6	25	0.6	35	8	2.5	8-lead PDIP, 8-lead SOIC	EAR99
LT1037	1	2.5	0.06	8	44	2.6	25	0.6	35	60	15	8-lead PDIP, 8-lead SOIC	EAR99
AD8022	2	2.5		4.5	26	4	6000		5000	100	50	8-lead SOIC, 8-lead MSOP	EAR99
AD8392A		2.5		10	24	5.8	4000		10,000	0	515	32-lead LFCSP with 3.1 mm exposed pad, 28-lead TSSOP-EP	EAR99
LT1226	1	2.6		5	36	7	1000		8000	1000	400	8-lead PDIP, 8-lead SOIC	EAR99
AD8016	2	2.6		6	26	12.5	3000		75,000	0	1000	28-lead TSSOP-EP	EAR99
LT1124	2	2.7	0.07	8	44	2.3	70	1	20	12.5	4.5	8-lead PDIP, 8-lead SOIC	EAR99
LT1125	4	2.7	0.07	8	44	2.3	90	1	20	12.5	4.5	14-lead PDIP, 16-lead SOIC	EAR99
LT1126	2	2.7	0.07	8	44	2.6	70	1	20	65	11	8-lead PDIP, 8-lead SOIC	EAR99
LT1127	4	2.7	0.07	8	44	2.6	90	1	20	65	11	14-lead PDIP, 16-lead SOIC	EAR99
AD8655	1	2.7		2.7	5.5	4.5	250	2.3	0.01	28	11	8-lead SOIC, 8-lead MSOP	EAR99
AD8656	2	2.7		2.7	5.5	4.5	250	2.3	0.01	28	11	8-lead SOIC, 8-lead MSOP	EAR99
AD8007	1	2.7		5	12	9	4000		6000	0	1000	5-lead SC70, 8-lead SOIC	EAR99
AD8008	2	2.7		5	12	9	4000		8000	380	1000	8-lead SOIC, 8-lead MSOP	EAR99
LT1251	1	2.7		5	36	13.5	5000		30,000	40	300	14-lead PDIP, 14-lead SOIC	EAR99
LT1256	1	2.7		5	36	13.5	5000		0	40	300	14-lead PDIP, 14-lead SOIC	EAR99
LTC6252	1	2.75	2	2.5	5.25	3.3	350		3000	720	280	6-lead SOT-23	EAR99
LTC6253	2	2.75	2	2.5	5.25	3.3	350		3000	720	280	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC6253-7	2	2.75	2	2.5	5.25	3.3	350		750	2000	500	10-lead MSOP	EAR99
LTC6254	4	2.75	2	2.5	5.25	3.3	350		3000	720	280	16-lead MSOP	EAR99
ADA4075-2	2	2.8	0.06	9	36	2.25	1000		100	6.5	12	8-lead LFCSP, 8-lead SOIC	EAR99
AD8675	1	2.8	0.1	10	30	2.9	75	0.6	2	10	2.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8676	2	2.8	0.1	10	30	2.9	50	0.6	2	10	2.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8671	1	2.8	0.077	8	36	3.5	75	0.5	12	10	4	8-lead SOIC, 8-lead MSOP	EAR99
AD8672	2	2.8	0.077	8	36	3.5	75	0.8	12	10	4	8-lead SOIC, 8-lead MSOP	EAR99
AD8674	4	2.8	0.077	8	36	3.5	75	0.8	12	10	4	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4310-1	2	2.85		5	12	7.6			0	0	820	16-lead LFCSP, 10-lead MSOP_ED	EAR99
AD810	1	2.9		5	36	6.8	6000		10,000	80	1000	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
AD743	1	2.9	0.38	9.6	36	10	1000		0.4	4.5	2.8	16-lead SOIC—wide	EAR99
AD745	1	2.9	0.38	9.6	36	10	500		0.25	20	12.5	16-lead SOIC—wide	EAR99
AD8072	2	3		5	12	3	6000		12,000	100	500	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
AD8073	3	3		5	12	3	6000		12,000	100	500	14-lead SOIC	EAR99
LT1253	2	3		4	28	6	15,000		0	250	250	8-lead PDIP, 8-lead SOIC	EAR99
LT1254	4	3		4	28	6	15,000		0	250	250	14-lead PDIP, 14-lead SOIC	EAR99
LT1497	2	3		4	36	6	15,000		0	59	900	16-lead SOIC, 8-lead SOIC	EAR99
LT1222	1	3		5	36	8	300		300	500	200	8-lead PDIP, 8-lead SOIC	EAR99
LT1252	1	3		4	28	8.5	15,000		0	250	250	8-lead PDIP, 8-lead SOIC	EAR99
LT1994	1	3		2.375	12.6	13.3	2000		45,000	70	65	8-lead MSOP, 8-lead DFN	EAR99

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低ノイズ（V_{NOISE} ≤ 5nV/√Hz）アンプ（続き） / Low Noise (V_{NOISE} ≤5 nV/√Hz) Amplifiers (Continued)

Part Number	Number of Amps	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	V_S Span (min) (V)	V_S Span (max) (V)	I_Q/Amp (typ) (mA)	V_{OS} (max) (µV)	V_{OS} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	Package	ECCN Code
AD8045	1	3		3.3	12	16	1000		6300	400	1350	8-lead LFCSP, 8-lead SOIC-EP	EAR99
AD8024	4	3		5	24	17	5000		7500	200	390	16-lead SOIC	EAR99
LT1210	1	3		8	36	35	15,000		0	66	900	7-lead TO-220 (flow 06) round header/metal CAN, 7-lead DD PAK, 7-lead TO-220 (flow 44), 7-lead TO-220 (flow 37), 16-lead SOIC	EAR99
LT1210X	1	3		10	30	35	15,000		0	66	900	16-lead TSSOP-EP	EAR99
LT1677	1	3.2	0.09	2.5	44	2.75	60	1.5	20	7.2	2.5	8-lead PDIP, 8-lead SOIC	EAR99
LT1229	2	3.2		4	36	6	10,000		0	100	700	8-lead PDIP, 8-lead SOIC	EAR99
LT1230	4	3.2		4	36	6	10,000		0	100	700	14-lead PDIP, 14-lead SOIC	EAR99
LT1227	1	3.2		4	36	10	10,000		0	140	1100	8-lead PDIP, 8-lead SOIC	EAR99
LT1227MJ8	1	3.2		4	36	10	10,000		0	100	1100	8-lead PDIP, 8-lead SOIC	EAR99
ADA4861-3	3	3.2		5	12	16.1	13,000		13,000	730	680	14-lead SOIC	EAR99
ADA4807-1	1	3.3	0.16	2.7	11	1	125	3.7	1600	200	225	6-lead SC70, 6-lead SOT-23	EAR99
ADA4807-2	2	3.3	0.16	2.7	11	1	125	3.7	1600	200	225	10-lead LFCSP, 8-lead MSOP	EAR99
ADA4807-4	4	3.3	0.16	2.7	11	1	175	3.7	1600	200	225	14-lead TSSOP	EAR99
AD8014	1	3.5		4.5	12	1.15	5000		15,000	0	4600	8-lead SOIC, 5-lead SOT-23	EAR99
AD8013	3	3.5		4.2	13	3.5	5000		15,000	140	1000	14-lead SOIC, chips or die	EAR99
AD812	2	3.5		2.4	36	4.5	5000		25,000	0	250	8-lead PDIP, 8-lead SOIC	EAR99
AD813	3	3.5		2.4	36	4.5	5000		30,000	0	450	14-lead PDIP, 14-lead SOIC, chips or die, LCC:cer leadless chip carr	EAR99
LT1806	1	3.5	0.8	2.5	12.6	9	550	5	4000	325	125	8-lead SOIC, 6-lead SOT-23	EAR99
LT1807	2	3.5	0.8	2.5	12.6	9	550	5	4000	325	125	8-lead SOIC, 8-lead MSOP	EAR99
LT1993-2	1	3.5		4	5.5	100	6500		0	800	1100	16-lead QFN	EAR99
LT1206	1	3.6		10	36	20	10,000		0	66	900	Round header/metal CAN 7-lead DD PAK, 8-lead PDIP, 8-lead SOIC	EAR99
LT1207	2	3.6		10	36	20	10,000		0	66	900	16-lead SOIC	EAR99
LT1259	2	3.6		4	36	5	12,000		0	130	1600	14-lead PDIP, 14-lead SOIC	EAR99
LT1260	3	3.6		4	36	5	12,000		0	130	1600	16-lead PDIP, 16-lead SOIC	EAR99
LT1795	2	3.6		10	36	29	13,000		0	65	900	20-lead SOIC, 20-lead TSSOP-EP	EAR99
AD8048	1	3.8		6	12	5.9	3000		3500	120	1000	8-lead SOIC	EAR99
LT1722	1	3.8		4.6	12.6	3.7	400	7	300	200	70	8-lead SOIC, 5-lead SOT-23	EAR99
LT1723	2	3.8		4.6	12.6	3.7	400	7	300	200	70	8-lead SOIC, 8-lead MSOP	EAR99
LT1724	4	3.8		4.6	12.6	3.7	400	7	300	200	70	14-lead SOIC	EAR99
ADA4084-1	1	3.9	0.1	3	30	0.625	100	1.75	250	15.9	4.6	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4084-2	2	3.9	0.1	3	30	0.625	100	1.75	250	15.9	4.6	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4084-4	4	3.9	0.1	3	30	0.625	100	1.75	250	15.9	4.6	16-lead LFCSP, 14-lead TSSOP	EAR99
LT1678	2	3.9	0.09	3	36	2	100	3	20	20	6	8-lead SOIC	EAR99
LT1679	4	3.9		3	36	2	100	3	20	20	6	14-lead SOIC	EAR99
AD8005	1	4		8	12	0.4	30,000		10,000	270	1500	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4817-1	1	4		5	10	19	2000		0.02	410	870	8-lead LFCSP, 8-lead SOIC-EP	EAR99
ADA4817-2	2	4		5	10	19	2000		0.02	410	870	16-lead LFCSP	EAR99
ADA4858-3	3	4		3	5.5	19	14,000		13,000	600	600	16-lead LFCSP	EAR99
ADA4860-1	1	4		5	12	6	13,000		10,000	0	790	6-lead SOT-23	EAR99
LTC6268-10	1	4	12.6	3.1	5.25	16.5	700		0.000	4000	1500	8-lead SOIC, 6-lead SOT-23	EAR99

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低ノイズ（V_{NOISE} ≤ 5nV/√Hz）アンプ（続き） / Low Noise (V_{NOISE} ≤5 nV/√Hz) Amplifiers (Continued)

Part Number	Number of Amps	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	V_S Span (min) (V)	V_S Span (max) (V)	I_Q/Amp (typ) (mA)	V_{OS} (max) (µV)	V_{OS} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	Package	ECCN Code
LTC6269-10	2	4	12.6	3.1	5.25	16.5	700		0.000	4000	1500	8-lead MSOP-EP, 10-lead DFN	EAR99
AD8634	2	4.2	0.13	3	30	1.1	250		200	9.7	5	Chips or die, 8-lead flatpack, 8-lead SOIC	EAR99
LT1792	1	4.2	2.4	10	40	4.2	600	10	0.8	5.6	3.4	8-lead PDIP, 8-lead SOIC	EAR99
LTC6246	1	4.2		2.5	5.25	0.95	500		350	180	90	6-lead SOT-23	EAR99
LTC6247	2	4.2		2.5	5.25	0.95	500		350	180	90	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC6248	4	4.2		2.5	5.25	0.95	500		350	180	90	16-lead MSOP	EAR99
AD8027	1	4.3		2.7	12	6.5	900		6000	190	100	8-lead SOIC, 6-lead SOT-23	EAR99
AD8028	2	4.3		2.7	12	6.5	900		6000	190	100	Chips or die, 8-lead SOIC, 10-lead MSOP	EAR99
AD9632	1	4.3		6	12	16	5000		7000	130	1500	8-lead SOIC	EAR99
LTC6268	1	4.3	13	3.1	5.25	16.5	700		0.000	500	400	8-lead SOIC, 6-lead SOT-23	EAR99
LTC6269	2	4.3	13	3.1	5.25	16.5	700		0.000	500	400	8-lead SOIC, 6-lead SOT-23	EAR99
ADA4857-1	1	4.4		4.5	10.5	5	4500	22	3300	410	2800	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4857-2	2	4.4		4.5	10.5	5	4500	22	3300	410	2800	16-lead LFCSP	EAR99
AD8018	2	4.5		3.3	8	9	15,000		8000	0	300	8-lead SOIC, 14-lead TSSOP	EAR99
AD8037	1	4.5		6	12	18.5	7000		9000	140	1500	8-lead SOIC, chips or die	EAR99
AD8397	2	4.5		3	25.2	11	3000		900	35	53	8-lead SOIC, 8-lead SOIC-EP	EAR99
AD8651	1	4.5		2.7	5.5	9	350		0.01	50	41	8-lead SOIC, 8-lead MSOP	EAR99
AD8652	2	4.5		2.7	5.5	9	300		0.01	50	41	8-lead SOIC, 8-lead MSOP	EAR99
LT1113	2	4.5	2.4	9	40	5.3	1500	1.5	0.45	5.6	3.9	8-lead PDIP, 8-lead SOIC	EAR99
LT1395	1	4.5		3	12.6	4.6	12,000		0	400	800	8-lead SOIC, 5-lead SOT-23, 6-lead SOT-23	EAR99
LT1396	2	4.5		3	12.6	4.6	12,000		0	400	800	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1397	4	4.5		3	12.6	4.6	12,000		0	400	800	14-lead SOIC, 16-lead SSOP, 14-lead DFN	EAR99
LT1398	2	4.5		3	12.6	4.6	12,000		0	300	800	16-lead SOIC	EAR99
LT1399	3	4.5		3	12.6	4.6	12,000		0	300	800	16-lead SOIC, 16-lead SSOP	EAR99
LT1399HV	3	4.5		3	15.5	4.6	12,000		0	300	800	16-lead SOIC, 16-lead SSOP	EAR99
LT6559	3	4.5		4	12	3.9	10,000		0	300	500	16-lead QFN	EAR99
ADA4627-1	1	4.8	0.7	9	36	7	200	2	0.005	19	56	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4637-1	1	4.8	0.7	9	30	7	200	2	0.005	79.9	170	8-lead LFCSP, 8-lead SOIC	EAR99
AD848	1	5		9	36	4.8	2300		5000	175	300	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
ADA4350	1	5		3.3	12	8.5	80	1.6	0.001	175	100	28-lead TSSOP	EAR99
LT1468	1	5	0.3	6	36	3.6	75	2	40	90	22	8-lead PDIP, 8-lead SOIC, 8-lead DFN	EAR99
LT1468-2	1	5	0.3	10	36	3.9	75		10	200	30	8-lead SOIC, 8-lead DFN	EAR99
LT1469	2	5	0.3	6	36	4.1	125	3	40	90	22	8-lead PDIP, 8-lead SOIC, 12-lead DFN	EAR99
LT1469-2	2	5	0.3	10	36	4.1	125		10	200	30	8-lead SOIC, 12-lead DFN	EAR99

オペアンプ

低消費電力(I_Q/Amp < 0.5mA)アンプ / Low Power (I_Q/Amp <0.5 mA) Amplifiers

Part Number	Number of Amps	I_Q/Amp (typ) (µA)	Shut-down	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (max) (nA)	V_{OS} (max) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	V_S Span (min) (V)	V_S Span (max) (V)	Package	ECCN Code
LTC2064 ***New***	2	1.4	Yes	0.02	0.004	0.02	5	220	4.6	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
LTC2066 ***New***	1	7.5	Yes	0.1	0.018	0.035	5	80	1.7	1.7	5.25	5-lead SOT-23, 6-lead SC70	EAR99
LTC2067 ***New***	2	7.5	Yes	0.1	0.018	0.035	5	80	1.7	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
LTC6260 ***New***	4	20	No	14.3	0.24	75	400	38	2	1.8	5.25	10-lead MSOP	EAR99
LT1997-2 ***New***	1	350	Yes	11	0.75	5	80	37	0.9	3.3	50	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
AD8500	1	0.75	No	0.077	0.004	0.01	1000	190		1.8	5	5-lead SC70	EAR99
AD8502	2	0.75	No	0.077	0.004	0.01	3000	190	6	1.8	5	8-lead SOT-23	EAR99
AD8504	4	0.75	No	0.077	0.004	0.01	3000	190	6	1.8	5	14-lead TSSOP	EAR99
LT6003	1	0.85	No	0.022	0.001	0.09	500	325	3	1.6	16	5-lead SOT-23, 4-lead DFN	EAR99
LT6004	2	0.85	No	0.022	0.001	0.09	500	325	3	1.6	16	8-lead MSOP, 8-lead DFN	EAR99
LT6005	4	0.85	No	0.022	0.001	0.09	650	325	3	1.6	16	16-lead SSOP, 16-lead DFN	EAR99
LT1494	1	1	No	0.030	0.001	1	375	185	4	2.1	36	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1495	2	1	No	0.030	0.001	1	375	185	4	2.1	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1496	4	1	No	0.030	0.001	1	375	185	4	2.1	36	14-lead PDIP, 14-lead SOIC	EAR99
LTC2063	1	1.4	Yes	0.02	0.004	0.02	5	220	4.6	1.7	5.25	5-lead SOT-23, 6-lead SC70	EAR99
LT1672	1	1.5	No	0.132	0.005	1	375	185	4	2.1	36	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1673	2	1.5	No	0.132	0.005	1	375	185	4	2.1	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1674	4	1.5	No	0.132	0.005	1	375	185	4	2.1	36	14-lead PDIP, 14-lead SOIC	EAR99
ADA4505-1	1	9	No	0.55	0.006	0.002	3000	65	2.95	1.8	5	6-ball WLCSP, 5-lead SOT-23	EAR99
ADA4505-2	2	9	No	0.55	0.006	0.002	3000	65	2.95	1.8	5	8-ball WLCSP, 8-lead MSOP	EAR99
ADA4505-4	4	9	No	0.55	0.006	0.002	3000	65	2.95	1.8	5	14-ball WLCSP, 14-lead TSSOP	EAR99
LT1178	2	12	No	0.935	0.04	5	70	49	0.9	2	44	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
LT1179	4	12	No	0.935	0.04	5	100	49	0.9	2	44	14-lead PDIP, 16-lead SOIC	EAR99
ADA4051-2	2	13	No	1.375	0.06	0.07	15	95	1.96	0	5	8-lead LFCSP, 8-lead MSOP	EAR99
LT2178	2	13	No	0.66	0.025	5	70	49	0.9	2.2	44	8-lead SOIC	EAR99
LT2179	4	13	No	0.66	0.025	5	100	49	0.9	2.2	44	14-lead SOIC	EAR99
LT6000	1	13	Yes	0.55	0.015	5	750	75		1.8	18	6-lead DFN	EAR99
LT6001	2	13	Yes	0.55	0.015	5	600	75		1.8	18	8-lead MSOP, 10-lead DFN	EAR99
LT6002	4	13	No	0.55	0.015	5	750	75		1.8	18	16-lead SSOP, 16-lead DFN	EAR99
ADA4051-1	1	15	No	1.375	0.06	0.07	17	95	1.96	0	5	5-lead SC70, 5-lead SOT-23	EAR99
AD8505	1	16.5	No	1.045	0.013	0.01	2500	45	2.8	1.8	5	6-ball WLCSP, 5-lead SOT-23	EAR99
LT6023	2	18	No	0.44	1.45	3	30	132		3	30	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
LT6023-1	2	18	Yes	0.44	1.45	3	30	132		3	30	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
AD8506	2	20	No	1.045	0.013	0.01	2500	45	2.8	1.8	5	8-ball WLCSP, 8-lead MSOP	EAR99
LTC6258	1	20	Yes	14.3	0.24	75	400	38	2	1.8	5.25	6-lead SOT-23, 6-lead DFN	EAR99
LTC6259	2	20	Yes	14.3	0.24	75	400	38	2	1.8	5.25	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
AD8657	2	22	No	2.53	0.08	0.02	350	45	5	2.7	18	8-lead LFCSP, 8-lead MSOP	EAR99
AD8659	4	22	No	2.53	0.08	0.02	350	45	5	2.7	18	16-lead LFCSP, 14-lead SOIC	EAR99
LT1462	2	28	No	1.925	0.13	0.002	800	76	2	10	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1463	4	28	No	1.925	0.13	0.002	800	76	2	10	40	14-lead PDIP, 14-lead SOIC	EAR99
LT2078	2	35	No	2.2	0.07	8	70	28	0.6	2.3	44	8-lead SOIC	EAR99
LT2079	4	35	No	2.2	0.07	8	110	28	0.6	2.3	44	14-lead SOIC	EAR99
AD8613	1	38	No	3.85	0.1	0.001	2200	22	2.3	1.8	5	5-lead SC70, 5-lead TSOT	EAR99
AD8617	2	38	No	4.4	0.1	0.001	2200	22	2.3	1.8	5	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
AD8619	4	38	No	4.4	0.1	0.001	2200	22	2.3	1.8	5	14-lead SOIC, 14-lead TSSOP	EAR99
LT1078	2	38	No	2.2	0.07	8	70	28	0.6	2.2	44	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
LT1079	4	38	No	2.2	0.07	8	100	28	0.6	2.2	44	14-lead PDIP, 16-lead SOIC	EAR99
LT1079MJ	4	38	No	2.2	0.07	8	100	28	0.6	2.2	44	14-lead PDIP, 16-lead SOIC	EAR99
AD8609	4	40	No	3.476	0.1	0.001	300	22	2.3	1.8	5	14-lead SOIC, 14-lead TSSOP	EAR99
LT1490A	2	40	No	1.98	0.06	8	500	50	1	2	44	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1491A	4	40	No	1.98	0.06	8	1000	50	1	2	44	14-lead PDIP, 14-lead SOIC, 16-lead DFN	EAR99
LT1782	1	40	Yes	2.2	0.07	15	800	50	1	2.2	18	5-lead SOT-23, 6-lead SOT-23	EAR99
LT1636	1	42	Yes	2.2	0.07	8	225	52	0.7	2.6	44	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1077	1	48	No	2.53	0.08	9	40	27	0.5	2.2	44	8-lead PDIP, 8-lead SOIC	EAR99
AD8603	1	50	No	3.476	0.1	0.001	300	22	2.3	1.8	5	5-lead TSOT	EAR99
AD8607	2	50	No	3.476	0.1	0.001	300	22	2.3	1.8	5	8-lead SOIC, 8-lead MSOP	EAR99

オペアンプ

低消費電力（I_O/Amp < 0.5mA）アンプ（続き） / Low Power (I_O/Amp <0.5 mA) Amplifiers (Continued)

Part Number	Number of Amps	I_O/Amp (typ) (µA)	Shut-down	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (max) (nA)	V_{os} (max) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LTC6078	2	54	Yes	8.25	0.05	0.001	25	18	1	2.7	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6079	4	54	No	8.25	0.05	0.001	25	18	1	2.7	5.5	16-lead SSOP, 16-lead DFN	EAR99
ADA4096-2	2	60	No	8.646	0.4	25	300	27	0.7	3	30	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4096-4	4	60	No	8.646	0.4	25	300	27	0.7	3	30	16-lead LFCSP, 14-lead TSSOP	EAR99
LT1466L	2	60	No	1.32	0.04	14	390	45		2	16	8-lead PDIP, 8-lead SOIC	EAR99
LT1467L	4	60	No	1.32	0.04	14	390	45		2	16	16-lead SOIC	EAR99
LTC1047	2	60	Yes	2.2	0.2	0.03	10		3.5	4.75	16	8-lead PDIP, 16-lead SOIC	EAR99
LTC6255	1	60	Yes	71.5	1.8	50	350	21	2.5	1.8	5.25	6-lead SOT-23, 6-lead DFN	EAR99
AD8541	1	65	No	11	0.92	0.06	6000	38		2.5	5	5-lead SC70, 8-lead SOIC, 5-lead SOT-23	EAR99
AD8542	2	65	No	11	0.92	0.06	6000	38		2.5	5	8-lead SOIC, 8-lead MSOP, 8-lead TSSOP	EAR99
AD8544	4	65	No	11	0.92	0.06	6000	38		2.5	5	14-lead SOIC, 14-lead TSSOP	EAR99
LTC6256	2	65	Yes	71.5	1.8	50	350	21	2.5	1.8	5.25	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC6257	4	65	Yes	71.5	1.8	50	350	21	2.5	1.8	5.25	16-lead MSOP	EAR99
LT6020	2	90	No	4.4	5	1	30	50	1.1	3	30	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
LT6020-1	2	90	Yes	4.4	5	1	30	50	1.1	3	30	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
LT1991	1	100	No	6.16	0.12	5	50	46	0.35	2.4	40	10-lead MSOP, 10-lead DFN	EAR99
LT1996	1	100	No	6.16	0.12	5	50	18	0.35	2.7	36	10-lead MSOP, 10-lead DFN	EAR99
LTC6084	2	110	Yes	16.5	0.5	0.04	750	31	3	2.5	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6085	4	110	No	16.5	0.5	0.04	750	31	3	2.5	5.5	16-lead SSOP, 16-lead DFN	EAR99
LT1635	1	130	No	1.925	0.045	4.5	1300	50	1	1.1	14	8-lead PDIP, 8-lead SOIC	EAR99
LT6010	1	135	Yes	3.63	0.09	0.11	35	14	0.4	2.7	40	8-lead SOIC, 8-lead DFN	EAR99
LT6011	2	135	No	3.63	0.09	0.3	60	14	0.4	2.4	40	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT6012	4	135	No	3.63	0.09	0.3	60	14	0.4	2.4	40	14-lead SOIC, 16-lead SSOP	EAR99
LTC2055	2	130	No	5.5	0.5	0.15	3		1.6	2.7	6	8-lead MSOP, 8-lead DFN	EAR99
LTC2055HV	2	150	No	5.5	0.5	0.15	3		1.6	2.7	11	8-lead MSOP, 8-lead DFN	EAR99
LT1464	2	145	No	11	0.9	0.002	800	24	2	10	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1465	4	145	No	11	0.9	0.002	800	24	2	10	40	14-lead PDIP, 14-lead SOIC	EAR99
LT6013	1	145	No	17.6	0.2	0.25	35	9.5	0.2	2.7	40	8-lead SOIC, 8-lead DFN	EAR99
LT6014	2	145	No	17.6	0.2	0.4	60	9.5	0.2	2.7	40	8-lead SOIC, 8-lead DFN	EAR99
LTC2054	1	140	No	5.5	0.5	0.15	3		1.6	2.7	6	5-lead SOT-23	EAR99
LTC2054HV	1	175	No	5.5	0.5	0.15	3		1.6	2.7	11	5-lead SOT-23	EAR99
ADA4062-2	2	165	No	15.4	3.3	0.05	1500	36	1.5	8	36	10-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4062-4	4	165	No	15.4	3.3	0.05	1500	36	1.5	8	36	16-lead LFCSP, 14-lead TSSOP	EAR99
ADA4091-2	2	165	No	13.97	0.46	80	250	24	0.8	2.7	36	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4091-4	4	165	No	13.97	0.46	80	250	24	0.8	2.7	36	16-lead LFCSP, 14-lead TSSOP	EAR99
ADA4092-4	4	165	No	15.4	0.4	80	1500	24	0.8	2.7	36	14-lead TSSOP	EAR99
ADA4691-2	2	165	Yes	39.6	1.3	0.005	2500	13	3.2	2.7	5.5	9-ball WLCSP, 10-lead LFCSP	EAR99
ADA4691-4	4	165	Yes	39.6	1.3	0.005	2500	13	3.2	2.7	5.5	16-lead LFCSP	EAR99
AD648	2	170	No	11	1.8	0.01	1000	30		9	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1638	2	170	No	13.2	0.38	50	600	20	1	2.5	44	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1639	4	170	No	11.825	0.38	50	600	20	1	2.5	44	14-lead PDIP, 14-lead SOIC	EAR99
AD8244	4	180	No		0.8	0.003	350	13	0.4	3	36	10-lead MSOP	EAR99
AD8538	1	180	No	4.73	0.4	0.025	13	50	2	2.7	5	8-lead SOIC, 5-lead TSOT	EAR99
ADA4692-2	2	180	No	39.6	1.3	0.005	2500	16		2.7	5	8-lead LFCSP, 8-lead SOIC	EAR99
LT1637	1	190	Yes	11	0.35	50	350	27	0.6	2.7	44	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LTC1049	1	200	Yes	8.8	0.8	0.05	10	80	3	4.75	18	8-lead PDIP, 8-lead SOIC	EAR99
AD8539	2	210	No	4.73	0.4	0.06	15	52	1.2	2.7	5	8-lead SOIC, 8-lead MSOP	EAR99
AD8682	2	210	No	38.5	9	0.02	1000	36	1.3	9	36	8-lead SOIC, 8-lead MSOP	EAR99
AD8684	4	210	No	38.5	9	0.02	1000	36	1.3	9	36	14-lead SOIC, 14-lead TSSOP	EAR99
LT1783	1	210	Yes	13.75	0.42	80	800	20	0.6	2.2	18	5-lead SOT-23, 6-lead SOT-23	EAR99
AD8622	2	215	No	6.16	0.48	0.2	125	11	0.2	5	36	8-lead SOIC, 8-lead MSOP	EAR99
AD8624	4	215	No	6.16	0.48	0.2	125	11	0.2	5	36	16-lead LFCSP, 14-lead TSSOP	EAR99
ADA4692-4	4	225	No	39.6	1.3	0.005	2500	13		2.7	5.5	14-lead TSSOP	EAR99
LTC6261	1	245	Yes	330	7	100	400	13	1.25	1.8	5.25	6-lead SOT-23, 6-lead DFN	EAR99
LTC6262	2	245	Yes	330	7	100	400	13	1.25	1.8	5.25	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC6263	4	245	Yes	330	7	750	400	13	1.25	1.8	5.25	16-lead MSOP	EAR99

オペアンプ

低消費電力(I_Q/Amp < 0.5mA)アンプ(続き) / Low Power (I_Q/Amp <0.5 mA) Amplifiers (Continued)

Part Number	Number of Amps	I_Q/Amp (typ) (µA)	Shut-down	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (max) (nA)	V_{OS} (max) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	V_S Span (min) (V)	V_S Span (max) (V)	Package	ECCN Code
LT1351	1	250	Yes	33	200	50	600	14		5	36	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1352	2	250	No	33	200	50	600	14		5	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1353	4	250	No	33	200	50	600	14		5	36	14-lead SOIC	EAR99
AD8663	1	285	No	5.94	0.3	0.045	300	21	2.5	5	16	8-lead LFCSP, 8-lead SOIC	EAR99
AD8667	2	285	No	5.94	0.3	0.045	300	21	2.5	5	16	8-lead SOIC, 8-lead MSOP	EAR99
AD8669	4	285	No	5.94	0.3	0.045	300	21	2.5	5	16	14-lead SOIC, 14-lead TSSOP	EAR99
AD8641	1	290	No	38.5	3	0.001	750	27.5	4.2	5	26	5-lead SC70, 8-lead SOIC	EAR99
AD8642	2	290	No	38.5	3	0.001	750	27.5	4.2	5	26	8-lead SOIC, 8-lead MSOP	EAR99
AD8643	4	290	No	38.5	3	0.001	750	27.5	4.2	5	26	16-lead LFCSP, 14-lead SOIC	EAR99
LT6015	1	315	No	35.2	0.75	5	50	18	0.5	3	50	5-lead SOT-23	EAR99
LT6016	2	315	No	35.2	0.75	5	50	18	0.5	3	50	8-lead MSOP	EAR99
LT6017	4	315	No	35.2	0.75	5	50	18	0.5	3	50	22-lead DFN	EAR99
LT1413	2	330	No	10.45	0.3		150	23	0.55	3	22	8-lead PDIP, 8-lead SOIC	EAR99
LTC6081	2	330	Yes	39.6	1	0.001	70	13	1.3	2.7	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6082	4	330	No	39.6	1	0.001	70	13	1.3	2.7	5.5	16-lead SSOP, 16-lead DFN	EAR99
LT1006	1	340	No	6.6	0.4	15	50	22	0.55	4	44	8-lead PDIP, 8-lead SOIC	EAR99
LT1366	2	340	No	4.4	0.13	35	475	29		2	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1367	4	340	No	4.4	0.13	35	800	29		2	36	14-lead SOIC	EAR99
LT1368	2	340	No	1.76	0.065	35	475	29		2	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1369	4	340	No	1.76	0.065	35	800	29		2	36	14-lead SOIC	EAR99
LT1013	2	350	No	8.8	0.4	20	150	22	0.55	4	44	8-lead TO-5 (0.200 in PCD), 8-lead PDIP, 8-lead SOIC	EAR99
LT1013AMH	2	350	No	8.8	0.4	20	150	22	0.55	4	44	8-lead TO-5 (0.200 in PCD), 8-lead PDIP, 8-lead SOIC	EAR99
LT1014	4	350	No	8.8	0.4	20	150	22	0.55	4	44	14-lead PDIP, 16-lead SOIC	EAR99
LT1097	1	350	No	7.7	0.2	0.25	50	14	0.5	2	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1112	2	350	No	8.25	0.3	0.25	60	14	0.3	2	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1114	4	350	No	8.25	0.3	0.25	60	14	0.3	2	40	14-lead PDIP, 16-lead SOIC	EAR99
LT1997-3	1	350	Yes	12.1	0.75	5	60	50	1.4	3.3	50	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
LT1012	1	370	No	11	0.2	0.1	25	14	0.5	2.4	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1218	1	370	Yes	3.3	0.1	70	90	33		2	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1218L	1	370		3.3	0.1	70	90	33		2	16	8-lead PDIP, 8-lead SOIC	EAR99
LT1219	1	370	Yes	1.65	0.05	70	90	33		2	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1219L	1	370		1.65	0.05	70	90	33		2	16	8-lead PDIP, 8-lead SOIC	EAR99
LT1008	1	380	No	11	0.2	0.1	120	14	0.5	4	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1024	2	380	No	11	0.2	0.12	50	14	0.5	4	40	14-lead PDIP	EAR99
AD8005	1	400	No	2970	1500	10,000	30,000	4		8	12	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4077-1	1	400	No	42.9	1	1	35	7	0.25	5	30	8-lead SOIC, 8-lead MSOP	EAR99
ADA4077-2	2	400	No	42.9	1	1	35	7	0.25	5	30	8-lead SOIC, 8-lead MSOP	EAR99
ADA4077-4	4	400	No	42.9	1	1	50	7	0.25	5	30	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4665-2	2	400	No	13.2	1	0.001	4000	27	3	5	16	8-lead SOIC, 8-lead MSOP	EAR99
LT1492	2	425	No	49.5	1.8	100	180	16.5	0.33	2.1	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1493	4	425	No	49.5	1.8	100	130	16.5	0.33	2.1	36	16-lead SOIC	EAR99
AD8508	4	500	No	1.045	0.013	0.01	2500	45	2.8	1.8	5	14-ball WLCSP, 14-lead TSSOP	EAR99
AD8515	1	500	No	55	2.7	0.03	6000	20		1.8	5	5-lead SC70, 5-lead SOT-23	EAR99
ADA4177-1	1	500	No	38.5	1.5	1	60	8	0.175	10	30	8-lead SOIC, 8-lead MSOP	EAR99
ADA4177-2	2	500	No	38.5	1.5	1	60	8	0.175	10	30	8-lead SOIC, 8-lead MSOP	EAR99
ADA4177-4	4	500	No	38.5	1.5	1	60	8	0.175	10	30	14-lead SOIC, 14-lead TSSOP	EAR99
LT1784	1	500	Yes	27.5	2.1	500	3500	25	1.5	2	18	5-lead SOT-23, 6-lead SOT-23	EAR99

オペアンプ

ADA4530-1: フェムトアンペア入力バイアス電流、電位計用アンプ

主な特長

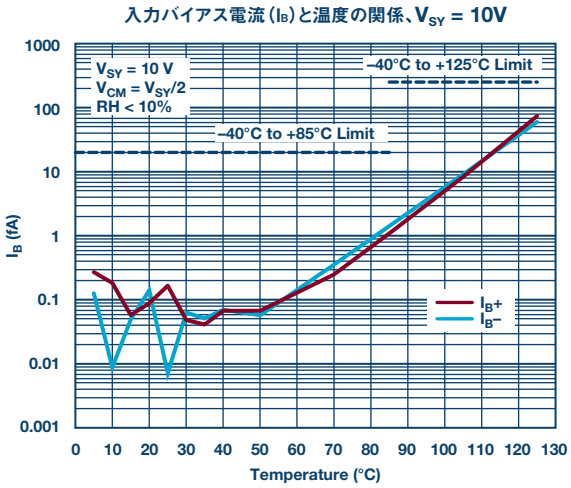
- 低入力バイアス電流
- ±20fA（最大値）@ T_A = 25°C（出荷テストで保証）
- ±20fA（最大値）@ -40°C < T_A < +85°C
- ±250fA（最大値）@ -40°C < T_A < +12°C（出荷テストで保証）
- 低オフセット電圧: 50µV（最大値）（規定のCMRR範囲内）
- オフセット電圧ドリフト: ±0.13µV/°C（代表値）、±0.5µV/°C（最大値）
- オフセット電圧100µV（最大値）のガード・バッファ・アンプを内蔵
- 低電圧ノイズ密度: 14nV/√Hz @ 10kHz
- 広帯域幅: ユニティ・ゲイン・クロスオーバー: 2MHz
- 電源電圧: 4.5V～16V（±2.25V～±8V）
- 動作温度: -40°C～+125°C
- 長期オフセット電圧ドリフト（10,000時間）: 0.5µV（代表値）
- 温度ヒステリシス: 1.5µV（代表値）

利点

- 容易に導入可能
- ガード・リング・ドライバ用バッファ・アンプ内蔵
- 表面実装パッケージ
- 入力ピンの電源からの分離に最適化されたピン配置
- 高性能な携帯型化学分析装置の設計が可能
- 実験用計測器を現地に持っていき、その場で調整を行えるため、サンプルの持ち帰りが不要

アプリケーション

- 実験／解析用計測器: 分光光度計、クロマトグラフ、質量分析器、定電位／定電流電量分析
- 計測器: ピコ・アンメータ、電気量計
- フォトダイオード用トランスインピーダンス・アンプ（TIA）、電離箱、作業電極測定
- 化学センサー／容量センサー用の高インピーダンス・バッファ



低入力バイアス電流（I_{BIAS} < 75pA）アンプ / Low Input Bias Current (I_{BIAS} <75 pA) Amplifiers

Part Number	Number of Amps	I_{BIAS} (max) (pA)	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LTC2064 ***New***	2	20	5	0.02	220	4.6	0.02	0.004	0.001	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
LTC2066 ***New***	1	35	5	0.02	80	1.7	0.1	0.018	0.008	1.7	5.25	5-lead SOT-23, 6-lead SC70	EAR99
LTC2067 ***New***	2	35	5	0.02	80	1.7	0.1	0.018	0.008	1.7	5.25	8-lead MSOP, 10-lead DFN	EAR99
ADA4625-1 ***New***	1	75	80	2.1	3.3	0.15	18	48	4	5	36	8-lead SOIC-EP	EAR99
LTC2058 ***New***	2	100	5	0.025	9	0.2	2.5	1.6	0.95	4.75	36	12-lead MSOP-EP, 8-lead SOIC-EP	EAR99
ADA4530-1	1	0.02	40	0.5	14	4	2	1.4	0.9	4.5	16	8-lead SOIC	EAR99
LTC6268	1	0.02	700		4.3	13	500	400	16.5	3.1	5.25		EAR99
LTC6268-10	1	0.02	700		4	12.6	4000	1500	16.5	3.1	5.25	8-lead SOIC, 6-lead SOT-23	EAR99
LTC6269	2	0.02	700		4.3	13	500	400	16.5	3.1	5.25	8-lead MSOP-EP, 10-lead DFN	EAR99
LTC6269-10	2	0.02	700		4	12.6	4000	1500	16.5	3.1	5.25	8-lead MSOP-EP, 10-lead DFN	EAR99
AD549	1	0.06	500	15	35	4	1	3	0.7	10	36	8-lead header	EAR99
AD8603	1	1	300	4.5	22	2.3	0.316	0.1	0.05	1.8	5	5-lead TSOT	EAR99
AD8605	1	1	300	4.5	6.5	2.3	10	5	1.2	2.7	5	5-ball WLCSP, 5-lead SOT-23	EAR99
AD8606	2	1	300	4.5	6.5	2.3	10	5	1.2	2.7	5	8-ball WLCSP, 8-lead SOIC, 8-lead MSOP	EAR99
AD8607	2	1	300	4.5	22	2.3	0.316	0.1	0.05	1.8	5	8-lead SOIC, 8-lead MSOP	EAR99

オペアンプ

低入力バイアス電流(I_{BIAS} < 75pA)アンプ(続き) / Low Input Bias Current (I_{BIAS} <75 pA) Amplifiers (Continued)

Part Number	Number of Amps	I_{BIAS} (max) (pA)	V_{OS} (max) (µV)	V_{OS} TC (max) (µV/°C)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_Q/Amp (typ) (mA)	V_S Span (min) (V)	V_S Span (max) (V)	Package	ECCN Code
AD8608	4	1	300	6	6.5	2.3	10	5	1.2	2.7	5	Chips or die, 14-lead SOIC, 14-lead TSSOP	EAR99
AD8609	4	1	300	4.5	22	2.3	0.316	0.1	0.04	1.8	5	14-lead SOIC, 14-lead TSSOP	EAR99
AD8613	1	1	2200	7	22	2.3	0.35	0.1	0.038	1.8	5	5-lead SC70, 5-lead TSOT	EAR99
AD8615	1	1	100	10	7	2.4	24	12	1.7	2.7	5.5	5-lead TSOT	EAR99
AD8616	2	1	60	7	7	2.4	24	12	1.7	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8617	2	1	2200	4.5	22	2.3	0.4	0.1	0.038	1.8	5	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
AD8618	4	1	60	7	7	2.4	24	12	2	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
AD8619	4	1	2200	4.5	22	2.3	0.4	0.1	0.038	1.8	5	14-lead SOIC, 14-lead TSSOP	EAR99
AD8625	4	1	750		16	2.5	5	5	0.85	5	26	14-lead SOIC, 14-lead TSSOP	EAR99
AD8626	2	1	750		16	2.5	5	5	0.85	5	26	8-lead SOIC, 8-lead MSOP	EAR99
AD8627	1	1	750		16	2.5	5	5	0.85	5	26	5-lead SC70, 8-lead SOIC	EAR99
AD8641	1	1	750		27.5	4.2	3.5	3	0.29	5	26	5-lead SC70, 8-lead SOIC	EAR99
AD8642	2	1	750		27.5	4.2	3.5	3	0.29	5	26	8-lead SOIC, 8-lead MSOP	EAR99
AD8643	4	1	750		27.5	4.2	3.5	3	0.29	5	26	16-lead LFCSP, 14-lead SOIC	EAR99
AD8646	2	1	2500	7.5	6	2.3	24	11	2	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8647	2	1	2500	7.5	6	2.3	24	11	2	2.7	5.5	10-lead MSOP	EAR99
AD8648	4	1	2500	7.5	6	2.3	24	11	2	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
AD8661	1	1	160	10	10	2.5	4	3.5	1.4	5	16	8-lead LFCSP, 8-lead SOIC	EAR99
AD8662	2	1	160	9	10	2.5	4	3.5	1.4	5	16	8-lead SOIC, 8-lead MSOP	EAR99
AD8664	4	1	160	9	10	2.5	4	3.5	1.55	5	16	14-lead SOIC, 14-lead TSSOP	EAR99
AD8665	1	1	2500	10	8	2.5	4	3.5	1.55	5	16	8-lead SOIC, 5-lead SOT-23	EAR99
AD8666	2	1	2500	10	8	2.5	4	3.5	1.55	5	16	8-lead SOIC, 8-lead MSOP	EAR99
AD8668	4	1	2500	10	8	2.5	4	3.5	1.55	5	16	14-lead SOIC, 14-lead TSSOP	EAR99
AD8691	1	1	2000	12	6.5	1.6	10	5	1.05	2.7	5.5	5-lead SC70, 5-lead TSOT	EAR99
AD8692	2	1	2000	6	6.5	1.6	10	5	1.05	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8694	4	1	2000	6	6.5	1.6	10	5	1.05	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4350	1	1	80	1.6	5		175	100	8.5	3.3	12	28-lead TSSOP	EAR99
ADA4665-2	2	1	4000		27	3	1.2	1	0.4	5	16	8-lead SOIC, 8-lead MSOP	EAR99
LTC6078	2	1	25	0.7	18	1	0.75	0.05	0.054	2.7	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6079	4	1	25	1.4	18	1	0.75	0.05	0.054	2.7	5.5	16-lead SSOP, 16-lead DFN	EAR99
LTC6081	2	1	70	0.8	13	1.3	3.6	1	0.33	2.7	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6082	4	1	70	0.8	13	1.3	3.6	1	0.33	2.7	5.5	16-lead SSOP, 16-lead DFN	EAR99
LTC6240	1	1	175	2.5	7	0.55	18	10	2	2.8	6	8-lead SOIC, 5-lead SOT-23	EAR99
LTC6240HV	1	1	175	2.5	7	0.55	18	10	2	2.8	12	8-lead SOIC, 5-lead SOT-23	EAR99
AD795	1	2	500	10	9	1	1.6	1	1.5	8	36	8-lead SOIC	EAR99
ADA4500-2	2	2	120	5.5	14.5	2	10	5.5	1.55	2.7	5.5	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4505-1	1	2	3000		65	2.95	0.05	0.006	0.009	1.8	5	6-ball WLCSP, 5-lead SOT-23	EAR99
ADA4505-2	2	2	3000		65	2.95	0.05	0.006	0.009	1.8	5	8-ball WLCSP, 8-lead MSOP	EAR99
ADA4505-4	4	2	3000		65	2.95	0.05	0.006	0.009	1.8	5	14-ball WLCSP, 14-lead TSSOP	EAR99
LT1462	2	2	800	20	76	2	0.175	0.13	0.028	10	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1463	4	2	800	20	76	2	0.175	0.13	0.028	10	40	14-lead PDIP, 14-lead SOIC	EAR99
LT1464	2	2	800	20	24	2	1	0.9	0.145	10	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1465	4	2	800	20	24	2	1	0.9	0.145	10	40	14-lead PDIP, 14-lead SOIC	EAR99
AD8244	4	3	350	3	13	0.4		0.8	0.18	3	36	10-lead MSOP	EAR99
AD8067	1	5	1000	15	6.6		200	640	7	5	24	5-lead SOT-23	EAR99
ADA4627-1	1	5	200	2	4.8	0.7	19	56	7	9	36	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4637-1	1	5	200	2	4.8	0.7	79.9	170	7	9	30	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4691-2	2	5	2500	4	13	3.2	3.6	1.3	0.165	2.7	5.5	9-ball WLCSP, 10-lead LFCSP	EAR99
ADA4691-4	4	5	2500	4	13	3.2	3.6	1.3	0.165	2.7	5.5	16-lead LFCSP	EAR99
ADA4692-2	2	5	2500	4	16		3.6	1.3	0.18	2.7	5	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4692-4	4	5	2500	4	13		3.6	1.3	0.225	2.7	5.5	14-lead TSSOP	EAR99
AD8065	1	7	1500	17	7		145	180	7.4	5	24	Chips or die, 8-lead SOIC, 5-lead SOT-23	EAR99
AD8066	2	7	1500	17	7		145	180	7.4	5	24	8-lead SOIC, 8-lead MSOP	EAR99
AD648	2	10	1000	10	30		1	1.8	0.17	9	36	8-lead PDIP, 8-lead SOIC	EAR99

オペアンプ

低入力バイアス電流（I_{BIAS} < 75pA）アンプ（続き） / Low Input Bias Current (I_{BIAS} <75 pA) Amplifiers (Continued)

Part Number	Number of Amps	I_{BIAS} (max) (pA)	V_{os} (max) (μV)	V_{os} TC (max) (μV/°C)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	I_O/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
AD820	1	10	1000		13	2	1.8	3	0.9	5	30	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
AD8500	1	10	1000	10	190		0.007	0.004	0.001	1.8	5	5-lead SC70	EAR99
AD8502	2	10	3000		190	6	0.007	0.004	0.001	1.8	5	8-lead SOT-23	EAR99
AD8504	4	10	3000		190	6	0.007	0.004	0.001	1.8	5	14-lead TSSOP	EAR99
AD8505	1	10	2500		45	2.8	0.095	0.013	0.017	1.8	5	6-ball WLCSP, 5-lead SOT-23	EAR99
AD8506	2	10	2500		45	2.8	0.095	0.013	0.02	1.8	5	8-ball WLCSP, 8-lead MSOP	EAR99
AD8508	4	10	2500		45	2.8	0.095	0.013	0.5	1.8	5	14-ball WLCSP, 14-lead TSSOP	EAR99
AD8610	1	10	100	1	6	1.8	25	60	3.5	10	26	8-lead SOIC, 8-lead MSOP	EAR99
AD8620	2	10	150	1.5	6	1.8	25	60	3.5	10	26	8-lead SOIC	EAR99
AD8651	1	10	350		4.5		50	41	9	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8652	2	10	300		4.5		50	41	9	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8655	1	10	250	2.3	2.7		28	11	4.5	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8656	2	10	250	2.3	2.7		28	11	4.5	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
ADA4622-1	1	10	350	5	12.5	0.75	8	23	0.715	5	30	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4622-2	2	10	350	5	12.5	0.75	8	23	0.665	5	30	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4622-4	4	10	350	5	12.5	0.75	8	23	0.665	5	30	16-lead LFCSP, 14-lead SOIC	EAR99
LT1793	1	10	800	13	6	2.4	4.2	3.4	4.2	10	40	8-lead PDIP, 8-lead SOIC	EAR99
AD8033	1	12	2000	24	11		45	80	3.3	5	24	5-lead SC70, 8-lead SOIC	EAR99
AD8034	2	12	2000	24	11		45	80	3.3	5	24	8-lead SOIC, 8-lead SOT-23, chips or die	EAR99
AD822	2	12	1500		13	2	1.8	3	0.9	5	30	Chips or die, 8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4661-2	2	15	150	3.1	18	3	4	2.2	0.63	3	18	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4666-2	2	15	2200	3.1	18	3	4	2	0.63	3	18	8-lead LFCSP, 8-lead MSOP	EAR99
AD8657	2	20	350		45	5	0.23	0.08	0.022	2.7	18	8-lead LFCSP, 8-lead MSOP	EAR99
AD8659	4	20	350		45	5	0.23	0.08	0.022	2.7	18	16-lead LFCSP, 14-lead SOIC	EAR99
AD8682	2	20	1000		36	1.3	3.5	9	0.21	9	36	8-lead SOIC, 8-lead MSOP	EAR99
AD8684	4	20	1000		36	1.3	3.5	9	0.21	9	36	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4817-1	1	20	2000		4		410	870	19	5	10	8-lead LFCSP, 8-lead SOIC-EP	EAR99
ADA4817-2	2	20	2000		4		410	870	19	5	10	16-lead LFCSP	EAR99
LT1169	2	20	2000	50	6	2.4	5.3	4.2	5.3	9	40	8-lead PDIP, 8-lead SOIC	EAR99
LTC2063	1	20	5	0.02	220	4.6	0.02	0.004	0.001	1.7	5.25	5-lead SOT-23, 6-lead SC70	EAR99
AD823A	2	25	3500		13		10	35	5.1	3	36	8-lead SOIC, 8-lead MSOP	EAR99
AD8538	1	25	13	0.1	50	2	0.43	0.4	0.18	2.7	5	8-lead SOIC, 5-lead TSOT	EAR99
ADA4610-1	1	25	400	4	7.3	0.45	16.3	25	1.6	10	36	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4610-2	2	25	400	4	7.3	0.45	16.3	25	1.6	10	36	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4610-4	4	25	400	8	7.3	0.45	16.3	25	1.6	10	36	16-lead LFCSP, 14-lead SOIC	EAR99
AD823	2	30	3500		16		10	25	5.2	3	36	8-lead PDIP, 8-lead SOIC	EAR99
AD8515	1	30	6000		20		5	2.7	0.5	1.8	5	5-lead SC70, 5-lead SOT-23	EAR99
ADA4001-2	2	30	1500		7.7		16.7	25	2	9	36	8-lead SOIC	EAR99
LTC1047	2	30	10	0.05		3.5	0.2	0.2	0.06	4.75	16	8-lead PDIP, 16-lead SOIC	EAR99
LTC1050	1	30	5	0.05	90	1.6	2.5	4	1	4.75	18	14-lead PDIP, 8-lead PDIP, 8-lead SOIC	EAR99
LTC1052	1	30	5	0.05	30	1.5	1.2	4	1.7	4.75	18	14-lead PDIP, 8-lead PDIP, 16-lead SOIC	EAR99
AD824	4	35	2500		16	2	2	2	0.56	2.7	30	14-lead SOIC	EAR99
AD825	1	40	2000		12		26	140	6.5	10	36	8-lead SOIC, 16-lead SOIC—wide, chips or die	EAR99
ADA4000-1	1	40	1700		16	1	5	20	1.65	8	36	8-lead SOIC, 5-lead TSOT	EAR99
ADA4000-2	2	40	1700		16	1	5	20	1.65	8	36	8-lead SOIC, 8-lead MSOP	EAR99
ADA4000-4	4	40	1700		16	1	5	20	1.65	8	36	14-lead SOIC, 14-lead TSSOP	EAR99
LTC6084	2	40	750	5	31	3	1.5	0.5	0.11	2.5	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6085	4	40	750	5	31	3	1.5	0.5	0.11	2.5	5.5	16-lead SSOP, 16-lead DFN	EAR99
LTC6087	2	40	750	5	12	5.8	14	7.2	1.05	2.7	5.5	8-lead MSOP, 10-lead DFN	EAR99
LTC6088	4	40	750	5	12	5.8	14	7.2	1.05	2.7	5.5	16-lead SSOP, 16-lead DFN	EAR99
AD8663	1	45	300	5	21	2.5	0.54	0.3	0.285	5	16	8-lead LFCSP, 8-lead SOIC	EAR99
AD8667	2	45	300	5	21	2.5	0.54	0.3	0.285	5	16	8-lead SOIC, 8-lead MSOP	EAR99

オペアンプ

低入力バイアス電流（I_{BIAS} < 75pA）アンプ（続き） / Low Input Bias Current (I_{BIAS} <75 pA) Amplifiers (Continued)

Part Number	Number of Amps	I_{BIAS} (max) (pA)	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
AD8669	4	45	300	5	21	2.5	0.54	0.3	0.285	5	16	14-lead SOIC, 14-lead TSSOP	EAR99
AD711	1	50	1000	20	16	2	4	20	2.8	9	36	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC	EAR99
AD8531	1	50	25,000		30		3	5	1.25	3	6	5-lead SC70, 8-lead SOIC, 5-lead SOT-23	EAR99
AD8532	2	50	25,000		30		3	5	1.25	3	6	8-lead SOIC, 8-lead MSOP, 8-lead TSSOP	EAR99
AD8534	4	50	25,000		30		3	5	1.25	3	6	14-lead SOIC, 14-lead TSSOP	EAR99
AD8551	1	50	5	0.04	42	1	1.5	0.4	0.975	2.7	5	8-lead SOIC, 8-lead MSOP	EAR99
AD8552	2	50	5	0.04	42	1	1.5	0.4	0.975	2.7	5	8-lead SOIC, 8-lead TSSOP	EAR99
AD8554	4	50	5	0.04	42	1	1.5	0.4	0.975	2.7	5	14-lead SOIC, 14-lead TSSOP	EAR99
AD8571	1	50	5	0.04	51	1.3	1.5	0.4	0.975	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8572	2	50	5	0.04	51	1.3	1.5	0.4	0.975	2.7	5.5	8-lead SOIC, 8-lead TSSOP	EAR99
AD8574	4	50	5	0.04	51	1.3	1.5	0.4	0.975	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
AD8591	1	50	25,000		30		3	5	1.25	2.5	6	6-lead SOT-23	EAR99
AD8592	2	50	25,000		30		3	5	1.25	2.5	6	10-lead MSOP	EAR99
ADA4062-2	2	50	1500		36	1.5	1.4	3.3	0.165	8	36	10-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4062-4	4	50	1500		36	1.5	1.4	3.3	0.165	8	36	16-lead LFCSP, 14-lead TSSOP	EAR99
ADA4891-1	1	50	10,000		9		105	170	4.4	2.7	5.5	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4891-2	2	50	10,000		9		105	170	4.4	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
ADA4891-3	3	50	10,000		9		105	170	4.4	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4891-4	4	50	10,000		9		105	170	4.4	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
LT1022	1	50	250	5	14	2.5	8.5	26	5.2	20	40	8-lead TO-5 (0.200 in PCD), 8-lead PDIP	EAR99
LT1055	1	50	700	12	15	2	4.5	12	2.8	8	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1056	1	50	800	12	15	2.8	5.5	14	5	8	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1057	2	50	450	10	13	2	5	14	1.6	8	40	8-lead PDIP, 8-lead SOIC	EAR99
LT1058	4	50	600	15	13	2.4	5	14	1.6	8	40	14-lead PDIP, 16-lead SOIC	EAR99
LTC1049	1	50	10	0.1	80	3	0.8	0.8	0.2	4.75	18	8-lead PDIP, 8-lead SOIC	EAR99
LTC6090	1	50	1000		14	3.5	12	24	2.7	9.5	140	16-lead TSSOP-EP, 8-lead SOIC-EP	EAR99
LTC6090-5	1	50	1000		14	3.5	24	37	2.7	9.5	140	16-lead TSSOP-EP, 8-lead SOIC-EP	EAR99
LTC6091	2	50	1000	5	14	3.5	12	21	2.8	9.5	140	16-lead QFN	EAR99
AD8539	2	60	15	0.1	52	1.2	0.43	0.4	0.21	2.7	5	8-lead SOIC, 8-lead MSOP	EAR99
AD8541	1	60	6000		38		1	0.92	0.065	2.5	5	5-lead SC70, 8-lead SOIC, 5-lead SOT-23	EAR99
AD8542	2	60	6000		38		1	0.92	0.065	2.5	5	8-lead SOIC, 8-lead MSOP, 8-lead TSSOP	EAR99
AD8544	4	60	6000		38		1	0.92	0.065	2.5	5	14-lead SOIC, 14-lead TSSOP	EAR99
AD8601	1	60	500		18		8.4	6	0.75	2.7	5	5-lead SOT-23	EAR99
AD8602	2	60	500		18		8.4	6	0.75	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8604	4	60	600		18		8.4	6	0.75	2.7	5.5	14-lead SOIC, 16-lead QSOP, 14-lead TSSOP	EAR99
LTC1051	2	65	5	0.05	70	1.5	2.5	4	1	4.75	16.5	8-lead PDIP, 16-lead SOIC	EAR99
LTC1053	4	65	5	0.05	70	1.5	2.5	4	1	4.75	16.5	14-lead PDIP, 18-lead SOIC	EAR99
ADA4051-1	1	70	17	0.1	95	1.96	0.125	0.06	0.015	1.8	5.5	5-lead SC70, 5-lead SOT-23	EAR99
ADA4051-2	2	70	15	0.1	95	1.96	0.125	0.06	0.013	1.8	5.5	8-lead LFCSP, 8-lead MSOP	EAR99
AD712	2	75	1000	20	16	2	4	20	2.8	9	36	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC	EAR99
AD8638	1	75	9	0.06	60	1.2	1.5	2	1.5	4.5	16	8-lead SOIC, 5-lead SOT-23	EAR99
AD8639	2	75	9	0.06	60	1.2	1.5	2	1.5	4.5	16	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1122	1	75	600	18	14	3	14	80	7.5	20	40	8-lead PDIP, 8-lead SOIC	EAR99
LTC2050	1	75	3	0.03		1.5	3	2	0.8	2.7	6	8-lead SOIC, 5-lead SOT-23, 6-lead SOT-23	EAR99
LTC2050HV	1	75	3	0.03		1.5	3	2	0.8	2.7	11	8-lead SOIC, 5-lead SOT-23, 6-lead SOT-23	EAR99
LTC2051	2	75	3	0.03		1.5	3	2	0.85	2.7	6	8-lead SOIC, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC2051HV	2	75	3	0.03		1.5	3	2	0.85	2.7	11	8-lead SOIC, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99

オペアンプ

低入力バイアス電流（I_{BIAS} < 75pA）アンプ（続き） / Low Input Bias Current (I_{BIAS} <75 pA) Amplifiers (Continued)

Part Number	Number of Amps	I_{BIAS} (max) (pA)	V_{os} (max) (μV)	V_{os} TC (max) (μV/°C)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LTC2052	4	75	3	0.03		1.5	3	2	0.85	2.7	6	14-lead SOIC, 16-lead SSOP	EAR99
LTC2052HV	4	75	3	0.03		1.5	3	2	0.85	2.7	11	14-lead SOIC, 16-lead SSOP	EAR99
LTC6241	2	75	125	2.5	7	1	18	10	1.8	2.8	6	8-lead SOIC, 8-lead DFN	EAR99
LTC6241HV	2	75	125	2.5	7	1	18	10	1.8	2.8	12	8-lead SOIC, 8-lead DFN	EAR99
LTC6242	4	75	125	2.5	7	1	18	10	1.8	2.8	6	16-lead SSOP, 16-lead DFN	EAR99
LTC6242HV	4	75	125	2.5	7	1	18	10	1.8	2.8	12	16-lead SSOP, 16-lead DFN	EAR99
LTC6244	2	75	100	2.5	8	1.5	50	35	6.25	2.8	6	8-lead MSOP, 8-lead DFN	EAR99
LTC6244HV	2	75	100	2.5	8	1.5	50	35	6.25	2.8	12	8-lead MSOP, 8-lead DFN	EAR99
ADA4638-1	1	90	4.5	0.8	66	1.2	1.5	1.5	0.85	4.5	30	8-lead LFCSP, 8-lead SOIC	EAR99

過電圧保護／Over-the-Top (OVP/OTT)アンプ / Overvoltage Protection/Over-the-Top (OVP/OTT) Amplifiers

Part Number	Number of Amps	Overvoltage Protection/ Over-the-Top	Rail to Rail	V_s Span (min) (V)	V_s Span (max) (V)	V_{os} (max) (μV)	V_{os} TC (max) (μV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/μs)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	I_Q/Amp (typ) (mA)	Package	ECCN Code
LT1997-2 ***New***	1	OTT	Both	3.3	50	80	1.5	55	1	0.75	37	0.9	3.85	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
ADA4091-2	2	OVP	Both	2.7	36	250		880	1.27	0.46	24	0.8	1.815	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4091-4	4	OVP	Both	2.7	36	250		880	1.27	0.46	24	0.8	1.815	16-lead LFCSP, 14-lead TSSOP	EAR99
ADA4092-4	4	OVP	Both	2.7	36	1500		880	1.4	0.4	24	0.8	1.815	14-lead TSSOP	EAR99
ADA4096-2	2	OVP	Both	3	30	300		275	0.786	0.4	27	0.7	0.66	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4096-4	4	OVP	Both	3	30	300		275	0.786	0.4	27	0.7	0.66	16-lead LFCSP, 14-lead TSSOP	EAR99
ADA4177-1	1	OVP		10	30	60	1	1	3.5	1.5	8	0.175	0.5	8-lead SOIC, 8-lead MSOP	EAR99
ADA4177-2	2	OVP		10	30	60	1	1	3.5	1.5	8	0.175	0.5	8-lead SOIC, 8-lead MSOP	EAR99
ADA4177-4	4	OVP		10	30	60	1	1	3.5	1.5	8	0.175	0.5	14-lead SOIC, 14-lead TSSOP	EAR99
LT1490A	2	OTT	Both	2	44	500	4	88	0.18	0.06	50	1	0.44	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1491A	4	OTT	Both	2	44	1000	4	88	0.18	0.06	50	1	0.44	14-lead PDIP, 14-lead SOIC, 16-lead DFN	EAR99
LT1494	1	OTT	Both	2.1	36	375	2	11	0.003	0.001	185	4	0.011	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1495	2	OTT	Both	2.1	36	375	2	11	0.003	0.001	185	4	0.011	8-lead PDIP, 8-lead SOIC	EAR99
LT1496	4	OTT	Both	2.1	36	375	2	11	0.003	0.001	185	4	0.011	14-lead PDIP, 14-lead SOIC	EAR99
LT1636	1	OTT	Both	2.6	44	225	5	88	0.2	0.07	52	0.7	0.462	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1637	1	OTT	Both	2.7	44	350	3	550	1	0.35	27	0.6	2.09	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1638	2	OTT	Both	2.5	44	600	6	550	1.2	0.38	20	1	1.87	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1639	4	OTT	Both	2.5	44	600	6	550	1.075	0.38	20	1	1.87	14-lead PDIP, 14-lead SOIC	EAR99
LT1672	1	OTT	Both	2.1	36	375	2	11	0.012	0.005	185	4	0.017	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99

オペアンプ

過電圧保護／Over-the-Top (OVP/OTT)アンプ（続き） / Overvoltage Protection/Over-the-Top (OVP/OTT) Amplifiers (Continued)

Part Number	Number of Amps	Overvoltage Protection/ Over-the-Top	Rail to Rail	V_s Span (min) (V)	V_s Span (max) (V)	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	I_Q/Amp (typ) (mA)	Package	ECCN Code
LT1673	2	OTT	Both	2.1	36	375	2	11	0.012	0.005	185	4	0.017	8-lead PDIP, 8-lead SOIC	EAR99
LT1674	4	OTT	Both	2.1	36	375	2	11	0.012	0.005	185	4	0.017	14-lead PDIP, 14-lead SOIC	EAR99
LT1782	1	OTT	Both	2.2	18	800	5	165	0.2	0.07	50	1	0.44	5-lead SOT-23, 6-lead SOT-23	EAR99
LT1783	1	OTT	Both	2.2	18	800	5	880	1.25	0.42	20	0.6	2.31	5-lead SOT-23, 6-lead SOT-23	EAR99
LT1784	1	OTT	Both	2	18	3500	15	5500	2.5	2.1	25	1.5	5.5	5-lead SOT-23, 6-lead SOT-23	EAR99
LT1991	1	OTT	In to V- output	2.4	40	50	1	55	0.56	0.12	46	0.35	1.1	10-lead MSOP, 10-lead DFN	EAR99
LT1996	1	OTT	In to V- output	2.7	36	50	1	55	0.56	0.12	18	0.35	1.1	10-lead MSOP, 10-lead DFN	EAR99
LT1997-3	1	OTT	Both	3.3	50	60	1.5	55	1.1	0.75	50	1.4	3.85	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
LT6015	1	OTT	Both	3	50	50		55	3.2	0.75	18	0.5	3.465	5-lead SOT-23	EAR99
LT6016	2	OTT	Both	3	50	50		55	3.2	0.75	18	0.5	3.465	8-lead MSOP	EAR99
LT6017	4	OTT	Both	3	50	50		55	3.2	0.75	18	0.5	3.465	22-lead DFN	EAR99

高電圧（V ≥ 30V）高精度アンプ / High Voltage (V ≥30 V) Precision Amplifiers

Part Number	Number of Amps	V_s Span (min) (V)	V_s Span (max) (V)	I_Q/Amp (typ) (mA)	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	GBP (typ)	Slew Rate (typ)	Package	ECCN Code
LT1997-2 ***New***	1	3.3	50	0.35	80	1.5	5	37	0.9	1	0.75	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
LTC2058 ***New***	2	4.75	36	0.95	5	0.025	0.1	9	0.2	2.5	1.6	12-lead MSOP-EP, 8-lead SOIC-EP	EAR99
ADA4625-1 ***New***	1	5	36	4	80	2.1	0.075	3.3	0.15	18	48	8-lead SOIC-EP	EAR99
LT6274 ***New***	1	9	32	1.6	400	10	500	10	1	40	2200	5-lead SOT-23	EAR99
ADHV4702-1	1	24	220	3	1000	2	0.002	8		10	74	LFCSP:LEADFRM chip scale	EAR99
LTC6090	1	9.5	140	2.7	1000		0.05	14	3.5	12	24	16-lead TSSOP-EP, 8-lead SOIC-EP	EAR99
LTC6090-5	1	9.5	140	2.7	1000		0.05	14	3.5	24	37	16-lead TSSOP-EP, 8-lead SOIC-EP	EAR99
LTC6091	2	9.5	140	2.8	1000	5	0.05	14	3.5	12	21	16-lead QFN	EAR99
ADA4700-1	1	9	110	1.7	2000	13	30	14.7	0.8	3.5	20	8-lead SOIC-EP	EAR99
LTC2057HV	1	4.75	60	0.8	4	0.015	0.12	11	0.2	1.5	1.2	8-lead SOIC, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
ADA4522-1	1	4.5	55	0.84	5	0.015	0.15	5.8	0.117	2.7	1.7	8-lead SOIC, 8-lead MSOP	EAR99
ADA4522-2	2	4.5	55	0.83	5	0.015	0.15	5.8	0.117	2.7	1.7	8-lead SOIC, 8-lead MSOP	EAR99
ADA4522-4	4	4.5	55	0.83	5	0.015	0.15	5.8	0.117	2.7	1.7	14-lead SOIC, 14-lead TSSOP	EAR99
LT6015	1	3	50	0.315	50		5	18	0.5	3.2	0.75	5-lead SOT-23	EAR99
LT6016	2	3	50	0.315	50		5	18	0.5	3.2	0.75	8-lead MSOP	EAR99
LT6017	4	3	50	0.315	50		5	18	0.5	3.2	0.75	22-lead DFN	EAR99
LT1997-3	1	3.3	50	0.35	60	1.5	5	50	1.4	1.1	0.75	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
LT1178	2	2	44	0.012	70	3	5	49	0.9	0.085	0.04	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
LT1179	4	2	44	0.012	100	0.3	5	49	0.9	0.085	0.04	14-lead PDIP, 16-lead SOIC	EAR99
LT1490A	2	2	44	0.04	500	4	8	50	1	0.18	0.06	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1491A	4	2	44	0.04	1000	4	8	50	1	0.18	0.06	14-lead PDIP, 14-lead SOIC, 16-lead DFN	EAR99
LT1077	1	2.2	44	0.048	40	1.6	9	27	0.5	0.23	0.08	8-lead PDIP, 8-lead SOIC	EAR99
LT1078	2	2.2	44	0.038	70	1.8	8	28	0.6	0.2	0.07	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
LT1079	4	2.2	44	0.038	100	1.8	8	28	0.6	0.2	0.07	14-lead PDIP, 16-lead SOIC	EAR99
LT1079MJ	4	2.2	44	0.038	100	1.8	8	28	0.6	0.2	0.07	14-lead PDIP, 16-lead SOIC	EAR99
LT2178	2	2.2	44	0.013	70	1.8	5	49	0.9	0.06	0.025	8-lead SOIC	EAR99

オペアンプ

高電圧（V ≥ 30V）高精度アンプ（続き） / High Voltage (V ≥30 V) Precision Amplifiers (Continued)

Part Number	Number of Amps	V_s Span (min) (V)	V_s Span (max) (V)	I_D/Amp (typ) (mA)	V_{os} (max) (μV)	V_{os} TC (max) (μV/°C)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	GBP (typ)	Slew Rate (typ)	Package	ECCN Code
LT2179	4	2.2	44	0.013	100	3	5	49	0.9	0.06	0.025	14-lead SOIC	EAR99
LT2078	2	2.3	44	0.035	70	1.8	8	28	0.6	0.2	0.07	8-lead SOIC	EAR99
LT2079	4	2.3	44	0.035	110	3	8	28	0.6	0.2	0.07	14-lead SOIC	EAR99
LT1638	2	2.5	44	0.17	600	6	50	20	1	1.2	0.38	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1639	4	2.5	44	0.17	600	6	50	20	1	1.075	0.38	14-lead PDIP, 14-lead SOIC	EAR99
LT1677	1	2.5	44	2.75	60	1.5	20	3.2	0.09	7.2	2.5	8-lead PDIP, 8-lead SOIC	EAR99
LT1637	1	2.7	44	0.19	350	3	50	27	0.6	1	0.35	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1006	1	4	44	0.34	50	1.3	15	22	0.55	0.6	0.4	8-lead PDIP, 8-lead SOIC	EAR99
LT1007	1	4	44	2.6	25	0.6	35	2.5	0.06	8	2.5	8-lead PDIP, 8-lead SOIC	EAR99
LT1013	2	4	44	0.35	150	2	20	22	0.55	0.8	0.4	8-lead TO-5 (0.200 in PCD), 8-lead PDIP, 8-lead SOIC	EAR99
LT1013AMH	2	4	44	0.35	150	2	20	22	0.55	0.8	0.4	8-lead TO-5 (0.200 in PCD), 8-lead PDIP, 8-lead SOIC	EAR99
LT1014	4	4	44	0.35	150	2	20	22	0.55	0.8	0.4	14-lead PDIP, 16-lead SOIC	EAR99
LT1001	1	6	44	1.5	25	0.6	2	9.6	0.3	0.8	0.25	8-lead PDIP, 8-lead SOIC	EAR99
LT1002	2	6	44	1.53	60	0.9	3	9.6	0.35	0.8	0.25	14-lead PDIP	EAR99
LT1124	2	8	44	2.3	70	1	20	2.7	0.07	12.5	4.5	8-lead PDIP, 8-lead SOIC	EAR99
LT1125	4	8	44	2.3	90	1	20	2.7	0.07	12.5	4.5	14-lead PDIP, 16-lead SOIC	EAR99
LT1128	1	8	44	7.4	40	0.8	90	0.85	0.035	20	6	8-lead PDIP, 8-lead SOIC	EAR99
LT1097	1	2	40	0.35	50	1.2	0.25	14	0.5	0.7	0.2	8-lead PDIP, 8-lead SOIC	EAR99
LT1112	2	2	40	0.35	60	0.5	0.25	14	0.3	0.75	0.3	8-lead PDIP, 8-lead SOIC	EAR99
LT1114	4	2	40	0.35	60	1.1	0.25	14	0.3	0.75	0.3	14-lead PDIP, 16-lead SOIC	EAR99
LT1012	1	2.4	40	0.37	25	0.6	0.1	14	0.5	1	0.2	8-lead PDIP, 8-lead SOIC	EAR99
LT1880	1	2.4	40	1.2	150	1.2	0.9	13	0.5	1.1	0.55	5-lead SOT-23	EAR99
LT1881	2	2.4	40	0.65	50	0.8	0.2	14	0.5	1	0.35	8-lead PDIP, 8-lead SOIC	EAR99
LT1882	4	2.4	40	0.65	80	0.8	0.5	14	0.5	1	0.35	14-lead SOIC	EAR99
LT1884	2	2.4	40	0.65	50	0.8	0.4	9.5	0.4	2	0.9	8-lead PDIP, 8-lead SOIC	EAR99
LT1885	4	2.4	40	0.65	80	0.8	0.9	9.5	0.4	2	0.9	14-lead SOIC	EAR99
LT1991	1	2.4	40	0.1	50	1	5	46	0.35	0.56	0.12	10-lead MSOP, 10-lead DFN	EAR99
LT6011	2	2.4	40	0.135	60	0.8	0.3	14	0.4	0.33	0.09	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT6012	4	2.4	40	0.135	60	0.8	0.3	14	0.4	0.33	0.09	14-lead SOIC, 16-lead SSOP	EAR99
LT6010	1	2.7	40	0.135	35	0.8	0.11	14	0.4	0.33	0.09	8-lead SOIC, 8-lead DFN	EAR99
LT6013	1	2.7	40	0.145	35	0.8	0.25	9.5	0.2	1.6	0.2	8-lead SOIC, 8-lead DFN	EAR99
LT6014	2	2.7	40	0.145	60	0.8	0.4	9.5	0.2	1.6	0.2	8-lead SOIC, 8-lead DFN	EAR99
LT1008	1	4	40	0.38	120	1.5	0.1	14	0.5	1	0.2	8-lead PDIP, 8-lead SOIC	EAR99
LT1024	2	4	40	0.38	50	1.5	0.12	14	0.5	1	0.2	14-lead PDIP	EAR99
LT1055	1	8	40	2.8	700	12	0.05	15	2	4.5	12	8-lead PDIP, 8-lead SOIC	EAR99
LT1056	1	8	40	5	800	12	0.05	15	2.8	5.5	14	8-lead PDIP, 8-lead SOIC	EAR99
LT1057	2	8	40	1.6	450	10	0.05	13	2	5	14	8-lead PDIP, 8-lead SOIC	EAR99
LT1058	4	8	40	1.6	600	15	0.05	13	2.4	5	14	14-lead PDIP, 16-lead SOIC	EAR99
LT1457	2	9	40	1.8	450	10	0.5	13	2	1	4	8-lead PDIP, 8-lead SOIC	EAR99
LT1462	2	10	40	0.028	800	20	0.002	76	2	0.175	0.13	8-lead PDIP, 8-lead SOIC	EAR99
LT1463	4	10	40	0.028	800	20	0.002	76	2	0.175	0.13	14-lead PDIP, 14-lead SOIC	EAR99
LT1464	2	10	40	0.145	800	20	0.002	24	2	1	0.9	8-lead PDIP, 8-lead SOIC	EAR99
LT1465	4	10	40	0.145	800	20	0.002	24	2	1	0.9	14-lead PDIP, 14-lead SOIC	EAR99
LT1792	1	10	40	4.2	600	10	0.8	4.2	2.4	5.6	3.4	8-lead PDIP, 8-lead SOIC	EAR99
LT1793	1	10	40	4.2	800	13	0.01	6	2.4	4.2	3.4	8-lead PDIP, 8-lead SOIC	EAR99
LT1022	1	20	40	5.2	250	5	0.05	14	2.5	8.5	26	8-lead TO-5 (0.200 in PCD), 8-lead PDIP	EAR99
LT1122	1	20	40	7.5	600	18	0.075	14	3	14	80	8-lead PDIP, 8-lead SOIC	EAR99
LT1218	1	2	36	0.37	90	3	70	33		0.3	0.1	8-lead PDIP, 8-lead SOIC	EAR99
LT1219	1	2	36	0.37	90	3	70	33		0.15	0.05	8-lead PDIP, 8-lead SOIC	EAR99
LT1366	2	2	36	0.34	475	6	35	29		0.4	0.13	8-lead PDIP, 8-lead SOIC	EAR99
LT1367	4	2	36	0.34	800	6	35	29		0.4	0.13	14-lead SOIC	EAR99
LT1368	2	2	36	0.34	475	6	35	29		0.16	0.065	8-lead PDIP, 8-lead SOIC	EAR99
LT1369	4	2	36	0.34	800	6	35	29		0.16	0.065	14-lead SOIC	EAR99
LT1492	2	2.1	36	0.425	180	3	100	16.5	0.33	4.5	1.8	8-lead PDIP, 8-lead SOIC	EAR99

オペアンプ

高電圧(V ≥ 30V)高精度アンプ(続き) / High Voltage (V ≥30 V) Precision Amplifiers (Continued)

Part Number	Number of Amps	V_s Span (min) (V)	V_s Span (max) (V)	I_Q/Amp (typ) (mA)	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	GBP (typ)	Slew Rate (typ)	Package	ECCN Code
LT1493	4	2.1	36	0.425	130	3	100	16.5	0.33	4.5	1.8	16-lead SOIC	EAR99
LT1494	1	2.1	36	0.001	375	2	1	185	4	0.003	0.001	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1495	2	2.1	36	0.001	375	2	1	185	4	0.003	0.001	8-lead PDIP, 8-lead SOIC	EAR99
LT1496	4	2.1	36	0.001	375	2	1	185	4	0.003	0.001	14-lead PDIP, 14-lead SOIC	EAR99
LT1672	1	2.1	36	0.002	375	2	1	185	4	0.012	0.005	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1673	2	2.1	36	0.002	375	2	1	185	4	0.012	0.005	8-lead PDIP, 8-lead SOIC	EAR99
LT1674	4	2.1	36	0.002	375	2	1	185	4	0.012	0.005	14-lead PDIP, 14-lead SOIC	EAR99
LT1498	2	2.2	36	1.7	475	2.5	650	12	0.4	10.5	4.5	8-lead PDIP, 8-lead SOIC	EAR99
LT1499	4	2.2	36	1.7	475	2.5	650	12	0.4	10.5	4.5	14-lead SOIC	EAR99
LT1211	2	2.5	36	1.3	150	1.5	100	12	0.25	13	7	8-lead PDIP, 8-lead SOIC	EAR99
LT1211MJ8	2	2.5	36	1.3	150	1.5	100	12	0.25	13	7	8-lead PDIP, 8-lead SOIC	EAR99
LT1212	4	2.5	36	1.3	275	3	125	12	0.25	13	7	14-lead PDIP, 16-lead SOIC	EAR99
LT1213	2	2.5	36	2.7	150	1.5	160	10	0.2	28	8.5	8-lead PDIP, 8-lead SOIC	EAR99
LT1213MJ8	2	2.5	36	2.7	150	1.5	160	10	0.2	28	8.5	8-lead PDIP, 8-lead SOIC	EAR99
LT1214	4	2.5	36	2.7	275	3	200	10	0.2	28	8.5	14-lead PDIP, 16-lead SOIC	EAR99
LT1215	2	2.5	36	4.75	300	2.5	500	12	0.4	23	30	8-lead PDIP, 8-lead SOIC	EAR99
LT1216	4	2.5	36	4.75	450	5	600	12	0.4	23	30	14-lead PDIP, 16-lead SOIC	EAR99
LT1630	2	2.6	36	3.5	525	5.5	1000	6	0.3	30	9.2	8-lead PDIP, 8-lead SOIC	EAR99
LT1631	4	2.6	36	3.5	525	5.5	1000	6	0.3	30	9.2	14-lead SOIC	EAR99
ADA4091-2	2	2.7	36	0.165	250		80	24	0.8	1.27	0.46	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4091-4	4	2.7	36	0.165	250		80	24	0.8	1.27	0.46	16-lead LFCSP, 14-lead TSSOP	EAR99
LT1996	1	2.7	36	0.1	50	1	5	18	0.35	0.56	0.12	10-lead MSOP, 10-lead DFN	EAR99
AD8244	4	3	36	0.18	350	3	0.003	13	0.4		0.8	10-lead MSOP	EAR99
LT1360	1	3	36	3.8	1000	12	1000	9		50	800	8-lead PDIP, 8-lead SOIC	EAR99
LT1678	2	3	36	2	100	3	20	3.9	0.09	20	6	8-lead SOIC	EAR99
LT1679	4	3	36	2	100	3	20	3.9		20	6	14-lead SOIC	EAR99
AD704	4	4	36	0.6	150	1.5	0.27	15	0.5	0.8	0.15	20-lead LCC, 14-lead PDIP, 16-lead SOIC—wide	EAR99
AD706	2	4	36	0.6	100	1.5	0.2	15	0.5	0.8	0.15	8-lead PDIP, 8-lead SOIC	EAR99
LTC1151	2	4.75	36	0.9	5	0.05	0.1		1.5	2	2.5	8-lead PDIP, 16-lead SOIC	EAR99
LTC2057	1	4.75	36	0.8	4	0.015	0.12	11	0.2	1.5	1.2	8-lead SOIC, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
AD8622	2	5	36	0.215	125	1.2	0.2	11	0.2	0.56	0.48	8-lead SOIC, 8-lead MSOP	EAR99
AD8624	4	5	36	0.215	125	1.2	0.2	11	0.2	0.56	0.48	16-lead LFCSP, 14-lead TSSOP	EAR99
LT1220	1	5	36	8	1000		300	17		45	250	8-lead PDIP, 8-lead SOIC	EAR99
LT1351	1	5	36	0.25	600	8	50	14		3	200	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1352	2	5	36	0.25	600	8	50	14		3	200	8-lead PDIP, 8-lead SOIC	EAR99
LT1353	4	5	36	0.25	600	8	50	14		3	200	14-lead SOIC	EAR99
LT1354	1	5	36	1	800	8	300	10		12	400	8-lead PDIP, 8-lead SOIC	EAR99
LT1355	2	5	36	1	800	8	300	10		12	400	8-lead PDIP, 8-lead SOIC	EAR99
LT1356	4	5	36	1	800	8	300	10		12	400	14-lead PDIP, 16-lead SOIC	EAR99
LT1357	1	5	36	2	600	8	500	8		25	600	8-lead PDIP, 8-lead SOIC	EAR99
LT1358	2	5	36	2	600	8	500	8		25	600	8-lead PDIP, 8-lead SOIC	EAR99
LT1359	4	5	36	2	600	8	500	8		25	600	14-lead PDIP, 14-lead SOIC, 16-lead SOIC	EAR99
LT1361	2	5	36	3.8	1000	12	1000	9		50	800	8-lead PDIP, 8-lead SOIC	EAR99
LT1362	4	5	36	3.8	1000	12	1000	9		50	800	14-lead PDIP, 16-lead SOIC	EAR99
LT1970	1	5	36	7	600	10	600	15	3	3.6	1.6	20-lead TSSOP-EP	EAR99
LT1970A	1	5	36	7	600	10		15		3.6	1.6	20-lead TSSOP-EP	EAR99
AD708	2	6	36	2.75	30	1	1	9.6	0.23	0.9	0.3	8-lead PDIP, 8-lead CerDIP	EAR99
AD795	1	8	36	1.5	500	10	0.002	9	1	1.6	1	8-lead SOIC	EAR99
AD8671	1	8	36	3.5	75	0.5	12	2.8	0.077	10	4	8-lead SOIC, 8-lead MSOP	EAR99
AD8672	2	8	36	3.5	75	0.8	12	2.8	0.077	10	4	8-lead SOIC, 8-lead MSOP	EAR99
AD8674	4	8	36	3.5	75	0.8	12	2.8	0.077	10	4	14-lead SOIC, 14-lead TSSOP	EAR99
AD8677	1	8	36	1.3	130	1.5	1	10	0.25	0.6	0.2	8-lead SOIC, 5-lead TSOT	EAR99

オペアンプ

高電圧（V ≥ 30V）高精度アンプ（続き） / High Voltage (V ≥30 V) Precision Amplifiers (Continued)

Part Number	Number of Amps	V_s Span (min) (V)	V_s Span (max) (V)	I_D/Amp (typ) (mA)	V_{os} (max) (μV)	V_{os} TC (max) (μV/°C)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (μV p-p)	GBP (typ)	Slew Rate (typ)	Package	ECCN Code
AD648	2	9	36	0.17	1000	10	0.01	30		1	1.8	8-lead PDIP, 8-lead SOIC	EAR99
AD711	1	9	36	2.8	1000	20	0.05	16	2	4	20	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC	EAR99
AD712	2	9	36	2.8	1000	20	0.075	16	2	4	20	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC	EAR99
AD744	1	9	36	3.5	500	10	0.1	16	2	13	75	Round header/metal CAN, 8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
AD843	1	9	36	12	1000		1	19		34	250	8-lead PDIP, 14-lead CerDIP, 8-lead CerDIP, 16-lead SOIC—wide, LCC:cer leadless chip carr, chips or die	EAR99
AD844	1	9	36	6.5	150		250	2			2000	8-lead PDIP, 8-lead CerDIP, 16-lead SOIC—wide, chips or die	EAR99
AD847	1	9	36	4.8	1000		6600	15		50	300	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
AD8599	2	9	36	5.7	120	2.2	200	1.07	0.076	10	16	8-lead SOIC	EAR99
AD8682	2	9	36	0.21	1000		0.02	36	1.3	3.5	9	8-lead SOIC, 8-lead MSOP	EAR99
AD8684	4	9	36	0.21	1000		0.02	36	1.3	3.5	9	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4075-2	2	9	36	2.25	1000		100	2.8	0.06	6.5	12	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4627-1	1	9	36	7	200	2	0.005	4.8	0.7	19	56	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4898-1	1	9	36	8.1	125		400	0.9		50	55	8-lead SOIC-EP	EAR99
ADA4898-2	2	9	36	7.9	125		400	0.9		50	55	8-lead SOIC-EP	EAR99
AD845	1	9.5	36	10	250	5	1	12	4	16	100	8-lead PDIP, 8-lead CerDIP, 16-lead SOIC, —wide, chips or die	EAR99
AD743	1	9.6	36	10	1000		0.4	2.9	0.38	4.5	2.8	16-lead SOIC—wide	EAR99
AD745	1	9.6	36	10	500		0.25	2.9	0.38	20	12.5	16-lead SOIC—wide	EAR99
AD549	1	10	36	0.7	500	15	0.00006	35	4	1	3	8-lead header	EAR99
AD841	1	10	36	11	1000		5000	15		40	300	20-lead LCC, 14-lead PDIP, 14-lead CerDIP, LCC:cer leadless chip carr, chips or die	EAR99
ADA4610-1	1	10	36	1.6	400	4	0.025	7.3	0.45	16.3	25	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4610-2	2	10	36	1.6	400	4	0.025	7.3	0.45	16.3	25	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4610-4	4	10	36	1.6	400	8	0.025	7.3	0.45	16.3	25	16-lead LFCSP, 14-lead SOIC	EAR99
LT6018	1	8	33	7.2	50	0.5	150	1.2	0.03	15	30	8-lead SOIC-EP, 12-lead DFN	EAR99
LTC1150	1	4.75	32	0.8	10	0.05	0.1		1.8	2.5	3	8-lead PDIP, 8-lead SOIC	EAR99
LT6275	2	9	32	1.6	400	10	500	10	1	40	2200	8-lead MSOP	EAR99
AD8634	2	3	30	1.1	250		200	4.2	0.13	9.7	5	Chips or die, 8-lead flatpack, 8-lead SOIC	EAR99
ADA4084-1	1	3	30	0.625	100	1.75	250	3.9	0.1	15.9	4.6	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4084-2	2	3	30	0.625	100	1.75	250	3.9	0.1	15.9	4.6	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4084-4	4	3	30	0.625	100	1.75	250	3.9	0.1	15.9	4.6	16-lead LFCSP, 14-lead TSSOP	EAR99
ADA4096-2	2	3	30	0.06	300		25	27	0.7	0.786	0.4	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4096-4	4	3	30	0.06	300		25	27	0.7	0.786	0.4	16-lead LFCSP, 14-lead TSSOP	EAR99
LT6020	2	3	30	0.09	30	0.5	1	50	1.1	0.4	5	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
LT6020-1	2	3	30	0.09	30	0.5	1	50	1.1	0.4	5	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
LT6023	2	3	30	0.018	30	2.9	3	132		0.04	1.45	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
LT6023-1	2	3	30	0.018	30	2.9	3	132		0.04	1.45	8-lead MSOP, 8-lead DFN, 10-lead DFN	EAR99
ADA4638-1	1	4.5	30	0.85	4.5	0.8	0.09	66	1.2	1.5	1.5	8-lead LFCSP, 8-lead SOIC	EAR99
AD820	1	5	30	0.9	1000		0.01	13	2	1.8	3	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4077-1	1	5	30	0.4	35	0.25	1	7	0.25	3.9	1	8-lead SOIC, 8-lead MSOP	EAR99
ADA4077-2	2	5	30	0.4	35	0.25	1	7	0.25	3.9	1	8-lead SOIC, 8-lead MSOP	EAR99
ADA4077-4	4	5	30	0.4	50	0.75	1	7	0.25	3.9	1	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4622-1	1	5	30	0.715	350	5	0.01	12.5	0.75	8	23	8-lead SOIC, 5-lead SOT-23	EAR99

オペアンプ

高電圧(V ≥ 30V)高精度アンプ(続き) / High Voltage (V ≥30 V) Precision Amplifiers (Continued)

Part Number	Number of Amps	V_s Span (min) (V)	V_s Span (max) (V)	I_Q/Amp (typ) (mA)	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	GBP (typ)	Slew Rate (typ)	Package	ECCN Code
ADA4622-2	2	5	30	0.665	350	5	0.01	12.5	0.75	8	23	8-lead LFCSP, 8-lead SOIC, 8-lead MSOP	EAR99
ADA4622-4	4	5	30	0.665	350	5	0.01	12.5	0.75	8	23	16-lead LFCSP, 14-lead SOIC	EAR99
AD8510	1	9	30	2.5	400	5	0.08	7.6		8	20	8-lead SOIC, 8-lead MSOP	EAR99
AD8512	2	9	30	2.5	400	5	0.08	7.6		8	20	8-lead SOIC, 8-lead MSOP	EAR99
AD8513	4	9	30	2.5	1000	5	0.08	7.6		8	20	14-lead SOIC, 14-lead TSSOP	EAR99
AD8597	1	9	30	5.7	120	2.2	200	1.07	0.076	10	16	8-lead LFCSP, 8-lead SOIC	EAR99
AD8675	1	10	30	2.9	75	0.6	2	2.8	0.1	10	2.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8676	2	10	30	2.9	50	0.6	2	2.8	0.1	10	2.5	8-lead SOIC, 8-lead MSOP	EAR99
ADA4004-1	1	10	30	2.2	125	1	90	1.8	0.15	12	2.7	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4004-2	2	10	30	2.2	125	1	90	1.8	0.15	12	2.7	8-lead SOIC, 8-lead MSOP	EAR99
ADA4004-4	4	10	30	2.2	125	1	90	1.8	0.15	12	2.7	16-lead LFCSP, 14-lead SOIC	EAR99
ADA4177-1	1	10	30	0.5	60	1	1	8	0.175	3.5	1.5	8-lead SOIC, 8-lead MSOP	EAR99
ADA4177-2	2	10	30	0.5	60	1	1	8	0.175	3.5	1.5	8-lead SOIC, 8-lead MSOP	EAR99
ADA4177-4	4	10	30	0.5	60	1	1	8	0.175	3.5	1.5	14-lead SOIC, 14-lead TSSOP	EAR99
LT1007X		10	30	2.8	160		95			8	1.2	8-lead TO-5 (0.200 in PCD)	EAR99

高電圧(V ≥ 30V)高速アンプ / High Voltage (V ≥30 V), High Speed Amplifiers

Part Number	Number of Amps	V_s Span (min) (V)	V_s Span (max) (V)	I_Q/Amp (typ) (mA)	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	Package	ECCN Code
LT1028	1	8	44	7.4	40	0.8	90	0.85	0.035	75	15	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
LT1115	1	8	44	8.5	200		380	0.9		70	15	8-lead PDIP, 16-lead SOIC	EAR99
LT1126	2	8	44	2.6	70	1	20	2.7	0.07	65	11	8-lead PDIP, 8-lead SOIC	EAR99
LT1127	4	8	44	2.6	90	1	20	2.7	0.07	65	11	14-lead PDIP, 16-lead SOIC	EAR99
LT1037	1	8	44	2.6	25	0.6	35	2.5	0.06	60	15	8-lead PDIP, 8-lead SOIC	EAR99
ADA4870	1	10	40	32.5	10,000		23000	2.1			2500	PSOP_3 430 mil with heatsink, chips or die	EAR99
LT1226	1	5	36	7	1000		8000	2.6		1000	400	8-lead PDIP, 8-lead SOIC	EAR99
AD829	1	9	36	5.3	1000		7000	1.7		750	230	20-lead LCC, 8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
LT1222	1	5	36	8	300		300	3		500	200	8-lead PDIP, 8-lead SOIC	EAR99
LT1468-2	1	10	36	3.9	75		10	5	0.3	200	30	8-lead SOIC, 8-lead DFN	EAR99
LT1469-2	2	10	36	4.1	125		10	5	0.3	200	30	8-lead SOIC, 12-lead DFN	EAR99
LT1794	2	8	36	10	5000		4000	8		200	600	20-lead SOIC, 20-lead TSSOP-EP	EAR99
AD848	1	9	36	4.8	2300		5000	5		175	300	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
LT1203	1	9	36	10	30,000		5000			150	300	8-lead PDIP, 8-lead SOIC	EAR99
LT1205	2	9	36	10	30,000		5000			150	300	16-lead SOIC	EAR99
LT1221	1	5	36	8	1000		300	6		150	250	8-lead PDIP, 8-lead SOIC	EAR99
LT1225	1	5	36	7	1000		8000	7.5		150	400	8-lead PDIP, 8-lead SOIC	EAR99
LT1227	1	4	36	10	10,000			3.2		140	1100	8-lead PDIP, 8-lead SOIC	EAR99
LT1259	2	4	36	5	12,000			3.6		130	1600	14-lead PDIP, 14-lead SOIC	EAR99
LT1260	3	4	36	5	12,000			3.6		130	1600	16-lead PDIP, 16-lead SOIC	EAR99
AD797	1	10	36	10.5	40	1	900	0.9	0.05	110	20	8-lead PDIP, 8-lead SOIC	EAR99
AD818	1	5	36	7	2000		6600	10		100	500	8-lead PDIP, 8-lead SOIC	EAR99
AD828	2	5	36	7.5	2000		6600	10		100	450	8-lead PDIP, 8-lead SOIC	EAR99
LT1223	1	5	36	6	3000			33		100	1000	8-lead PDIP, 8-lead SOIC	EAR99
LT1227MJ8	1	4	36	10	10,000			3.2		100	1100	8-lead PDIP, 8-lead SOIC	EAR99
LT1228	1	4	36	9	5000		1000	20		100	500	8-lead PDIP, 8-lead SOIC	EAR99
LT1229	2	4	36	6	10,000			3.2		100	700	8-lead PDIP, 8-lead SOIC	EAR99
LT1230	4	4	36	6	10,000			3.2		100	700	14-lead PDIP, 14-lead SOIC	EAR99
LT1204	1	9	36	19	14,000			7		95	1000	16-lead PDIP, 16-lead SOIC	EAR99
LT1469	2	6	36	4.1	125	3	40	5	0.3	90	22	8-lead PDIP, 8-lead SOIC, 12-lead DFN	EAR99
AD810	1	5	36	6.8	6000		10,000	2.9		80	1000	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99

オペアンプ

高電圧（V ≥ 30V）高速アンプ（続き） / High Voltage (V ≥30 V), High Speed Amplifiers (Continued)

Part Number	Number of Amps	V_s Span (min) (V)	V_s Span (max) (V)	I_O/Amp (typ) (mA)	V_{OS} (max) (µV)	V_{OS} TC (max) (µV/°C)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	0.1 Hz to 10 Hz V_{NOISE} (typ) (µV p-p)	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	Package	ECCN Code
AD842	1	10	36	13	1000		5000	9		80	375	14-lead PDIP, 14-lead CerDIP, 16-lead SOIC—wide, LCC:cer leadless chip carr, chips or die	EAR99
LT1363	1	3	36	6.3	1500	13	2000	9		70	1000	8-lead PDIP, 8-lead SOIC	EAR99
LT1364	2	3	36	6	1500	13	1000	9		70	1000	8-lead PDIP, 8-lead SOIC	EAR99
LT1365	4	3	36	6	1500	13	2000	9		70	1000	14-lead PDIP, 16-lead SOIC	EAR99
LT1206	1	10	36	20	10,000			3.6		66	900	Round header/metal CAN, 7-lead DD PAK, 8-lead PDIP, 8-lead SOIC	EAR99
LT1207	2	10	36	20	10,000			3.6		66	900	16-lead SOIC	EAR99
LT1210	1	8	36	35	15,000			3		66	900	7-lead TO-220 (flow 06), round header/metal CAN, 7-lead DD PAK, 7-lead TO-220 (flow 44), 7-lead TO-220 (flow 37), 16-lead SOIC	EAR99
LT1795	2	10	36	29	13,000			3.6		65	900	20-lead SOIC, 20-lead TSSOP-EP	EAR99
LT1497	2	4	36	6	15,000			3		59	900	16-lead SOIC, 8-lead SOIC	EAR99
AD811	1	9	36	14.5	3000		5000	1.9			400	20-lead LCC, 8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, 16-lead SOIC—wide, LCC:CER leadless chip, carr chips or die	EAR99
AD812	2	2.4	36	4.5	5000		25,000	3.5			250	8-lead PDIP, 8-lead SOIC	EAR99
AD813	3	2.4	36	4.5	5000		30,000	3.5			450	14-lead PDIP, 14-lead SOIC, chips or die, LCC:cer leadless chip carr	EAR99
AD815	2	10	36	15	8000		5000	1.85			900		EAR99
AD8244	4	3	36	0.18	350	3	0.003	13	0.4		0.8	10-lead MSOP	EAR99
AD844	1	9	36	6.5	150		250	2			2000	8-lead PDIP, 8-lead CerDIP 16-lead SOIC—wide, chips or die	EAR99
ADA4637-1	1	9	30	7	200	2	0.005	4.8	0.7	79.9	170	8-lead LFCSP, 8-lead SOIC	EAR99
LT1210X	1	10	30	35	15,000			3		66	900	16-lead TSSOP-EP	EAR99

オペアンプ

LTC6274/LTC6275: 90MHz、2200V/µs、30V低消費電力シングル／デュアル・オペアンプ

主な特長

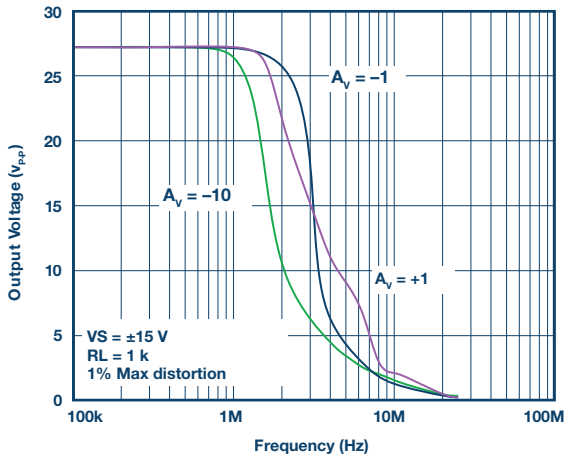
- スルー・レート:2200V/µs
- 90MHz、-3dB帯域幅(AV = +1)
- ゲイン帯域幅積:40MHz
- アンプ当たりの電源電流:1.6mA
- C-Load™オペアンプですべての容量性負荷を駆動
- 電圧範囲:±4.5V～±16V
- ユニティ・ゲインで安定動作
- 入力ノイズ電圧:10nV/√Hz
- 最大入力オフセット電圧:400µV
- 74dBの最小オープンループ・ゲイン、RL = 1k
- セトリング・タイム:40ns(1%まで)(10Vステップ)
- ±5Vと±15Vで仕様規定
- シングル:5ピンTSOT-23パッケージ
- デュアル:8ピンMSOPパッケージ

主な利点

- 高帯域幅と高速スルー・レートを組み合わせて、高周波数で低歪みの大信号増幅を実現
- どの容量性負荷でも安定しており、バッファまたはケーブル駆動に最適

アプリケーション

- 広帯域大信号増幅
- ケーブル・ドライバ
- バッファ
- ATE(自動試験装置)
- データ・アクイジション・システム
- アクティブ・フィルタ
- ハイファイ・ビデオ／オーディオ増幅



高速(BW ≥ 50MHz)アンプ / High Speed (BW ≥50 MHz) Amplifiers

Part Number	Number of Amps	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (typ) (nA)	V_{os} (typ) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LT6274 ***New***	1	40	2200	100	150	10	1.6	9	32	5-lead SOT-23	EAR99
LTC6268-10	1	4000	1500	0.000003	200	4	16.5	3.1	5.25	8-lead SOIC, 6-lead SOT-23	EAR99
LTC6269-10	2	4000	1500	0.000003	200	4	16.5	3.1	5.25	8-lead MSOP-EP, 10-lead DFN	EAR99
LTC6410-6	1	1400	1500		400		104	2.8	5.5	16-lead QFN	EAR99
LT5514	1	850					148	4.75	5.25	20-lead TSSOP-EP	EAR99
LT1993-2	1	800	1100		1000	3.5	100	4	5.5	16-lead QFN	EAR99
LT6556	3	750	2100		18,000	11	9.5	4.5	12.6	24-lead SSOP, 24-lead QFN	EAR99
LT1886	2	700	200	1500	1000	6	7	4	13.2	8-lead SOIC	EAR99
LT1969	2	700	200	1500	1000	6	7	4	13.2	10-lead MSOP	EAR99
LT6411	2	650	3300		3000	8	16	4.5	12.6	16-lead QFN	EAR99
LT6553	3	650	2500	17,000	3000	9	8	4	13.2	16-lead SSOP	EAR99
LT6554	3	650	2500	17,000	11,000	20	8	4	13.2	16-lead SSOP	EAR99
LT6555	3	650	2200		5000	9	9	4.5	12.6	24-lead SSOP, 24-lead QFN	EAR99
AD8074	3	600	1600	5000	2500	19.5	24	9	11	16-lead TSSOP	EAR99
ADA4858-3	3	600	600	8000	500	4	19	3	5.5	16-lead LFCSP	EAR99
AD8075	3	550	1350	5000	2500	22	24	9	11	16-lead TSSOP	EAR99
LT6558	3	550	2200		12,000		22.5	3	7.5	16-lead SSOP, 16-lead DFN	EAR99
LT5524	1	540					75	4.75	5.25	20-lead TSSOP-EP	EAR99
LT6557	3	500	2200	70,000	12,000	12	22.5	3	7.5	16-lead SSOP, 16-lead DFN	EAR99
LTC6268	1	500	400	0.000	200	4.3	16.5	3.1	5.25		EAR99
LTC6269	2	500	400	0.000	200	4.3	16.5	3.1	5.25	8-lead MSOP-EP, 10-lead DFN	EAR99

オペアンプ

高速（BW ≥ 50MHz）アンプ（続き） / High Speed (BW ≥50 MHz) Amplifiers (Continued)

Part Number	Number of Amps	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (typ) (nA)	V_{os} (typ) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
ADA4817-1	1	410	870	0.002	400	4	19	5	10	8-lead LFCSP, 8-lead SOIC-EP	EAR99
ADA4817-2	2	410	870	0.002	400	4	19	5	10	16-lead LFCSP	EAR99
ADA4857-1	1	410	2800	2000	2000	4.4	5	4.5	10.5	8-lead LFCSP, 8-lead SOIC	EAR99
ADA4857-2	2	410	2800	2000	2000	4.4	5	4.5	10.5	16-lead LFCSP	EAR99
LT1395	1	400	800		10,000	4.5	4.6	3	12.6	8-lead SOIC, 5-lead SOT-23, 6-lead SOT-23	EAR99
LT1396	2	400	800		10,000	4.5	4.6	3	12.6	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1397	4	400	800		10,000	4.5	4.6	3	12.6	14-lead SOIC, 16-lead SSOP, 14-lead DFN	EAR99
LT1818	1	400	2500	2000	200	6	9	3.5	12.6	8-lead SOIC, 5-lead SOT-23	EAR99
LT1819	2	400	2500	2000	200	6	9	3.5	12.6	8-lead SOIC, 8-lead MSOP	EAR99
LT1192	1	350	450	500	200	9	32	4	18	8-lead PDIP, 8-lead SOIC	EAR99
LT1194	1	350	500	500	1000	15	35	4	18	8-lead PDIP, 8-lead SOIC	EAR99
LT1806	1	325	125	1000	100	3.5	9	2.5	12.6	8-lead SOIC, 6-lead SOT-23	EAR99
LT1807	2	325	125	1000	100	3.5	9	2.5	12.6	8-lead SOIC, 8-lead MSOP	EAR99
AD8055	1	300	1400	400	3000	6	6.5	8	12	8-lead PDIP, 8-lead SOIC, 5-lead SOT-23	EAR99
AD8056	2	300	1400	400	3000	6	6	8	12	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LT1398	2	300	800		10,000	4.5	4.6	3	12.6	16-lead SOIC	EAR99
LT1399	3	300	800		1500	4.5	4.6	3	12.6	16-lead SOIC, 16-lead SSOP	EAR99
LT1399HV	3	300	800		1500	4.5	4.6	3	15.5	16-lead SOIC, 16-lead SSOP	EAR99
LT6559	3	300	500		1500	4.5	3.9	4	12	16-lead QFN	EAR99
AD8005	1	270	1500	5000	5000	4	0.4	8	12	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4859-3	3	265	740	0.7	9000	17	5.7	3	5.5	16-lead LFCSP	EAR99
LT1815	1	220	1500	2000	200	6	6.5	4	12.6	8-lead SOIC, 5-lead SOT-23, 6-lead SOT-23	EAR99
LT1816	2	220	1500	2000	200	6	6.5	2.5	12.6	8-lead SOIC, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LT1817	4	220	1500	2000	200	6	6.5	2.5	12.6	14-lead SOIC, 16-lead SSOP	EAR99
AD8067	1	200	640	0.001	200	6.6	7	5	24	5-lead SOT-23	EAR99
ADA4855-3	3	200	870	3800	1300	6.8	7.8	3	5.5	16-lead LFCSP	EAR99
LT1468-2	1	200	30	3	30	5	3.9	10	36	8-lead SOIC, 8-lead DFN	EAR99
LT1469-2	2	200	30	3	50	5	4.1	10	36	8-lead SOIC, 12-lead DFN	EAR99
LT1722	1	200	70	40	100	3.8	3.7	4.6	12.6	8-lead SOIC, 5-lead SOT-23	EAR99
LT1723	2	200	70	40	100	3.8	3.7	4.6	12.6	8-lead SOIC, 8-lead MSOP	EAR99
LT1724	4	200	70	40	100	3.8	3.7	4.6	12.6	14-lead SOIC	EAR99
LT1739	2	200	600	100	1000	8	10	8	27	20-lead TSSOP-EP, 12-lead DFN	EAR99
LT1794	2	200	600	100	1000	8	10	8	36	20-lead SOIC, 20-lead TSSOP-EP	EAR99
LT6210	1	200	700		1000	6.5	5.8	3	13.2	6-lead SOT-23	EAR99
LT6211	2	200	700		1000	6.5	5.8	3	13.2	10-lead MSOP, 10-lead DFN	EAR99
LT6300	2	200	600	100	1000	8	10	8	27	16-lead SSOP	EAR99
LT6301	4	200	600	100	1000	8	4	8	27	28-lead TSSOP-EP	EAR99
AD8027	1	190	100	4000	240	4.3	6.5	2.7	12	8-lead SOIC, 6-lead SOT-23	EAR99
AD8028	2	190	100	4000	240	4.3	6.5	2.7	12	Chips or die, 8-lead SOIC, 10-lead MSOP	EAR99
LT1189	1	180	220	500	1000	30	13	4	18	8-lead PDIP, 8-lead SOIC	EAR99
LTC6246	1	180	90	30	50	4.2	0.95	2.5	5.25	6-lead SOT-23	EAR99
LTC6247	2	180	90	30	50	4.2	0.95	2.5	5.25	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC6248	4	180	90	30	50	4.2	0.95	2.5	5.25	16-lead MSOP	EAR99
AD848	1	175	300	3300	500	5	4.8	9	36	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
ADA4350	1	175	100	0.000	15	5	8.5	3.3	12	28-lead TSSOP	EAR99
AD8041	1	160	170	1200	2000	16	5.8	3	12	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC	EAR99
LT1809	1	160	300	1800	600	16	12.5	2.5	12.6	8-lead SOIC, 6-lead SOT-23	EAR99
LT1810	2	160	300	1800	600	16	12.5	2.3	12.6	8-lead SOIC, 8-lead MSOP	EAR99
LT1203	1	150	300	600	10,000		10	9	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1205	2	150	300	600	10,000		10	9	36	16-lead SOIC	EAR99
LT1221	1	150	250	100	500	6	8	5	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1225	1	150	400	4000	500	7.5	7	5	36	8-lead PDIP, 8-lead SOIC	EAR99

オペアンプ

高速(BW ≥ 50MHz)アンプ(続き) / High Speed (BW ≥50 MHz) Amplifiers (Continued)

Part Number	Number of Amps	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (typ) (nA)	V_{os} (typ) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
AD8065	1	145	180	0.003	400	7	7.4	5	24	Chips or die, 8-lead SOIC, 5-lead SOT-23	EAR99
AD8066	2	145	180	0.003	400	7	7.4	5	24	8-lead SOIC, 8-lead MSOP	EAR99
AD8013	3	140	1000	3000	2000	3.5	3.5	4.2	13	14-lead SOIC, chips or die	EAR99
AD8037	1	140	1500	3000	2000	4.5	18.5	6	12	8-lead SOIC, chips or die	EAR99
AD9632	1	130	1500	2000	2000	4.3	16	6	12	8-lead SOIC	EAR99
LT1259	2	130	1600		2000	3.6	5	4	36	14-lead PDIP, 14-lead SOIC	EAR99
LT1260	3	130	1600		2000	3.6	5	4	36	16-lead PDIP, 16-lead SOIC	EAR99
AD8048	1	120	1000	1000	1000	3.8	5.9	6	12	8-lead SOIC	EAR99
AD8036	1	110	1200	4000	2000	6.7	20.5	6	12	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
AD8047	1	110	750	1000	1000	5.2	5.8	6	12	8-lead PDIP, 8-lead SOIC	EAR99
AD9631	1	110	1300	2000	3000	7	17	6	12	8-lead PDIP, 8-lead SOIC, chips or die	EAR99
LT6550	3	110	340	15,000	15,000	12	9.5	3	12.6	10-lead MSOP	EAR99
LT6551	4	110	340	15,000	15,000	12	9.5	3	12.6	10-lead MSOP	EAR99
ADA4891-1	1	105	170	0.002	2500	9	4.4	2.7	5.5	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4891-2	2	105	170	0.002	2500	9	4.4	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
ADA4891-3	3	105	170	0.002	2500	9	4.4	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4891-4	4	105	170	0.002	2500	9	4.4	2.7	5.5	14-lead SOIC, 14-lead TSSOP	EAR99
AD8038	1	100	425	400	800	8	1	3	12	5-lead SC70, 8-lead SOIC	EAR99
AD8039	2	100	425	400	800	8	1	3	12	8-lead SOIC, 8-lead SOT-23	EAR99
AD8057	1	100	1150	500	1000	7	7.5	3	12	8-lead SOIC, 5-lead SOT-23, chips or die	EAR99
AD8058	2	100	1150	500	1000	7	7.5	3	12	8-lead SOIC, 8-lead MSOP, chips or die	EAR99
AD818	1	100	500	3300	500	10	7	5	36	8-lead PDIP, 8-lead SOIC	EAR99
AD828	2	100	450	3300	500	10	7.5	5	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1223	1	100	1000		1000	33	6	5	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1228	1	100	500	400	500	20	9	4	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1812	1	100	750	900	400	8	3	2.5	12.6	8-lead SOIC, 5-lead SOT-23, 6-lead SOT-23	EAR99
LT1813	2	100	750	900	500	8	3	2.5	12.6	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1813HV	2	100	750	900	500	8	3	2.5	13.5	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1814	4	100	750	900	500	8	3	2.5	12.5	14-lead SOIC, 16-lead SSOP	EAR99
LT6205	1	100	600	18,000	1300	9	4	3	12.6	5-lead SOT-23	EAR99
LT6206	2	100	600	18,000	1300	9	4	3	12.6	8-lead MSOP	EAR99
LT6207	4	100	600	18,000	1300	9	4	3	12.6	16-lead SSOP	EAR99
LT1204	1	95	1000		5000	7	19	9	36	16-lead PDIP, 16-lead SOIC	EAR99
AD8042	2	90	225	1200	3000	15	6	3	12	8-lead SOIC, chips or die	EAR99
AD8044	4	90	190	2000	1400	16	2.875	3	12	14-lead PDIP, 14-lead SOIC	EAR99
AD8054	4	90	145	2000	1800	16	3.4	3	12	14-lead SOIC, 14-lead TSSOP	EAR99
AD8061	1	90	650	3500	1000	8.5	9.5	2.7	8	8-lead SOIC, 5-lead SOT-23	EAR99
AD8062	2	90	650	3500	1000	8.5	9.5	2.7	8	8-lead SOIC, 8-lead MSOP	EAR99
AD8063	1	90	650	3500	1000	8.5	9.5	2.7	8	8-lead SOIC, 6-lead SOT-23	EAR99
LT1191	1	90	450	500	1000	25	32	4	18	8-lead PDIP, 8-lead SOIC	EAR99
LT1468	1	90	22	3	30	5	3.6	6	36	8-lead PDIP, 8-lead SOIC, 8-lead DFN	EAR99
LT1469	2	90	22	3	50	5	4.1	6	36	8-lead PDIP, 8-lead SOIC, 12-lead DFN	EAR99
LT1805	4	85	100	125	350	21	2.7	2.3	12.6	14-lead SOIC	EAR99
LT1803	1	83	100	125	350	21	2.7	2.3	12.6	8-lead SOIC, 5-lead SOT-23	EAR99
LT1804	2	83	100	125	350	21	2.7	2.3	12.6	8-lead SOIC, 8-lead DFN	EAR99
AD8051	1	80	170	1400	1800	16	4.8	3	12	8-lead SOIC, 5-lead SOT-23	EAR99
AD8052	2	80	170	1400	1800	16	4.8	3	12	8-lead SOIC, 8-lead MSOP	EAR99
LT1193	1	80	500	500	2000	50	35	4	18	8-lead PDIP, 8-lead SOIC	EAR99
LT1800	1	80	25	25	75	8.5	1.6	2.3	12.6	8-lead SOIC, 5-lead SOT-23	EAR99
LT1801	2	80	25	25	75	8.5	1.6	2.3	12.6	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1802	4	80	25	25	75	8.5	1.6	2.3	12.6	14-lead SOIC	EAR99
LT6552	1	75	600	20,000	5000	55	12.5	3	12.6	8-lead SOIC, 8-lead DFN	EAR99
ADA4850-1	1	70	160	2300	600	10	2.5	2.7	6	8-lead LFCSP	EAR99
ADA4850-2	2	70	160	2300	600	10	2.5	2.7	6	16-lead LFCSP	EAR99
ADA4851-1	1	70	190	2200	600	10	2.9	2.7	12	6-lead SOT-23	EAR99
ADA4851-2	2	70	190	2200	600	10	2.9	2.7	12	8-lead MSOP	EAR99

オペアンプ

高速（BW ≥ 50MHz）アンプ（続き） / High Speed (BW ≥50 MHz) Amplifiers (Continued)

Part Number	Number of Amps	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (typ) (nA)	V_{os} (typ) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
ADA4851-4	4	70	190	2200	600	10	2.9	2.7	12	14-lead TSSOP	EAR99
LT1363	1	70	1000	600	500	9	6.3	3	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1364	2	70	1000	300	500	9	6	3	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1365	4	70	1000	600	500	9	6	3	36	14-lead PDIP, 16-lead SOIC	EAR99
LT1206	1	66	900		3000	3.6	20	10	36	Round header/metal CAN, 7-lead DD PAK, 8-lead PDIP, 8-lead SOIC	EAR99
LT1207	2	66	900		3000	3.6	20	10	36	16-lead SOIC	EAR99
LT1795	2	65	900		3000	3.6	29	10	36	20-lead SOIC, 20-lead TSSOP-EP	EAR99
LT6220	1	60	20	15	70	10	0.9	2.2	12.6	8-lead SOIC, 5-lead SOT-23	EAR99
LT6221	2	60	20	15	70	10	0.9	2.2	12.6	8-lead SOIC, 8-lead DFN	EAR99
LT6222	4	60	20	15	70	10	0.9	2.2	12.6	16-lead SSOP	EAR99
ADA4853-1	1	55	120	1000	1000	22	1.4	2.65	5	6-lead SC70	EAR99
ADA4853-2	2	55	120	1000	1000	22	1.4	2.65	5	16-lead LFCSP	EAR99
ADA4853-3	3	55	120	1000	1000	22	1.4	2.65	5	16-lead LFCSP, 14-lead TSSOP	EAR99
AD8031	1	50	35	450	500	15	0.9	2.7	12	8-lead PDIP, 8-lead SOIC, 5-lead SOT-23	EAR99
AD8032	2	50	35	450	500	15	0.9	2.7	12	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, chips or die	EAR99
AD8091	1	50	170	1400	1800	16	5.5	3	12	8-lead SOIC, 5-lead SOT-23	EAR99
AD8092	2	50	170	1400	1800	16	4.8	3	12	8-lead SOIC, 8-lead MSOP	EAR99
AD817	1	50	350	3300	500	15	7	5	36	8-lead PDIP, 8-lead SOIC	EAR99
AD826	2	50	350	3300	500	15	6.6	5	36	8-lead PDIP, 8-lead SOIC	EAR99
AD827	2	50	300	3300	300	15	10.5	9	36	8-lead PDIP, 8-lead CerDIP, 16-lead SOIC—wide, chips or die, LCC:cer leadless chip carr	EAR99
AD847	1	50	300	3300	500	15	4.8	9	36	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
AD8651	1	50	41	0.001	100	4.5	9	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
AD8652	2	50	41	0.001	100	4.5	9	2.7	5.5	8-lead SOIC, 8-lead MSOP	EAR99
LT1187	1	50	165	500	2000	65	13	4	18	8-lead PDIP, 8-lead SOIC	EAR99
LT1190	1	50	450	500	3000	50	32	4	18	8-lead PDIP, 8-lead SOIC	EAR99
LT1195	1	50	165	500	3000	70	12	4	18	8-lead PDIP, 8-lead SOIC	EAR99
LT1360	1	50	800	300	300	9	3.8	3	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1361	2	50	800	300	300	9	3.8	5	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1362	4	50	800	300	300	9	3.8	5	36	14-lead PDIP, 16-lead SOIC	EAR99
LTC6244	2	50	35	0.001	40	8	6.25	2.8	6	8-lead MSOP, 8-lead DFN	EAR99
LTC6244HV	2	50	35	0.001	40	8	6.25	2.8	12	8-lead MSOP, 8-lead DFN	EAR99
AD8014	1	400	4600	5000	2000	3.5	1.15	4.5	12	8-lead SOIC, 5-lead SOT-23	EAR99
AD8018	2	130	300	1000	1000	4.5	9	3.3	8	8-lead SOIC, 14-lead TSSOP	EAR99
AD812	2	145	250	300	2000	3.5	4.5	2.4	36	8-lead PDIP, 8-lead SOIC	EAR99
AD813	3		450	5000	2000	3.5	4.5	2.4	36	14-lead PDIP, 14-lead SOIC, chips or die, LCC:cer leadless chip carr	EAR99
ADA4312-1	1	195	2100					12	12	16-lead LFCSP	EAR99
ADA4856-3	3	225	800	3800	1300	14	7.8	3	5.5	16-lead LFCSP	EAR99
ADA4860-1	1	800	790	1500	3500	4	6	5	12	6-lead SOT-23	EAR99
ADA4862-3	3	300	830	600	2000	10.6	16	5	12	14-lead SOIC	EAR99

高速（BW ≥ 50MHz）、低ノイズ・アンプ / High Speed (BW ≥50 MHz), Low Noise Amplifiers

Part Number	Number of Amps	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (typ) (nA)	V_{os} (typ) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LT6274 ***New***	1	40	2200	100	150	10	1.6	9	32	5-lead SOT-23	EAR99
AD8099	1	3800	470	6000	100	0.95	15	5	12	8-lead LFCSP, 8-lead SOIC-EP	EAR99
LTC6253-7	2	2000	500	100	50	2.75	3.3	2.5	5.25	10-lead MSOP	EAR99
AD8003	3	1650	3800	7000	700	1.8	9.5	4.5	10	24-lead LFCSP, chips or die	EAR99
ADA4895-1	1	1500	943	11,000	28	1	3	3	10	8-lead SOIC, 6-lead SOT-23	EAR99
ADA4895-2	2	1500	943	11,000	28	1	3	3	10	10-lead MSOP	EAR99
LT6200-10	1	1450	340	10,000	100	0.95	20	2.5	12.6	8-lead SOIC, 6-lead SOT-23	EAR99
LT6230-10	1	1450	250	5000	100	1.1	3.3	3	12.6	6-lead SOT-23	EAR99

オペアンプ

高速(BW ≥ 50MHz)、低ノイズ・アンプ(続き) / High Speed (BW ≥50 MHz), Low Noise Amplifiers (Continued)

Part Number	Number of Amps	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (typ) (nA)	V_{os} (typ) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
AD8021	1	1000	130	8000	400	2.1	7.8	4.5	24	8-lead SOIC, 8-lead MSOP	EAR99
LTC6360	1	1000	135	17,000	30	2.3	13.6	4.75	5.25	8-lead MSOP-EP, 8-lead DFN	EAR99
LT1226	1	1000	400	4000	300	2.6	7	5	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1993-4	1	900	1100		1000	2.15	100	4	5.5	16-lead QFN	EAR99
AD8001	1	880	1200	5000	2000	2	5	6	12	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, 5-lead SOT-23, chips or die	EAR99
LT1993-2	1	800	1100		1000	3.5	100	4	5.5	16-lead QFN	EAR99
LT6200-5	1	750	210	10,000	100	0.95	20	2.5	12.6	8-lead SOIC, 6-lead SOT-23	EAR99
AD829	1	750	230	3300	100	1.7	5.3	9	36	20-lead LCC, 8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
ADA4861-3	3	730	680	2900	100	3.2	16.1	5	12	14-lead SOIC	EAR99
LTC6252	1	720	280	100	50	2.75	3.3	2.5	5.25	6-lead SOT-23	EAR99
LTC6253	2	720	280	100	50	2.75	3.3	2.5	5.25	8-lead SOT-23, 8-lead MSOP, 10-lead MSOP, 8-lead DFN	EAR99
LTC6254	4	720	280	100	50	2.75	3.3	2.5	5.25	16-lead MSOP	EAR99
LT1993-10	1	700	1100		1000	1.7	100	4	5.5	16-lead QFN	EAR99
AD8002	2	600	1200	5000	2000	2	10	6	12	8-lead SOIC, 8-lead MSOP	EAR99
LT1222	1	500	200	100	100	3	8	5	36	8-lead PDIP, 8-lead SOIC	EAR99
AD8045	1	400	1350	2000	500	3	16	3.3	12	8-lead LFCSP, 8-lead SOIC-EP	EAR99
AD8008	2	380	1000	4000	500	2.7	9	5	12	8-lead SOIC, 8-lead MSOP	EAR99
LT6233-10	1	375	80	1500	100	1.9	1.15	3	12.6	6-lead SOT-23	EAR99
LT1806	1	325	125	1000	100	3.5	9	2.5	12.6	8-lead SOIC, 6-lead SOT-23	EAR99
LT1807	2	325	125	1000	100	3.5	9	2.5	12.6	8-lead SOIC, 8-lead MSOP	EAR99
ADA4899-1	1	280	310	100	35	1	14.7	4.5	12	8-lead LFCSP, 8-lead SOIC-EP	EAR99
AD8079	2	260	800	3000	5000	2	10	6	12	8-lead SOIC	EAR99
AD8004	4	250	3000	40000	1000	1.5	14	4	12	14-lead SOIC	EAR99
LT1252	1	250	250		5000	3	8.5	4	28	8-lead PDIP, 8-lead SOIC	EAR99
LT1253	2	250	250		5000	3	6	4	28	8-lead PDIP, 8-lead SOIC	EAR99
LT1254	4	250	250		5000	3	6	4	28	14-lead PDIP, 14-lead SOIC	EAR99
LT6230	1	215	70	5000	100	1.1	3.3	3	12.6	6-lead SOT-23	EAR99
LT6231	2	215	70	5000	50	1.1	3.3	3	12.6	8-lead SOIC, 8-lead DFN	EAR99
LT6232	4	215	70	5000	50	1.1	3.3	3	12.6	16-lead SSOP	EAR99
LT6236	1	215	60	5000	100	1.1	3.15	3	12.6	6-lead SOT-23	EAR99
LT6237	2	215	60	5000	100	1.1	3.15	3	12.6	8-lead MSOP, 8-lead DFN	EAR99
LT6238	4	215	60	5000	100	1.1	3.15	3	12.6	16-lead SSOP	EAR99
AD8024	4	200	390	1000	2000	3	17	5	24	16-lead SOIC	EAR99
ADA4807-1	1	200	225	1200	20	3.3	1	2.7	11	6-lead SC70, 6-lead SOT-23	EAR99
ADA4807-2	2	200	225	1200	20	3.3	1	2.7	11	10-lead LFCSP, 8-lead MSOP	EAR99
ADA4807-4	4	200	225	1200	20	3.3	1	2.7	11	14-lead TSSOP	EAR99
LT6200	1	165	44	10,000	100	0.95	20	2.5	12.6	8-lead SOIC, 6-lead SOT-23	EAR99
LT6201	2	165	50	10,000	100	0.95	20	2.5	12.6	8-lead SOIC, 8-lead DFN	EAR99
LT1227	1	140	1100		3000	3.2	10	4	36	8-lead PDIP, 8-lead SOIC	EAR99
AD8013	3	140	1000	3000	2000	3.5	3.5	4.2	13	14-lead SOIC, chips or die	EAR99
LT6202	1	100	25	1300	100	1.9	2.8	2.5	12.6	8-lead SOIC, 5-lead SOT-23	EAR99
LT6203	2	100	25	1300	100	1.9	2.8	2.5	12.6	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT6204	4	100	25	1300	100	1.9	2.8	2.5	12.6	14-lead SOIC, 16-lead SSOP	EAR99
AD8022	2	100	50	2500	1500	2.5	4	4.5	26	8-lead SOIC, 8-lead MSOP	EAR99
AD8072	2	100	500	4000	2000	3	3	5	12	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
AD8073	3	100	500	4000	2000	3	3	5	12	14-lead SOIC	EAR99
LT1227MJ8	1	100	1100		3000	3.2	10	4	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1229	2	100	700		3000	3.2	6	4	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1230	4	100	700		3000	3.2	6	4	36	14-lead PDIP, 14-lead SOIC	EAR99
ADA4896-2	2	90	120	11,000	28	1	3	3	10	8-lead LFCSP, 8-lead MSOP	EAR99
ADA4897-1	1	90	120	11,000	28	1	3	3	10	8-lead SOIC, 6-lead SOT-23	EAR99
ADA4897-2	2	90	120	11,000	28	1	3	3	10	Chips or die, 10-lead MSOP	EAR99
LT6203X	2	83	24	1300	100	2	3.3	2.5	12.6	8-lead SOIC	EAR99
AD810	1	80	1000	2000	1500	2.9	6.8	5	36	8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, chips or die	EAR99
LT1028	1	75	15	25	10	0.85	7.4	8	44	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99

オペアンプ

高速（BW ≥ 50MHz）、低ノイズ・アンプ（続き） / High Speed (BW ≥50 MHz), Low Noise Amplifiers (Continued)

Part Number	Number of Amps	GBP (typ) (MHz)	Slew Rate (typ) (V/µs)	I_{BIAS} (typ) (nA)	V_{os} (typ) (µV)	V_{NOISE} Density (typ) (nV/√Hz)	I_O/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LT1115	1	70	15	50	50	0.9	8.5	8	44	8-lead PDIP, 16-lead SOIC	EAR99
LT1994	1	70	65	18,000	2000	3	13.3	2.375	12.6	8-lead MSOP, 8-lead DFN	EAR99
LT1210	1	66	900		3000	3	35	8	36	7-lead TO-220 (flow 06), round header/ metal CAN, 7-lead DD PAK, 7-lead TO-220 (flow 44), 7-lead TO-220 (flow 37),16-lead SOIC	EAR99
LT1210X	1	66	900	2000	3000	3	35	10	30	16-lead TSSOP-EP	EAR99
LT1126	2	65	11	7	20	2.7	2.6	8	44	8-lead PDIP, 8-lead SOIC	EAR99
LT1127	4	65	11	7	25	2.7	2.6	8	44	14-lead PDIP, 16-lead SOIC	EAR99
LT6233	1	60	15	1500	100	1.9	1.15	3	12.6	6-lead SOT-23	EAR99
LT6234	2	60	17	1500	500	1.9	1.15	3	12.6	8-lead SOIC, 8-lead DFN	EAR99
LT6235	4	60	17	1500	50	1.9	1.15	3	12.6	16-lead SSOP	EAR99
LT1037	1	60	15	10	10	2.5	2.6	8	44	8-lead PDIP, 8-lead SOIC	EAR99
LT1497	2	59	900		3000	3	6	4	36	16-lead SOIC, 8-lead SOIC	EAR99
ADA4898-1	1	50	55	100	20	0.9	8.1	9	36	8-lead SOIC-EP	EAR99
ADA4898-2	2	50	55	100	20	0.9	7.9	9	36	8-lead SOIC-EP	EAR99
ADA4800	1	400	415	1000	30,000	1.5	1.4	4	17	6-lead LFCSP, chips or die	EAR99
AD8000	1	1500	4100	3000	1000	1.6	13.5	4.5	12	8-lead LFCSP, 8-lead SOIC-EP	EAR99
AD815	2	120	900	2000	10,000	1.85	15	10	36		EAR99
AD8009	1	1000	5500	50,000	2000	1.9	14	5	12	8-lead SOIC, 5-lead SOT-23, chips or die	EAR99
AD8017	2	160	1600	16000	1800	1.9	7	4.4	12	8-lead SOIC	EAR99
AD811	1	140	400	2000	500	1.9	14.5	9	36	20-lead LCC, 8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, 16-lead SOIC—wide, LCC:cer leadless chip carr, chips or die	EAR99
AD8010	1	230	800	10,000	5000	2	15.5	9	12	8-lead PDIP, 8-lead SOIC, 16-lead SOIC—wide	EAR99
AD8011	1	300	1100	5000	2000	2	1	3	12	8-lead PDIP, 8-lead SOIC	EAR99
AD8023	3	250	1200	15,000	2000	2	6.2	4.2	15	14-lead SOIC, chips or die	EAR99
AD844	1	60	2000	150	50	2	6.5	9	36	8-lead PDIP, 8-lead CerDIP 16-lead SOIC—wide, chips or die	EAR99
ADA4870	1	70	2500	9000	1000	2.1	32.5	10	40	PSOP_3 430 mil with heatsink, chips or die	EAR99
ADA4311-1	2	310	1050	4500	1000	2.4	11.8	12	12	10-lead MSOP_ED	EAR99
AD8012	2	350	2250	3000	1500	2.5	1.7	3	12	8-lead SOIC, 8-lead MSOP	EAR99
AD8016	2	78	1000	4000	1000	2.6	12.5	6	26	28-lead TSSOP-EP	EAR99
AD8007	1	650	1000	400	500	2.7	9	5	12	5-lead SC70, 8-lead SOIC	EAR99
ADA4310-1	2	190	820	6000	1000	2.85	7.6	5	12	16-lead LFCSP, 10-lead MSOP_ED	EAR99
AD8014	1	400	4600	5000	2000	3.5	1.15	4.5	12	8-lead SOIC, 5-lead SOT-23	EAR99
AD812	2	145	250	300	2000	3.5	4.5	2.4	36	8-lead PDIP, 8-lead SOIC	EAR99
AD813	3	125	450	5000	2000	3.5	4.5	2.4	36	14-lead PDIP, 14-lead SOIC, chips or die, LCC:cer leadless chip carr	EAR99

高出力電流（I_{OUT} ≥ 100mA）アンプ / High Output Current (I_{OUT} ≥100 mA) Amplifiers

Part Number	Number of Amps	I_{out} (typ) (A)	Slew Rate (typ) (V/ µs)	V_{os} (max) (mV)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	GBP (typ) (MHz)	I_O/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Architecture	Package	ECCN Code
LT1739	2	1.2	600	5	4000	8	200	10	8	27	Voltage feedback	20-lead TSSOP-EP, 12-lead DFN	EAR99
LT6300	2	1.2	600	5	4000	8	200	10	8	27	Voltage feedback	16-lead SSOP	EAR99
LT6301	4	1.2	600	5	4000	8	200	4	8	27	Voltage feedback	28-lead TSSOP-EP	EAR99
ADA4870	1	1	2500	10	23000	2.1		32.5	10	40	Current feedback	PSOP_3 with heatsink, chips or die	EAR99
LT1795	2	1	900	13		3.6	65	29	10	36	Current feedback	20-lead SOIC, 20-lead TSSOP-EP	EAR99
LT1886	2	0.8	200	4	4000	6	700	7	4	13.2	Voltage feedback	8-lead SOIC	EAR99
LT1969	2	0.8	200	4	4000	6	700	7	4	13.2	Voltage feedback	10-lead MSOP	EAR99
LT1970	1	0.8	1.6	0.6	600	15	3.6	7	5	36	Voltage feedback	20-lead TSSOP-EP	EAR99
LT1970A	1	0.8	1.6	0.6		15	3.6	7	5	36	Voltage feedback	20-lead TSSOP-EP	EAR99
LT1794	2	0.72	600	5	4000	8	200	10	8	36	Voltage feedback	20-lead SOIC, 20-lead TSSOP-EP	EAR99

オペアンプ

高出力電流(I_{OUT} ≥ 100mA)アンプ(続き) / High Output Current (I_{OUT} ≥100 mA) Amplifiers (Continued)

Part Number	Number of Amps	I_{out} (typ) (A)	Slew Rate (typ) (V/µs)	V_{os} (max) (mV)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	GBP (typ) (MHz)	I_o/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Architecture	Package	ECCN Code
AD8016	2	0.6	1000	3	75,000	2.6		12.5	6	26	Current feedback	28-lead TSSOP-EP (EP = 3.5 mm)	EAR99
AD815	2	0.5	900	8	5000	1.85		15	10	36	Current feedback		EAR99
AD8392A		0.5	515	4	10,000	2.5		5.8	10	24	xDSL line driver	32-lead LFCSP-EP, 28-lead TSSOP-EP	EAR99
LT1206	1	0.5	900	10		3.6	66	20	10	36	Current feedback	Round header/metal CAN, 7-lead DD PAK, 8-lead PDIP, 8-lead SOIC	EAR99
LT1207	2	0.5	900	10		3.6	66	20	10	36	Current feedback	16-lead SOIC	EAR99
AD8018	2	0.4	300	15	8000	4.5		9	3.3	8	Current feedback	8-lead SOIC, 14-lead TSSOP	EAR99
LT1010	1	0.375	200	150	25,0000	20	30	5	4.5	44	Buffer	5-lead TO-220 (flow 06), 5-lead TO-220, 8-lead PDIP, 8-lead DFN	EAR99
AD8397	2	0.31	53	3	900	4.5	35	11	3	25.2	Bipolar voltage feedback	8-lead SOIC, 8-lead SOIC-EP (2.41 mm exposed pad)	EAR99
AD8509	9	0.3	7	20	50			0.944	3.3	6.5	Buffer voltage feedback		EAR99
AD8017	2	0.27	1600	3	45,000	1.9		7	4.4	12	Bipolar current feedback	8-lead SOIC	EAR99
AD8531	1	0.25	5	25	0.05	30	3	1.25	3	6	CMOS voltage feedback	5-lead SC70, 8-lead SOIC, 5-lead SOT-23	EAR99
AD8532	2	0.25	5	25	0.05	30	3	1.25	3	6	CMOS voltage feedback	8-lead SOIC, 8-lead MSOP, 8-lead TSSOP	EAR99
AD8534	4	0.25	5	25	0.05	30	3	1.25	3	6	CMOS voltage feedback	14-lead SOIC, 14-lead TSSOP	EAR99
AD8591	1	0.25	5	25	0.05	30	3	1.25	2.5	6	CMOS voltage feedback	6-lead SOT-23	EAR99
AD8592	2	0.25	5	25	0.05	30	3	1.25	2.5	6	CMOS voltage feedback	10-lead MSOP	EAR99
ADA4312-1	1	0.225	2100	1.2	175,000				12	12	xDSL line driver	16-lead LFCSP	EAR99
AD8655	1	0.22	11	0.25	0.01	2.7	28	4.5	2.7	5.5	CMOS voltage feedback	8-lead SOIC, 8-lead MSOP	EAR99
AD8656	2	0.22	11	0.25	0.01	2.7	28	4.5	2.7	5.5	CMOS voltage feedback	8-lead SOIC, 8-lead MSOP	EAR99
LT1497	2	0.22	900	15		3	59	6	4	36	Current feedback	16-lead SOIC, 8-lead SOIC	EAR99
AD8010	1	0.2	800	12	135,000	2		15.5	9	12	Current feedback	8-lead PDIP, 8-lead SOIC, 16-lead SOIC—wide	EAR99
AD8009	1	0.175	5500	5	15,0000	1.9		14	5	12	Current feedback	8-lead SOIC, 5-lead SOT-23, chips or die	EAR99
AD8615	1	0.15	12	0.1	0.001	7	24	1.7	2.7	5.5	CMOS voltage feedback	5-lead TSOT	EAR99
AD8616	2	0.15	12	0.06	0.001	7	24	1.7	2.7	5.5	CMOS voltage feedback	8-lead SOIC, 8-lead MSOP	EAR99
AD8618	4	0.15	12	0.06	0.001	7	24	2	2.7	5.5	CMOS voltage feedback	14-lead SOIC, 14-lead TSSOP	EAR99
AD8012	2	0.125	2250	4	12,000	2.5		1.7	3	12	Current feedback	8-lead SOIC, 8-lead MSOP	EAR99
ADA4891-1	1	0.125	170	10	0.05	9	105	4.4	2.7	5.5	CMOS video amplifier voltage feedback	8-lead SOIC, 5-lead SOT-23	EAR99
ADA4891-2	2	0.125	170	10	0.05	9	105	4.4	2.7	5.5	CMOS video amplifier voltage feedback	8-lead SOIC, 8-lead MSOP	EAR99
ADA4891-3	3	0.125	170	10	0.05	9	105	4.4	2.7	5.5	CMOS video amplifier voltage feedback	14-lead SOIC, 14-lead TSSOP	EAR99
ADA4891-4	4	0.125	170	10	0.05	9	105	4.4	2.7	5.5	CMOS video amplifier voltage feedback	14-lead SOIC, 14-lead TSSOP	EAR99
LT6411	2	0.105	3300	10		8	650	16	4.5	12.6	Voltage feedback	16-lead QFN	EAR99
LT6553	3	0.105	2500	10	50,000	9	650	8	4	13.2	Fixed gain video amplifier	16-lead SSOP	EAR99

オペアンプ

高出力電流（I_{OUT} ≥ 100mA）アンプ（続き） / High Output Current (I_{OUT} ≥100 mA) Amplifiers (Continued)

Part Number	Number of Amps	I_{out} (typ) (A)	Slew Rate (typ) (V/µs)	V_{os} (max) (mV)	I_{BIAS} (max) (nA)	V_{NOISE} Density (typ) (nV/√Hz)	GBP (typ) (MHz)	I_Q/Amp (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Architecture	Package	ECCN Code
LT6554	3	0.105	2500	35	50,000	20	650	8	4	13.2	Fixed gain video amplifier	16-lead SSOP	EAR99
LT6555	3	0.105	2200	16		9	650	9	4.5	12.6	Fixed gain video amplifier	24-lead SSOP, 24-lead QFN	EAR99
LT6556	3	0.105	2100	67		11	750	9.5	4.5	12.6	Fixed gain video amplifier	24-lead SSOP, 24-lead QFN	EAR99
AD8000	1	0.1	4100	10	45,000	1.6		13.5	4.5	12	Bipolar current feedback	8-lead LFCSP, 8-lead SOIC-EP	EAR99
AD8003	3	0.1	3800	9.3	50,000	1.8	1650	9.5	4.5	10	Current feedback	24-lead LFCSP, chips or die	EAR99
AD811	1	0.1	400	3	5000	1.9		14.5	9	36	Current feedback	20-lead LCC, 8-lead PDIP, 8-lead CerDIP, 8-lead SOIC, 16-lead SOIC—wide, LCC:cer leadless chip carr, chips or die	EAR99
LT1217	1	0.1	500	3		6.5	10	1	10	36	Current feedback	8-lead PDIP, 8-lead SOIC	EAR99
LT1395	1	0.1	800	12		4.5	400	4.6	3	12.6	Current feedback	8-lead SOIC, 5-lead SOT-23, 6-lead SOT-23	EAR99
LT1396	2	0.1	800	12		4.5	400	4.6	3	12.6	Current feedback	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LT1397	4	0.1	800	12		4.5	400	4.6	3	12.6	Current feedback	14-lead SOIC, 16-lead SSOP, 14-lead DFN	EAR99
LT1398	2	0.1	800	12		4.5	300	4.6	3	12.6	Current feedback	16-lead SOIC	EAR99
LT1399	3	0.1	800	12		4.5	300	4.6	3	12.6	Current feedback	16-lead SOIC, 16-lead SSOP	EAR99
LT1399HV	3	0.1	800	12		4.5	300	4.6	3	15.5	Current feedback	16-lead SOIC, 16-lead SSOP	EAR99
LT6557	3	0.1	2200	40		12	500	22.5	3	7.5	Fixed gain video amplifier	16-lead SSOP, 16-lead DFN	EAR99

ADCドライバ／差動アンプ

LTC6363: 高精度、低消費電力、完全差動アンプ／ADCドライバ

主な特長

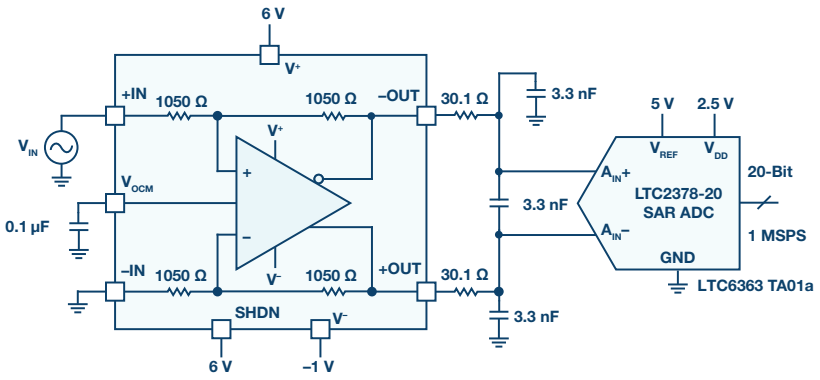
- ユーザー設定ゲインまたは固定ゲイン（0.5V/V、1V/V、2V/V）
- 入力換算ノイズ:2.9nV/√Hz
- ゲイン誤差:45ppm（最大値）
- ゲイン誤差のドリフト:0.5ppm/°C
- CMRR:94dB（最小値）
- オフセット電圧:100µV（最大値）
- 電源電流:2mA（最大値）
- 高速セトリング:18ビット、8Vp-p出力到達まで720ns

アプリケーション

- 20ビット、18ビット、16ビットのSAR ADCドライバ
- シングルエンド／差動変換
- 低消費電力のADCドライバ
- レベル・シフタ
- 差動ライン・ドライバ
- バッテリ駆動の計測器

主な利点

- シンプルな18ビットおよび20ビットの高精度SAR ADC駆動ソリューション
- アンプと高精度抵抗を小型のMSOPパッケージに収めることにより、個別部品では実現が困難で費用もかかる高い精度と小型化を実現
- 0.5V/V、1V/V、2V/Vの固定ゲインで提供され、入力をADCの全範囲に柔軟にスケーリング

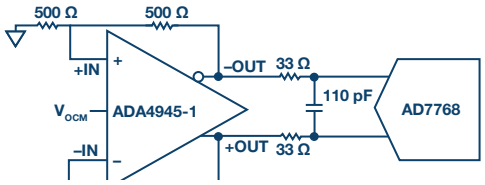


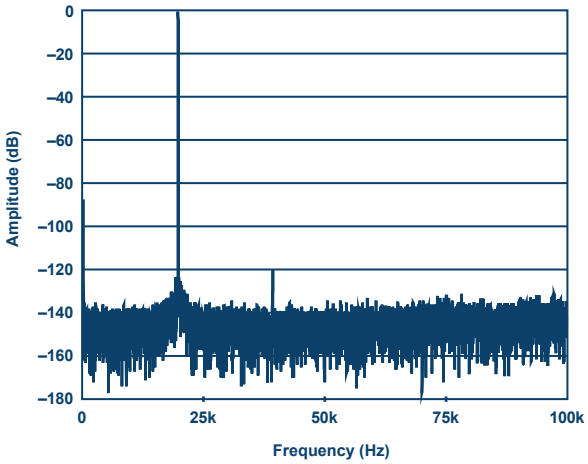
ADCドライバ／差動アンプ

ADA4945-1: デュアル消費電力モード、ドリフト0.1mV/°C、完全差動高精度ADCドライバ

主な特長

- 3V～12Vの幅広い電源電圧範囲、負のレール入力およびレールtoレール出力
- 柔軟なデュアル消費電力動作モード:
- 通常消費電力モード:4mA(200MHz)
- 低消費電力モード:1.4mA(80MHz)
- 通常消費電力モードでのTHDおよびノイズ性能
- 低い全高調波歪み(THD)
- 1kHz時に-120dB
- 100kHz時に-110dB
- 低入力電圧ノイズ:
- 100kHz時に1.6nV/√Hz
- 低DC誤差:
- 入力オフセット電圧ドリフト
- 0.1µV/°C(代表値)、0.5µV/°C(最大値)(20°C～85°C)
- 入力オフセット電流ドリフト
- 0.1nA/°C(代表値)、2nA/°C(最大値)(20°C～85°C)
- ADC入力保護のための調整可能な出力電圧クランプ





ADCドライバ／差動アンプ

ADCドライバ／差動アンプ / ADC Drivers/Differential Amplifiers

Part Number	Number of Channels	BW −3 dB (typ) (MHz)	Gain Set	Gain (min) (dB)	Gain (max) (dB)	V_{NOISE} Density (typ) (nV/√Hz)	Distortion 2nd Harmonic (typ) (dBc)	Distortion 3rd Harmonic (typ) (dBc)	I_s (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Input type	Package	ECCN Code
ADA4945-1 ***New***	1	200	Resistor			6.2	−140	−148	4	2.7	11	Differential	16-lead LFCSP (1.6 mm EP)	EAR99
ADL5569 ***New***	2	6500	Pin strap	6	20	1	−78	−71	86	4.75	5.25	Differential	16-lead LFCSP	EAR99
ADL5565	1	6000	Pin strap	0	15.5	1.5	−108	−103	80	2.8	5.2	Differential	16-lead LFCSP	EAR99
ADA4960-1	1	5000	Analog	0	18	4.8	−73	−72	60	4.75	5.25	Differential	16-lead LFCSP	EAR99
ADL5566	2	4500	Pin strap	3	16	1.3	−94.7	−100	160	2.8	5.2	Differential, single-ended	24-lead LFCSP	EAR99
ADL5567	2	4300	Pin strap	0	20	1.29	−94	−103	148	3.15	5.25	Differential	24-lead LFCSP (2.1 mm EP)	EAR99
ADL5562	1	3300	Pin strap	3	15.5	2.1	−104	−87	80	3	3.6	Differential	16-lead LFCSP	EAR99
ADA4961	1	3200	Digital pin strap	−6	15		−84	−100	150	3.3	5.5	Differential	24-lead LFCSP (2.5 mm EP)	EAR99
ADL5561	1	2900	Pin strap	3	15.5	2.1	−95	−87	40	3	3.6	Differential	16-lead LFCSP	EAR99
LTC6400-14	1	2400	Fixed	14	14	2.5	−107	−96	85	2.85	3.5	Differential	16-lead QFN	EAR99
ADA4927-1	1	2300	Resistor			1.4	−87	−89	22.1	4.5	11	Differential	16-lead LFCSP	EAR99
ADA4927-2	2	2300	Resistor			1.4	−87	−89	44.2	4.5	11	Differential	24-lead LFCSP (2.5 mm EP)	EAR99
AD8351	1	2200	Analog	0	26	2.7	−79	−81	28	3	5.5	Differential	16-lead LFCSP, 10-lead MSOP, LFCSP:LEADFRM chip scale	EAR99
AD8352	1	2200	Analog	3	25	2.7	−83	−82	37	3	5.5	Differential	16-lead LFCSP	EAR99
LTC6400-8	1	2200	Fixed	8	8	1	−118	−98	85	2.85	3.5	Differential	16-lead QFN	EAR99
LTC6401-8	1	2200	Fixed	8	8	1	−109	−118	45	2.85	3.5	Differential	16-lead QFN	EAR99
LTC6401-14	1	2000	Fixed	14	14	1.1			45	2.85	3.5	Differential	16-lead QFN	EAR99
LTC6409	1	2000	Resistor	0		1.1	−104	−106	52	2.7	5.25	Differential	10-lead QFN	EAR99
LTC6416	1	2000	Fixed	0	0	1.8			42	2.7	3.9	Differential	10-lead DFN	EAR99
LTC6430A-15	1	2000	Fixed	15.2	15.2	1			160	4.75	5.25	Differential	24-lead QFN	EAR99
LTC6430A-20	1	2000	Fixed	20.8	20.8	0.6			170	4.75	5.25	Differential	24-lead QFN	EAR99
LTC6430B-15	1	2000	Fixed	15.2	15.2	1			160	4.75	5.25	Differential	24-lead QFN	EAR99
LTC6430B-20		2000	Fixed	20.8	20.8	0.6			170	4.75	5.25	Differential	24-lead QFN	EAR99
ADA4937-1	1	1900	Resistor			2.2	−70	−84	39.5	3	5.25	Differential	16-lead LFCSP	EAR99
ADA4937-2	2	1900	Resistor			2.2	−77	−84	80	3	5.25	Differential	24-lead LFCSP	EAR99
LTC6400-26	1	1900	Fixed	26	26	1.5			85	2.85	3.5	Differential	16-lead QFN	EAR99
LTC6400-20	1	1800	Fixed	20	20	2.1	−97	−93	90	2.85	3.5	Differential	16-lead QFN	EAR99
LTC6420-20	2	1800	Fixed	20	20	2.2	−80	−80	80	2.85	3.5	Differential	20-lead QFN	EAR99
LTC6401-26	1	1600	Fixed	26	26	1.5			45	2.85	3.5	Differential	16-lead QFN	EAR99
LTC6417	1	1600	Fixed	0	0	1.5	−100	−69	123	4.75	5.25	Differential	20-lead QFN	EAR99
ADA4930-1	1	1400	Resistor			1.2	−104	−101	35	3.3	5	Differential	16-lead LFCSP	EAR99
ADA4930-2	2	1400	Resistor			1.2	−104	−101	70	3.3	5	Differential	24-lead LFCSP	EAR99
ADA4939-1	1	1400	Resistor			2.3	−77	−95	37.7	3	5.25	Differential	16-lead LFCSP	EAR99
ADA4939-2	2	1400	Resistor			2.3	−77	−91	75.4	3	5.25	Differential	24-lead LFCSP	EAR99
LTC6410-6	1	1400	Fixed	6	6		−85	−71	104	2.8	5.5	Differential	16-lead QFN	EAR99
LTC6419	2	1400	Resistor	0		1.1	−82	−106	52	2.7	5.25	Differential	20-lead LQFN	EAR99
LTC6432A-15	1	1400	Fixed	15.2	15.2	0.8	−85	−61	166	4.75	5.25	Differential	24-lead QFN	EAR99
LTC6432B-15	1	1400	Fixed	15.2	15.2	0.8	−85	−61	166	4.75	5.25	Differential	24-lead QFN	EAR99
LTC6401-20	1	1300	Fixed	20	20	0.91	−88	−91	50	2.85	3.5	Differential	16-lead QFN	EAR99
LTC6421-20	2	1300	Fixed	20	20	2.2			40	2.85	3.5	Differential	20-lead QFN	EAR99
ADL5205	2	1200	Digital	−9	26	1.2	−90	−94	175	3.15	5.25	Differential	40-lead LFCSP	EAR99
ADA4938-1	1	1000	Resistor			2.6	−82	−82	40	4.5	11	Differential	16-lead LFCSP	EAR99
ADA4938-2	2	1000	Resistor			2.6	−82	−82	80	4.5	11	Differential	24-lead LFCS	EAR99
AD8350	1	900	Analog fixed	20	20	1.7	−66	−65	30	5	10	Differential	8-lead SOIC, 8-lead MSOP	EAR99
LT1993-4	1	900	Fixed	12	4	2.15	−100	−102	100	4	5.5	Differential	16-lead QFN	EAR99
AD8368	1	800	Analog	−12	22				60	4.75	5.5	Single-ended	24-lead LFCSP-EP	EAR99
LT1993-2	1	800	Fixed	6	6	3.5	−94	−94	100	4	5.5	Differential	16-lead QFN	EAR99
LTC6405	1	800	Resistor	0		1.6			18	4.5	5.25	Differential	8-lead MSOP-EP, 16-lead QFN	EAR99
LTC6406	1	800	Resistor	0		1.6	−80	−69	18	2.7	3.5	Differential	8-lead MSOP-EP, 16-lead QFN	EAR99

ADCドライバ／差動アンプ

ADCドライバ／差動アンプ（続き） / ADC Drivers/Differential Amplifiers (Continued)

Part Number	Number of Channels	BW –3 dB (typ) (MHz)	Gain Set	Gain (min) (dB)	Gain (max) (dB)	V_{NOISE} Density (typ) (nV/√Hz)	Distortion 2nd Harmonic (typ) (dBc)	Distortion 3rd Harmonic (typ) (dBc)	I_s (typ) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Input type	Package	ECCN Code
LTC6412	1	800	Analog	–14	17	2.7	–80	–80	110	3	3.6	Differential	24-lead QFN	EAR99
AD8370	1	750	Digital	–11	34	2.1	–65	–62	79	3	5.5	Differential	16-lead TSSOP-EP (3.0 mm pad size)	EAR99
ADA4950-1	1	750	Digital pin strap	0	9.54	9.2	–107	–105	9.5	3	11	Differential	16-lead LFCSP	EAR99
ADA4950-2	2	750	Digital pin strap	0	9.54	9.2	–107	–105	19	3	11	Differential	24-lead LFCSP	EAR99
AD8376	2	700	Digital	–4	20		–82	–91	250	4.5	5.5	Differential	32-lead LFCSP-EP	EAR99
LT1993-10	1	700	Fixed	20	20	1.9	–100	–102	100	4	5.5	Differential	16-lead QFN	EAR99
LT6411	2	650	Pin strap	0	6	8	–88	–88	16	4.5	12.6	Differential	16-lead QFN	EAR99
AD8375	1	630	Digital	–4	20		–85	–92	125	4.5	5.5	Differential	24-lead LFCSP	EAR99
AD8366	2	600	Digital	4.5	20.25		–88	–92	180	4.75	5.25	Differential	32-lead LFCSP	EAR99
AD8369	1	600	Digital	–10	40	2	–68	–64	37	3	5.5	Differential	16-lead TSSOP	EAR99
LTC6404-1	1	600	Resistor	0		1.5			27.2	2.7	5.5	Differential	16-lead QFN	EAR99
LTC6404-2	1	600	Resistor	6		1.5			29.7	2.7	5.5	Differential	16-lead QFN	EAR99
ADA4932-1	1	560	Resistor			3.6	–110	–130	9.6	3	11	Differential	16-lead LFCSP	EAR99
ADA4932-2	2	560	Resistor			3.6	–110	–130	19.2	3	11	Differential	24-lead LFCSP	EAR99
LTC6404-4	1	530	Resistor	12		1.5			30	2.7	5.5	Differential	16-lead QFN	EAR99
AD8367	1	500	Analog	–2.5	42.5	1.84			26	2.7	5.5	Single-ended	14-lead TSSOP	EAR99
AD8139	1	410	Resistor			2.25	–90	–105	24.5	4.5	12	Differential	8-lead LFCSP, 8-lead SOIC-EP	EAR99
AD8131	1	400	Fixed	6	6	12.5	–95	–101	11.5	2.8	11	Differential single-ended	8-lead SOIC, 8-lead MSOP	EAR99
AD8132	1	350	Resistor			8	–83	–98	12	2.7	11	Differential	8-lead SOIC, 8-lead MSOP	EAR99
AD8138	1	320	Resistor			5	–94	–114	20	3	11	Differential	8-lead SOIC, 8-lead MSOP, chips or die	EAR99
LT6402-12	1	300	Fixed	12	12	2.7	–85	–84	30	4	5.5	Differential	16-lead QFN	EAR99
LT6402-20	1	300	Fixed	20	20	1.85	–96	–96	30	4	5.5	Differential	16-lead QFN	EAR99
LT6402-6	1	300	Fixed	6	6	3.8			30	4	5.5	Differential	16-lead QFN	EAR99
ADA4940-1	1	260	Resistor			3.9	–102	–96	1.25	3	7	Differential	16-lead LFCSP, 8-lead SOIC	EAR99
ADA4940-2	2	260	Resistor			3.9	–102	–96	1.25	3	7	Differential	24-lead LFCSP-EP	EAR99
LTC6360	1	250	Resistor			2.3				4.75	5.25		8-lead MSOP-EP, 8-lead DFN	EAR99
LTC6403-1	1	200	Resistor	0		2.8	–97	–95	10.8	2.7	5.25	Differential	16-lead QFN	EAR99
AD8475	1	150	Digital pin strap	–8	–2	10	–110	–108	3	3	10	Differential	16-lead LFCSP, 10-lead MSOP	EAR99
AD8372	2	130	Digital	–9	32		–78	–85	212	4.5	5.5	Differential	32-lead LFCSP-EP	EAR99
AD8137	1	76	Resistor			8.25	–100	–105	3.2	2.7	12	Differential	8-lead LFCSP, 8-lead SOIC	EAR99
LT1994	1	70	Resistor	0		3	–99	–96	13.3	2.375	12.6	Differential	8-lead MSOP, 8-lead DFN	EAR99
LTC6363-0.5	1	60	Fixed	–6.02	–6.02	2.9	–113	–118	1.7	2.8	11	Differential	8-lead MSOP, 8-lead DFN	EAR99
ADA4922-1	1	38	Fixed	6	6	12	–116	–109	9.4	5	26	Single-ended	8-lead LFCSP, 8-lead SOIC-EP	EAR99
LTC6363	1	35	Resistor	–20		2.9	–113	–118	1.7	2.8	11	Differential	8-lead MSOP, 8-lead DFN	EAR99
LTC6363-1	1	35	Fixed	0	0	2.9	–113	–118	1.7	2.8	11	Differential	8-lead MSOP, 8-lead DFN	EAR99
LTC6362	1	34	Resistor	0		3.9	–120	–116	0.9	2.8	5.25	Differential	8-lead MSOP, 8-lead DFN	EAR99
LT6350	1	33	Resistor			1.9	–102	–107	4.8	2.7	12	Single-ended	8-lead MSOP, 8-lead DFN	EAR99
ADA4941-1	1	31	Analog			5.1	–75	–71	2.3	2.7	12	Single-ended	8-lead LFCSP, 8-lead SOIC	EAR99
LTC6363-2	1	21	Fixed	6.02	6.02	2.9	–113	–118	1.7	2.8	11	Differential	8-lead MSOP, 8-lead DFN	EAR99
LT6600-20	1	20	Resistor	0		15	–83	–88	46	2.7	11	Differential	8-lead SOIC	EAR99
LT6600-15	1	15	Resistor	0		19	–88	–88	46	2.7	11	Differential	8-lead SOIC	EAR99
LT6604-15	2	15	Resistor	0			–86	–90	35	3	11	Differential	32-lead QFN	EAR99

ADCドライバ／差動アンプ

ADCドライバ／差動アンプ（続き） / ADC Drivers/Differential Amplifiers (Continued)

Part Number	Number of Channels	BW −3 dB (typ) (MHz)	Gain Set	Gain (min) (dB)	Gain (max) (dB)	V_{NOISE} Density (typ) ($nV/\sqrt{Hz}$)	Distortion 2nd Harmonic (typ) (dBc)	Distortion 3rd Harmonic (typ) (dBc)	I_S (typ) (mA)	V_S Span (min) (V)	V_S Span (max) (V)	Input type	Package	ECCN Code
LT6600-10	1	10	Resistor	0		14	–97	–88	39	2.7	11	Differential	8-lead SOIC, 12-lead DFN	EAR99
LT6604-10	2	10	Resistor	0			–88	–97	35	3	11	Differential	32-lead QFN	EAR99
AD8476	1	6	Fixed	1	1	39	–120	–130	0.33	3	18	Differential	16-lead LFCSP, 8-lead MSOP	EAR99
LT1567		5	Analog			1.4			11	2.7	12	Single-ended	8-lead MSOP	EAR99
LT6600-5	1	5	Resistor	0		16			28	2.7	11	Differential	8-lead SOIC	EAR99
LT6604-5	2	5	Resistor	0			–92	–88	26	3	11	Differential	32-lead QFN	EAR99
LTC1992-10	1	4	Resistor	20	20	45			650	2.7	12	Differential	8-lead MSOP	EAR99
LTC1992-2	1	4	Resistor	6	6	45			650	2.7	12	Differential	8-lead MSOP	EAR99
LTC1992-5	1	4	Resistor	14	14	45			650	2.7	12	Differential	8-lead MSOP	EAR99
LTC1992	1	3.2	Resistor	0		35			650	2.7	12	Differential	8-lead MSOP	EAR99
LTC1992-1	1	3	Resistor	0		45			650	2.7	12	Differential	8-lead MSOP	EAR99
LT6600-2.5	1	2.5	Resistor	0		23	–95	–88	26	2.7	11	Differential	8-lead SOIC, 12-lead DFN	EAR99
LT6604-2.5	2	2.5	Resistor	0			–92	–88	26	3	11	Differential	32-lead QFN	EAR99
AD8138S			Resistor										Cer flatpack with leads	EAR99

計装アンプ

計装アンプ / Instrumentation Amplifiers

Part Number	Number of Amps	Gain Set	Gain (min) (V/V)	Gain (max) (V/V)	V_{os} (max) (µV)	V_{os} TC (max) (µV/°C)	CMRR— High Gain (min) (dB)	I_{BIAS} (max) (nA)	I_Q/Amp (max) (mA)	BW— Low Gain (typ) (MHz)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
LTC2053	1	Resistor	1		10	0.05	120	10	1.3	0.2	2.7	11	8-lead MSOP, 8-lead DFN-EP	EAR99
LTC6915	1	Digital	1	4096	10	0.05	125	10	1.6	0.2	2.7	11	16-lead SSOP (150 mil), 12-lead DFN-EP	EAR99
LTC1100	1	Fixed gain	10	100	10	0.1	104	0.05	2.8	1.8	4	18	8-lead PDIP (300 mil), 16-lead SOIC (300 mil)	EAR99
AD8230	1	Resistor	2	1000	10	0.05	110	1	4	0.002	8	16	8-lead SOIC	EAR99
AD8556	1	Digital	70	1280	12	0.065	94	54	2.7	0.28	5	5.5	16-lead LFCSP-EP, 8-lead SOIC	EAR99
AD8557	1	Digital	28	1300	12	0.065	96	25		0.6	2.7	5.5	16-lead LFCSP-EP, 8-lead SOIC	EAR99
AD8231	1	Digital	1	128	15	0.05	110	0.5	5	2.7	3	6	16-lead LFCSP-EP	EAR99
AD8422	1	Resistor	1	1000	25	0.3	150	0.5	0.3	2.2	3.6	36	8-lead SOIC, 8-lead MSOP	EAR99
AD8221	1	Resistor	1	1000	25	0.3	140	0.4	1	0.825	4.6	36	8-lead SOIC, 8-lead MSOP, chips or die	EAR99
AD8421	1	Resistor	1	1000	25	0.2	140	1	2.3	10	5	36	8-lead SOIC, 8-lead MSOP	EAR99
AD624	1	Pin strap	1	1000	25	0.25	130	50	5	1	12	36	16-lead side-brazed CerDip, chips or die	EAR99
AD625	1	Resistor	1	10,000	25	0.25	120	15	5	0.65	12	36	16-lead side-brazed CerDip, 16-lead PDIP, LCC: cer leadless chip carr	EAR99
AD8428	1	Fixed gain	2000	2000	25	0.3	140	50	6.8	3.5	8	36	8-lead SOIC	EAR99
LT1168	1	Resistor	1	10,000	40	0.3	126	0.25	0.53	0.4	4.6	40	8-lead PDIP (300 mil), 8-lead SOIC (150 mil)	EAR99
LT1167	1	Resistor	1	10,000	40	0.3	126	0.35	1.3	1	4.6	40	8-lead PDIP (300 mil), 8-lead SOIC (150 mil)	EAR99
LT1167-1	1	Resistor	1	10,000	40	0.3	126	0.35	1.3	1	4.6	40	8-lead PDIP (300 mil), 8-lead SOIC (150 mil)	EAR99
AD8226	1	Resistor	1	1000	50	1	120	27	0.425	1.5	2.2	36	8-lead SOIC, 8-lead MSOP	EAR99
AD8228	1	Pin strap	10	100	50	0.8	120	0.6	1	0.65	4.6	36	8-lead SOIC, 8-lead MSOP	EAR99
AD620	1	Resistor	1	10,000	50	0.6	120	1	1.3	1	4.6	36	8-lead PDIP, 8-lead CerDip, 8-lead SOIC, chips or die	EAR99
AD8293G160	1	Fixed gain	160	160	50	0.3	94	2	1.3	0.5	1.8	5.5	8-lead SOT-23	EAR99
AD8293G80	1	Fixed gain	80	80	50	0.3	94	2	1.3	0.5	1.8	5.5	8-lead SOT-23	EAR99
AD524	1	Pin strap	1	1000	50	0.5	120	15	5	1	12	36	16-lead side-brazed CerDip, LCC: cer leadless chip carr, 16-lead SOIC—wide, chips or die	EAR99
AD8429	1	Resistor	1	10,000	50	0.3	140	150	7	15	8	36	8-lead SOIC	EAR99
AD8222	2	Resistor	1	10,000	60	0.3	140	1	1.1	1.2	4.6	36	16-lead LFCSP-EP, 16-lead LFCSP-EP	EAR99
AD8295	1	Resistor	1	1000	60	0.3	140	0.8	2.3	1.2	4.6	36	16-lead LFCSP—no EP	EAR99
AD8237	1	Resistor	1	1000	75	0.3	114	0.65	0.13	0.2	1.8	5.5	8-lead MSOP	EAR99
AD8227	1	Resistor	5	1000	100	1	110	27	0.425	0.25	2.2	36	8-lead SOIC, 8-lead MSOP, N/A	EAR99
AD8426	2	Resistor	1	1000	100	1	110	30	0.425	1.5	2.2	36	16-lead LFCSP—no EP	EAR99
AD8223	1	Resistor	5	1000	100	1	96	25	0.5	0.125	3	24	8-lead SOIC, 8-lead MSOP	EAR99
AD623	1	Resistor	1	1000	100	1	105	25	0.55	0.8	2.7	12	8-lead PDIP, 8-lead SOIC, 8-lead MSOP	EAR99
LTC6800	1	Resistor	1		100	0.25	120	10	1.2	0.2	2.7	5.5	8-lead MSOP, 8-lead DFN-EP	EAR99

計装アンプ

計装アンプ（続き） / Instrumentation Amplifiers (Continued)

Part Number	Number of Amps	Gain Set	Gain (min) (V/V)	Gain (max) (V/V)	V_{os} (max) µV	V_{os} TC (max) (µV/°C)	CMRR—High Gain (min) (dB)	I_{BIAS} (max) (nA)	I_O/Amp (max) (mA)	BW—Low Gain (typ) (MHz)	V_s Span (min) (V)	V_s Span (max) (V)	Package	ECCN Code
AMP01	1	Resistor	0.1	10,000	100	1	125	4	4.8	0.57	9	36	18-lead CerDip, 20-lead SOIC—wide, chips or die	EAR99
AMP02	1	Resistor	1	10,000	100	2	115	0.01	6	1.2	9	36	8-lead PDIP, 16-lead SOIC—wide	EAR99
AD8229	1	Resistor	1	1000	100	1	134	70	7	15	8	34	8-lead side-brazed CerDIP, 8-lead SOIC, chips or die	EAR99
AD627	1	Resistor	5	1000	125	1	83	10	0.085	0.08	2.2	36	8-lead PDIP, 8-lead SOIC	EAR99
AD8220	1	Resistor	1	1000	125	5	100	0.025	0.75	1.5	4.5	36	8-lead MSOP	EAR99
AD621	1	Pin strap	10	100	125	1.5	120	1	1.3	0.8	4.6	18	8-lead PDIP, 8-lead CerDip, 8-lead SOIC	EAR99
AD622	1	Resistor	1	1000	125	1	103	5	1.3	1	5.2	36	8-lead PDIP, 8-lead SOIC	EAR99
LT1920	1	Resistor	1	10,000	125	1	110	2	1.3	0.8	4.6	40	8-lead PDIP (300 mil), 8-lead SOIC (150 mil)	EAR99
AD8420	1	Resistor	1	1000	150	1	100	27	0.1	0.25	2.7	36	8-lead MSOP	EAR99
AD8225	1	Fixed gain	5	5	150	2	86	1.2	1.2	0.9	3.4	36	8-lead SOIC	EAR99
LT1101	1	Fixed gain	10	100	160	2	112	8	0.13	0.37	2.3	44	8-lead PDIP (300 mil), 16-lead SOIC (300 mil)	EAR99
AD8224	2	Resistor	1	1000	175	5	100	0.01	0.8	1.5	4.5	36	16-lead LFCSP-EP, 16-lead LFCSP-EP	EAR99
AD522	1	Resistor	1	1000	200	25	100		8	0.03	10	36	14-lead CerDip (bottom brazed)	EAR99
AD8553	1	Resistor	1	1000	375	3	120	1	1.2	0.001	1.8	5.5	10-lead MSOP	EAR99
AMP04	1	Resistor	1	1000	400	3	90	30	0.9	0.7	5	36	8-lead PDIP, 8-lead SOIC, chips or die	EAR99
LT1102	1	Fixed gain	10	100	600	8	98	0.04	5	35	18	40	8-lead PDIP (300 mil)	EAR99
LT1789-1	1	Resistor	1	1000	750	0.7	100	40	0.095	0.06	2.2	36	8-lead SOIC (150 mil)	EAR99
AD8250	1	Digital	1	10	800	6.2	98	30	4.5	10	10	30	10-lead MSOP	EAR99
AD8251	1	Digital	1	8	800	6.2	98	30	4.5	10	10	34	10-lead MSOP	EAR99
AD8253	1	Digital	1	1000	1050	6.2	100	50	5.3	10	10	30	10-lead MSOP	EAR99
AD8235	1	Resistor	5	200	2500	0.7	100	0.05	0.04	0.023	1.8	5.5	11-ball WLCSP-EP	EAR99
LT1789-10	1	Resistor	10	1000	3000	0.7	98	40	0.095	0.06	2.2	36	8-lead SOIC (150 mil)	EAR99
AD8236	1	Resistor	5	200	3500	2.5	100	0.01	0.04	0.023	1.8	5.5	8-lead MSOP	EAR99
AD8290	1	Fixed gain	50	50	935,000	300	110	1	1.8	0.000	2.6	5.5	16-lead LFCSP-EP	EAR99
AD8232	1	Fixed gain	100	100	8000	10	80	0.2	0.23	0.002	2.7	3.3	20-lead LFCSP-EP	EAR99
AD8233	1	Fixed gain	100	100	6000	2	80	0.2	0.07		1.7	3.3	20-ball WLCSP	EAR99

差電圧アンプ

差電圧アンプ / Difference Amplifiers

Part Number	Number of Amps	Common-Mode In (min) (V)	Common-Mode In (max) (V)	Gain (min) (V/V)	Gain (max) (V/V)	BW—Low Gain (typ) (MHz)	Slew Rate (typ) (V/µs)	I_O/Amp (max) (mA)	V_s Span (min) (V)	V_s Span (max) (V)	Input Beyond Supply	Package	ECCN Code
LT1997-2 ***New***	1	–255	255	0.1	0.25	1	0.75	0.4	3.3	50	Yes	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
LT1990-10 ***New***	1	–250	250	10	10	0.1	0.4	0.18	2.4	36	No	8-lead SOIC (150 mil), 8-lead MSOP	EAR99
LT6376 ***New***	1	–230	230	10	10	0.16	4.1	0.4	3.3	50	Yes	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
AD8479	1	–600	600	1	1	0.13	7.5	0.65	5	36	Yes	8-lead SOIC	EAR99
AD629	1	–270	270	1	1	0.5	2.1	1	5	36	Yes	8-lead PDIP, 8-lead SOIC, chips or die	EAR99
LT6375	1	–270	270	1	1	0.375	2.4	0.4	3.3	50	Yes	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
LT1990	1	–250	250	1	10	0.1	0.55	0.18	2.4	36	Yes	8-lead SOIC	EAR99
LT1997-3	1	–160	160	-13	14	1.1	0.75	0.4	3.3	50	Yes	16-lead MSOP (4 pins removed), 14-lead DFN	EAR99
AD628	1	–120	120	0.1	100	0.6	0.3	1.6	4.5	36	Yes	8-lead SOIC, 8-lead MSOP	EAR99
LT1996	1	–60	60	9	117	0.56	0.12	0.11	2.7	36	Yes	10-lead MSOP, 10-lead DFN	EAR99
AD8208	1	–2	45	20	20	0.07	1	3	4.5	5.5	Yes	8-lead SOIC, 8-lead MSOP	EAR99
AD8209	1	–2	45	14	14	0.08	1	3	4.5	5.5	Yes	8-lead MSOP	EAR99
AD8278	1	–45.3	40.5	0.5	2	1	1.4	0.2	2	36	Yes	8-lead SOIC, 8-lead MSOP	EAR99
AD8279	2	–45.3	40.5	0.5	2	1	1.3	0.35	2	36	Yes	14-lead SOIC	EAR99
AD8273	2	–40.5	40.5	0.5	3	20	20	2.5	5	36	Yes	14-lead SOIC	EAR99
AD8274	1	–40.5	40.5	0.5	2	20		2.6	5	36	Yes	8-lead SOIC, 8-lead MSOP	EAR99
AD8276	1	–30.2	27	1	1	0.55	1.1	0.2	2	36	Yes	8-lead SOIC, 8-lead MSOP	EAR99
AD8277	2	–30.2	27	1	1	0.55	1.1	0.2	2	36	Yes	14-lead SOIC	EAR99
AD626	1	–24	24	10	100	0.1	0.22	2	2.4	10	Yes	8-lead PDIP, 8-lead SOIC	EAR99
AMP03	1	–20	20	1	1	3	9.5	3.5	10	36	Yes	8-lead header, 8-lead PDIP, 8-lead SOIC	EAR99
LT1991	1	–18	18	1	13	0.56	0.12	0.11	2.4	40	Yes	10-lead MSOP, 10-lead DFN	EAR99
AD8270	2	–15.4	15.4	0.5	2	20	30	2.5	5	36	Slightly	16-lead LFCSP	EAR99
AD8271	1	–15.4	15.4	0.5	2	20	30	2.6	5	36	Slightly	10-lead MSOP	EAR99
LT1995	1	–15	15	1	7	32	1000	8.5	5	30	Slightly	10-lead MSOP, 10-lead DFN	EAR99
AD8275	1	–12.3	12	0.2	0.2	15	25	2.3	3.3	15	Yes	8-lead MSOP	EAR99
ADA4830-1	1	–10	9.5	0.5	0.5	84	300	10	2.9	5.5	Yes	8-lead LFCSP	EAR99
ADA4830-2	2	–10	9.5	0.5	0.5	84	300	10	2.9	5.5	Yes	16-lead LFCSP	EAR99

電流検出アンプ

電流検出アンプ / Current Sense Amplifiers

Part Number	Common-Mode In (min) (V)	Common-Mode In (max) (V)	V_{os} (max) (mV)	Gain (V/V)	BW –3 dB (typ) (MHz)	V_s Span (min) (V)	V_s Span (max) (V)	V_{in} Direction	Filter Option	Automotive	Package	ECCN Code
LTC6115 ***New***	5	100	0.5	Resistor set	0.5	5	100	Unidirectional	No	Yes	12-lead MSOP	EAR99
AD8214			8	Comparator		5	65		No	No	8-lead MSOP	EAR99
LTC2946	0	100	0.077	Voltage to I²C		2.7	100		No	No	16-lead MSOP, 16-lead DFN	EAR99
LTC6101HV	5	100	0.3	Resistor set	0.02	5	100	Unidirectional	No	No	5-lead SOT-23, 8-lead MSOP	EAR99
LTC6102HV	5	100	0.01	Resistor set	0.014	5	100	Unidirectional	No	No	8-lead MSOP, 8-lead DFN	EAR99
LT1999-10	–5	80	0.75	10	0.2	4.5	5.5	Bidirectional	No	No	8-lead SOIC, 8-lead MSOP	EAR99
LT1999-20	–5	80	0.75	20	0.2	4.5	5.5	Bidirectional	No	No	8-lead SOIC, 8-lead MSOP	EAR99
LT1999-50	–5	80	0.75	50	0.2	4.5	5.5	Bidirectional	No	No	8-lead SOIC, 8-lead MSOP	EAR99
LTC2945	0	80	0.05	Voltage to I²C		2.7	80		No	No	12-lead MSOP, 12-lead QFN	EAR99
AD8219	4	80	0.3	60	0.5	4	80	Unidirectional	No	No	8-lead MSOP	EAR99
AD8218	4	80	0.075	20	0.45	4	80	Bidirectional	No	No	8-lead LFCSP, 8-lead MSOP	EAR99
AD8217	4.5	80	0.3	20	0.5	4.5	80	Unidirectional	No	No	8-lead MSOP	EAR99
LTC4151	7	80	0.1	Voltage to I²C		7	80	Unidirectional	No	No	16-lead SOIC, 10-lead MSOP, 10-lead DFN	EAR99
AD8417	–2	70	0.4	60	0.25	2.7	5.5	Bidirectional		Yes	8-lead SOIC, 8-lead MSOP	EAR99
AD8418	–2	70	0.4	20	0.25	2.7	5.5	Bidirectional	No	Yes	8-lead SOIC, 8-lead MSOP	EAR99
AD8418A	–2	70	0.2	20	0.25	2.7	5.5	Bidirectional		Yes	8-lead SOIC, 8-lead MSOP	EAR99
AD8216	–4	65	3	3	3	4.5	5.5	Bidirectional	No	Yes	8-lead SOIC	EAR99
AD8207	–4	65	0.4	20	0.15	3.3	5.5	Bidirectional		Yes	8-lead SOIC	EAR99
AD8210	–2	65	1.8	20	0.5	4.5	5.5	Bidirectional	No	Yes	8-lead SOIC	EAR99
AD8211	–2	65	2.5	20	0.5	4.5	5.5	Unidirectional	No	Yes	5-lead SOT-23	EAR99
AD8213	–2	65	2.2	20	0.5	4.5	5.5	Unidirectional	Yes	Yes	10-lead MSOP	EAR99
AD8215	–2	65	2.5	20	0.45	4.5	5.5	Unidirectional	No	Yes	8-lead SOIC	EAR99
AD8206	–2	65	4.5	20	0.1	4.5	5.5	Bidirectional	No	Yes	8-lead SOIC	EAR99
AD8205	–2	65	4.5	50	0.05	4.5	5.5	Unidirectional	No	Yes	8-lead SOIC	EAR99
AD8212	7	65	3	Resistor set	1	7	65	Unidirectional	No	Yes	8-lead MSOP	EAR99
LT1787HV	2.5	60	0.075	8	0.012	2.5	60	Bidirectional	No	No	8-lead SOIC, 8-lead MSOP	EAR99
LT6108	2.7	60	0.35	Resistor set	0.1	2.7	60	Unidirectional	No	No	8-lead MSOP, 8-lead DFN	EAR99
LT6109	2.7	60	0.45	Resistor set	0.1	2.7	60	Unidirectional	No	No	10-lead MSOP	EAR99
LT6118	2.7	60	0.2	Resistor set	0.1	2.7	60	Unidirectional	No	No	8-lead MSOP, 8-lead DFN	EAR99
LT6119	2.7	60	0.2	Resistor set	0.1	2.7	60	Unidirectional	No	No	10-lead MSOP	EAR99
LTC6101	4	60	0.3	Resistor set	0.02	4	60	Unidirectional	No	No	5-lead SOT-23, 8-lead MSOP	EAR99
LTC6102	4	60	0.01	Resistor set	0.014	4	60	Unidirectional	No	No	8-lead MSOP, 8-lead DFN	EAR99
LTC6104	4	60	0.45	Resistor set	0.014	4	60	Bidirectional	No	No	8-lead MSOP	EAR99
LTC6103	4	60	0.45	Resistor set	0.012	4	60	Unidirectional	No	No	8-lead MSOP	EAR99
AD8209A	–2	50	4	14	0.1	4.5	5.5	Unidirectional	Yes	Yes	8-lead MSOP	EAR99
AD8208	–2	45	4	20	0.08	4.5	5.5	Unidirectional		Yes	8-lead SOIC, 8-lead MSOP	EAR99
AD8209	–2	45	4	14	0.08	4.5	5.5	Unidirectional		Yes	8-lead MSOP	EAR99
LT1787	2.5	36	0.075	8	0.012	2.5	36	Bidirectional	No	No	8-lead SOIC, 8-lead MSOP	EAR99
LT6106	2.7	36	0.25	Resistor set	0.02	2.7	36	Unidirectional	No	No	5-lead SOT-23	EAR99
LT6107	2.7	36	0.25	Resistor set	0.02	2.7	36	Unidirectional	No	No	5-lead SOT-23	EAR99
LT6100	2.7	36	0.3	10, 12.5, 20, 25, 40, 50	0.015	2.7	36	Unidirectional	No	No	8-lead MSOP, 8-lead DFN	EAR99
LT6105	2.85	36	0.3	Resistor set	0.01	2.85	36	Unidirectional	No	No	8-lead MSOP, 6-lead DFN	EAR99
RH6105	2.85	36	0.3	Resistor set	0.01	2.85	36	Unidirectional	No	No		EAR99
AD8203	–6	30	2	14	0.06	3.5	12	Unidirectional	Yes	No	8-lead MSOP	EAR99
AD8202	–6	28	2	20	0.05	3.5	12	Unidirectional	Yes	Yes	Chips or die, 8-lead SOIC, 8-lead MSOP	EAR99
ADM4073	2	28		20	1.8	3	28	Unidirectional	No	No	6-lead SOT-23	EAR99
AD626	–24	24		10 100		2.4	10		Yes	No	8-lead PDIP, 8-lead SOIC	EAR99
AD22057	1	24		20		3	36	Unidirectional	Yes	No	8-lead SOIC	EAR99
LTC4150	2.7	8.5	0.1	Voltage to frequency		2.7	8.5	Bidirectional	No	No	10-lead MSOP	EAR99
LTC2990	2.9	5.5		Voltage to I²C		3	5.5		No	No	10-lead MSOP	EAR99
LTC2991	2.9	5.5		Voltage to I²C		3	5.5		No	No	16-lead MSOP	EAR99

フィルタ

フィルタ / Filters

Part Number	Filters Per Package	Filter Type	Filter Order	Clock Tunable	Filter response	Fo Min (typ)	Fo Max (typ)	Package	ECCN Code
LTC6601-2	1	Low-pass differential	2	No	Pin configurable	5 MHz	25 MHz	20-lead QFN	EAR99
LTC6601-1	1	Low-pass differential	2	No	Pin configurable	5 MHz	25 MHz	20-lead QFN	EAR99
LTC6602	2	Band-pass differential	9	Yes	Elliptic	4 kHz	900 kHz	24-lead QFN	EAR99
LTC6603	2	Low-pass differential	9	Yes	Elliptic	20 kHz	2.5 MHz	24-lead QFN	EAR99
LTC6605-10	2	Low-pass differential	2	No	Pin configurable	10 MHz	14 MHz	22-lead DFN	EAR99
LTC6605-14	2	Low-pass differential	2	No	Pin configurable	14 MHz	20 MHz	22-lead DFN	EAR99
LTC6605-7	2	Low-pass differential	2	No	Pin configurable	6.5 MHz	10 MHz	22-lead DFN	EAR99
LT6604-10	2	Low-pass differential	4	No	Chebyshev		10 MHz	32-lead QFN	EAR99
LT6604-15	2	Low-pass differential	4	No	Chebyshev		15 MHz	32-lead QFN	EAR99
LT6604-2.5	2	Low-pass differential	4	No	Chebyshev		2.5 MHz	32-lead QFN	EAR99
LT6604-5	2	Low-pass differential	4	No	Chebyshev		5 MHz	32-lead QFN	EAR99
LT6600-15	1	Low-pass differential	4	No	Chebyshev		15 MHz	8-lead SOIC	EAR99
LT6600-5	1	Low-pass differential	4	No	Chebyshev		5 MHz	8-lead SOIC	EAR99
LT6600-2.5	1	Low-pass differential	4	No	Chebyshev		2.5 MHz	8-lead SOIC, 12-lead DFN	EAR99
LT6600-10	1	Low-pass differential	4	No	Chebyshev		10 MHz	8-lead SOIC, 12-lead DFN	EAR99
LT1568	Dual 2nd order	Low-pass/band-pass	4	No	Resistor configurable	100 kHz	5 MHz	16-lead SSOP	EAR99
LT6600-20	1	Low-pass differential	4	No	Chebyshev		20 MHz	8-lead SOIC	EAR99
LTC1564	1	Low-pass	8	No	Progaramable elliptic	10 kHz	150 kHz	16-lead SSOP	EAR99
LTC1566-1	1	Low-pass	7	No	Elliptic		2.3 MHz	8-lead SOIC	EAR99
LTC1563-2	Dual 2nd order	Low-pass/band-pass	4	No	Resistor configurable	256 Hz	256 kHz	16-lead SSOP	EAR99
LTC1563-3	Dual 2nd order	Low-pass	4	No	Resistor configurable	256 Hz	256 kHz	16-lead SSOP	EAR99
LTC1565-31	1	Low-pass	7	No	Linear phase		650 kHz	8-lead SOIC	EAR99
LTC1569-6	1	Low-pass	10	Yes	Elliptic	20 Hz	64 kHz	8-lead SOIC	EAR99
LTC1569-7	1	Low-pass	10	Yes	Elliptic	30 Hz	256 kHz	8-lead SOIC	EAR99
LTC1562-2	Quad 2nd order	Universal	8	No	Resistor configurable	50 kHz	300 kHz	20-lead SSOP	EAR99
LTC1562	Quad 2nd order	Universal	8	No	Resistor configurable	10 kHz	150 kHz	16-lead PDIP, 20-lead SSOP	EAR99
LTC1067	Dual 2nd order	Universal	4	Yes	Resistor configurable	10 Hz	16 kHz	16-lead SOIC, 16-lead SSOP	EAR99
LTC1067-50	Dual 2nd order	Universal	4	Yes	Resistor configurable	20 Hz	30 kHz	16-lead SOIC, 16-lead SSOP	EAR99
LTC1069-6	1	Low-pass	8	Yes	Elliptic	20 Hz	15 kHz	8-lead SOIC	EAR99
LTC1560-1	1	Low-pass	5	No	Elliptic	500 kHz	1MHz	8-lead SOIC	EAR99
LTC1068	Quad 2nd order	Universal	8	Yes	Resistor configurable	10 Hz	50 kHz	24-lead PDIP, 28-lead SSOP	EAR99
LTC1068-200	Quad 2nd order	Universal	8	Yes	Resistor configurable	5 Hz	25 kHz	24-lead PDIP, 28-lead SSOP	EAR99
LTC1068-25	Quad 2nd order	Universal	8	Yes	Resistor configurable	40 Hz	160 kHz	24-lead PDIP, 28-lead SSOP	EAR99
LTC1068-50	Quad 2nd order	Universal	8	Yes	Resistor configurable	20 Hz	60 kHz	24-lead PDIP, 28-lead SSOP	EAR99
LTC1069-1	1	Low-pass	8	Yes	Elliptic	10 Hz	12 kHz	8-lead PDIP, 8-lead SOIC	EAR99
LTC1069-7	1	Low-pass	8	Yes	Bessel (linear phase)	40 Hz	200 kHz	8-lead SOIC	EAR99
LTC1066-1	1	Low-pass	8	Yes	Elliptic	20 Hz	100 kHz	18-lead SOIC	EAR99

コンパレータ

コンパレータ / Comparators

Part Number	Number of Channels	Prop Delay V p-p (typ) (ns p-p)	V_{os} (typ) (mV)	Output Logic	Adjustable Hysteresis	V_s Type	V_s Pos-1 (min) (V)	V_{SUPPLY} Pos-1 (max) (V)	I_s Pos (max) (mA)	Temperature Range	Package	ECCN Code
HMC874	1	0.085	5	PECL	Adjustable	Multi	3.135	3.465	9	–40°C to +85°C	16-lead LCC	EAR99
HMC674LC3C	1	0.085	5	PECL	Adjustable	Multi	3.135	3.465	9	–40°C to +85°C	16-lead LCC	EAR99
HMC674LP3E	1	0.085	5	PECL	Adjustable	Multi	3.135		9	–40°C to +85°C	16-lead LCC, 16-lead LFCSP	EAR99
HMC974	1	0.088	4	PECL		Multi	3.135	3.465	20	–40°C to +85°C	16-lead LCC	EAR99
HMC675LC3C	1	0.1	5	CML	Adjustable	Multi			9	–40°C to +85°C	16-lead LCC	EAR99
HMC675LP3E	1	0.1	5	CML	Adjustable	Multi			9	–40°C to +85°C	16-lead QFN	EAR99
ADCMP572	1	0.15	2	CML	Adjustable	Single	3.1	5.4	52	–40°C to +85°C	16-lead LFCSP	EAR99
ADCMP573	1	0.15	2	PECL	Adjustable	Single	3.1	5.4	80	–40°C to +85°C	16-lead LFCSP	EAR99
ADCMP580	1	0.18	4	CML	Adjustable	Dual	4.5	5.5	8	–40°C to +125°C	16-lead LFCSP	EAR99
ADCMP581	1	0.18	4	ECL	Adjustable	Dual	4.5	5.5	8	–40°C to +125°C	16-lead LFCSP	EAR99
ADCMP582	1	0.18	4	PECL	Adjustable	Dual	4.5	5.5	8	–40°C to +125°C	16-lead LFCSP	EAR99
ADCMP566	2	0.25	1.5	ECL	Adjustable	Dual	4.75	5.25	18	–40°C to +85°C	32-lead LFCSP	EAR99
ADCMP567	2	0.25	1	PECL	Adjustable	Dual	4.75	5.25	20	–40°C to +85°C	32-lead LFCSP	EAR99
ADCMP565	2	0.31	1.5	ECL	Adjustable				18	–40°C to +85°C	20-lead PLCC	EAR99
LTC6957-1	1	0.5		LVPECL		Single	3.15	3.45	22	–40°C to +85°C	12-lead MSOP, 12-lead DFN	EAR99
ADCMP551	2	0.5	2	PECL	Fixed	Single	3.135	5.25	17	–40°C to +85°C	16-lead QSOP	EAR99
ADCMP552	2	0.5	2	PECL	Adjustable	Single	3.135	5.25	17	–40°C to +85°C	20-lead QSOP	EAR99
ADCMP553	1	0.5	2	PECL	Fixed	Single	3.135	5.25	13	–40°C to +85°C	8-lead MSOP	EAR99
ADCMP563	2	0.7	2	ECL	Fixed	Dual	4.75	5.25	5	–40°C to +85°C	16-lead LFCSP, 16-lead QSOP	EAR99
ADCMP564	2	0.7	2	ECL	Adjustable	Dual	4.75	5.25	5	–40°C to +85°C	20-lead QSOP	EAR99
ADCMP561	2	0.75	2	PECL	Fixed	Dual	4.75	5.25	5	–40°C to +85°C	16-lead QSOP	EAR99
ADCMP562	2	0.75	2	PECL	Adjustable	Dual	4.75	5.25	5	–40°C to +85°C	20-lead QSOP	EAR99
LTC6957-2	1	0.84		LVDS		Single	3.15	3.45	45	–40°C to +85°C	12-lead MSOP, 12-lead DFN	EAR99
LTC6957-3	1	0.95		In-phase CMOS		Single	3.15	3.45	27.5	–40°C to +85°C	12-lead MSOP, 12-lead DFN	EAR99
LTC6957–4	1	0.95		Complementary CMOS		Single	3.15	3.45	27.5	–40°C to +85°C	12-lead MSOP, 12-lead DFN	EAR99
ADCMP606	1	1.2	5	CML	Fixed	Single	2.5	5.5	26	–40°C to +125°C	6-lead SC70	EAR99
ADCMP607	1	1.2	5	CML	Adjustable	Dual	2.5	5.5	25	–40°C to +125°C	12-lead LFCSP	EAR99
AD8465	1	1.6	5	LVDS	Adjustable	Dual	2.5	5.5	26	–40°C to +125°C	12-lead LFCSP	EAR99
ADCMP604	1	1.6	5	LVDS	Fixed	Single	2.5	5.5	21	–40°C to +125°C	6-lead SC70	EAR99
ADCMP605	1	1.6	5	LVDS	Adjustable	Dual	2.5	5.5	23	–40°C to +125°C	12-lead LFCSP	EAR99
LTC6754	1	1.8	0.75	LVDS	Adjustable	Single	2.4	5.25	14.7	–40°C to +85°C	6-lead SC70, 12-lead QFN	EAR99
LTC6752	1	2.9	1.2	CMOS	Adjustable	Single	2.45	5.25	5	–40°C to +125°C	5-lead SOT-23, 6-lead SC70, 8-lead MSOP, 12-lead QFN	EAR99
LTC6752-1	1	2.9	1.2	CMOS	Adjustable	Single	2.45	5.25	5	–40°C to +85°C	5-lead SOT-23, 6-lead SC70, 8-lead MSOP, 12-lead QFN	EAR99
LTC6752-2	1	2.9	1.2	CMOS	Adjustable	Single	2.45	5.25	5	–40°C to +85°C	5-lead SOT-23, 6-lead SC70, 8-lead MSOP, 12-lead QFN	EAR99
LTC6752-3	1	2.9	1.2	CMOS	Adjustable	Single	2.45	5.25	5	–40°C to +85°C	5-lead SOT-23, 6-lead SC70, 8-lead MSOP, 12-lead QFN	EAR99
LTC6752–4	1	2.9	1.2	CMOS	Adjustable	Single	2.45	5.25	5	–40°C to +85°C	5-lead SOT-23, 6-lead SC70, 8-lead MSOP, 12-lead QFN	EAR99
ADCMP600	1	3.5	2	CMOS, TTL	Fixed	Single	2.5	5.5	4	–40°C to +125°C	5-lead SC70, 5-lead SOT-23	EAR99
ADCMP601	1	3.5	2	CMOS, TTL	Adjustable	Single	2.5	5.5	4	–40°C to +125°C	6-lead SC70	EAR99
ADCMP602	1	3.5	2	CMOS, TTL	Adjustable	Dual	2.5	5.5	5.5	–40°C to +125°C	8-lead MSOP	EAR99

コンパレータ

コンパレータ（続き） / Comparators (Continued)

Part Number	Number of Channels	Prop Delay V p-p (typ) (ns p-p)	V_{os} (typ) (mV)	Output Logic	Adjustable Hysteresis	V_s Type	V_s Pos-1 (min) (V)	V_{SUPPLY} Pos-1 (max) (V)	I_s Pos (max) (mA)	Temperature Range	Package	ECCN Code
ADCMP603	1	3.5	2	CMOS, TTL	Adjustable	Dual	2.5	5.5	5.3	–40°C to +125°C	12-lead LFCSP	EAR99
LT1715	2	4	0.4	CMOS	Fixed	Dual, single	2.7	12	7.5	–40°C to +125°C	10-lead MSOP	EAR99
AD8612	2	4	1	TTL	None	Single	4.5	5.5	10	–40°C to +85°C	14-lead TSSOP	EAR99
AD8611	1	4	1	TTL	None	Single	2.7	6	10	–40°C to +85°C	8-lead SOIC, 8-lead MSOP	EAR99
LT1719	1	4.2	0.4	CMOS	Fixed	Dual, Single	2.7	10.5	7	–40°C to +85°C	8-lead SOIC, 6-lead SOT-23	EAR99
LT1711	1	4.5	0.5	CMOS	None	Dual, single	2.4	12	19	–40°C to +85°C	8-lead MSOP	EAR99
LT1712	2	4.5	0.5	CMOS	None	Dual, single	2.4	12	19	–40°C to +85°C	16-lead SSOP	EAR99
LT1721	4	4.5	1	CMOS	Fixed	Single	2.7	6	7	–40°C to +85°C	16-lead SOIC, 16-lead SSOP	EAR99
LT1720	2	4.5	1	CMOS	Fixed	Single	2.7	6	7	–40°C to +85°C	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
AD96685	1	6	1	ECL	Fixed	Dual	5	5	18	–25°C to +85°C	16-lead SOIC	EAR99
AD96687	2	6	1	ECL	Fixed	Dual	5	5	18	–25°C to +85°C	20-lead PLCC, 16-lead CerDip, 16-lead SOIC	EAR99
LT1714	2	7	0.5	CMOS	None	Dual, single	2.4	12	7.5	–40°C to +85°C	16-lead SSOP	EAR99
LT1713	1	7	0.5	CMOS	None	Dual, single	2.4	12	7.5	–40°C to +85°C	8-lead MSOP	EAR99
AD8564	4	7	2.3	CMOS, TTL	None	Dual	4.5	5.5	14	–40°C to +125°C	16-lead SOIC, 16-lead TSSOP	EAR99
AD8561	1	7	2.3	TTL	None	Dual	4.5	5.5	6.5	–40°C to +85°C	8-lead PDIP, 8-lead SOIC, 8-lead TSSOP	EAR99
LT1394	1	7	0.8	CMOS	None	Dual, single	4.5	10	8.5	–40°C to +85°C	8-lead SOIC, 8-lead MSOP	EAR99
LT1016	1	9	1	CMOS	None	Dual, single	4.5	10	35	–40°C to +85°C	10-lead TO-5, 8-lead PDIP, 8-lead SOIC	EAR99
LT1116	1	10	1	CMOS	None	Dual, single	4.5	10	38	0°C to 70°C	8-lead PDIP, 8-lead SOIC	EAR99
ADCMP609	1	30	3	CMOS, TTL	Adjustable	Single	2.5	5.5	1.1	–40°C to +125°C	8-lead MSOP	EAR99
ADCMP608	1	30	3	CMOS, TTL	Fixed	Single	2.5	5.5	1.3	–40°C to +125°C	6-lead SC70	EAR99
CMP401	4	33	3	CMOS, TTL	Fixed	Dual, single	0	5	6.5	–40°C to +125°C	16-lead SOIC, 16-lead TSSOP	EAR99
AD8468	1	35	3	CMOS, TTL	Fixed	Single	2.5	5.5	0.8	–40°C to +125°C	6-lead SC70	EAR99
AD790	1	45	0.2	CMOS, TTL	Fixed	Multi	15	15	10	–55 to +125°C	8-lead PDIP, 8-lead SOIC, CerDip Glass Seal	EAR99
LT1671	1	60	0.8	CMOS	None	Dual, single	4.5	10	0.8	–40°C to +85°C	8-lead SOIC, 8-lead MSOP	EAR99
CMP402	4	60	3	CMOS, TTL	Fixed	Dual, single	0	5	1.4	–40°C to +125°C	16-lead SOIC, 16-lead TSSOP	EAR99
LT1011	1	150	0.6	Open-collector	Programmable	Dual, single	3	36	4	–40°C to +85°C	8-lead PDIP, 8-lead SOIC	EAR99
LT1011A	1	150	0.3	Open-collector	Programmable	Dual, single	3	36	4	–40°C to +85°C	8-lead PDIP, 8-lead SOIC	EAR99
LT1011AMJ8	1	150	0.3	Open-collector	Programmable	Dual, single	3	36	4		8-lead PDIP, 8-lead SOIC	EAR99
LTC6702	2	320	1	CMOS	Fixed	Single	1.5	5.5	0.03	–40°C to +125°C	8-lead SOT-23, 8-lead DFN	EAR99
CMP04	4	1300	0.4	CMOS, DTL, ECL, TTL	None	Single	5	5	2	–40°C to +85°C	14-lead SOIC	EAR99
LT1716	1	3000	0.3	CMOS (up to 44 V)	None	Single	2.7	44	0.05	–40°C to +125°C	5-lead SOT-23	EAR99
LTC1841	2	4000	3	Open-drain	None	Single	2.5	12.6	0.006	–40°C to +85°C	8-lead SOIC	EAR99
LTC1842	2	4000	3	Open-drain	Programmable	Single	2	11	0.006	–40°C to +85°C	8-lead SOIC	EAR99
LTC1843	2	4000	3	Open-drain	Programmable	Single	2	11	0.006	–40°C to +85°C	8-lead SOIC	EAR99
LTC1443	4	4000	3	CMOS	Fixed	Single	2	11	0.009	–40°C to +85°C	16-lead PDIP, 16-lead SOIC, 16-lead DFN	EAR99

コンパレータ

コンパレータ（続き） / Comparators (Continued)

Part Number	Number of Channels	Prop Delay V p-p (typ) (ns p-p)	V_{os} (typ) (mV)	Output Logic	Adjustable Hysteresis	V_s Type	V_s Pos-1 (min) (V)	V_{SUPPLY} Pos-1 (max) (V)	I_s Pos (max) (mA)	Temperature Range	Package	ECCN Code
LTC1444	4	4000	3	CMOS	Programmable	Single	11	11	0.009	–40°C to +85°C	16-lead PDIP, 16-lead SOIC, 16-lead DFN	EAR99
LTC1445	4	4000	3	CMOS	Programmable	Single	2	11	0.009	–40°C to +85°C	16-lead PDIP, 16-lead SOIC, 16-lead DFN	EAR99
ADCMP391	1	4500	0.5	Open-drain	Fixed	Single	2.3	5.5	0.025	–40°C to +125°C	8-lead SOIC	EAR99
ADCMP392	2	4500	0.5	Open-drain	Fixed	Single	2.3	5.5	0.029	–40°C to +125°C	8-lead SOIC	EAR99
ADCMP393	4	4500	0.5	Open-drain	Fixed	Single	2.3	5.5	0.037	–40°C to +125°C	14-lead SOIC, 14-lead TSSOP	EAR99
ADCMP396	4	4940	0.5	Open-drain	Fixed	Single	2.3	5.5	0.042	–40°C to +125°C	16-lead SOIC	EAR99
ADCMP361	1	5000		Open-drain	Fixed	Single	1.7	5.5	0.01	–40°C to +125°C	5-lead SOT-23	EAR99
ADCMP350	1	5000		Active-low, Open-drain	Fixed	Single	2.25	5.5	0.015	–40°C to +125°C	4-lead SC70	EAR99
ADCMP354	1	5000		Active-high, Open-drain	Fixed	Single	2.25	5.5	0.015	–40°C to +125°C	4-lead SC70	EAR99
ADCMP356	1	5000		Active-high, Push-pull	Fixed	Single	2.25	5.5	0.015	–40°C to +125°C	4-lead SC70	EAR99
ADCMP370	1	5000	6	Open-drain	Fixed	Single	2.25	5.5	0.007	–40°C to +85°C	5-lead SC70	EAR99
ADCMP371	1	5000	6	Push-pull	Fixed	Single	2.25	5.5	0.007	–40°C to +85°C	5-lead SC70, chips or die	EAR99
LT1018	2	6000	0.4	CMOS	None	Single	1.2	40	0.25	–40°C to +85°C	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
LTC1542	1	8000	1	CMOS	Fixed	Single	2.5	12.6	0.01	–40°C to +85°C	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LTC1541	1	8000	1	CMOS	Fixed	Single	2.5	12.6	0.01	–40°C to +85°C	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LTC1440	1	8000	3	CMOS	Programmable	Single	2	11	0.004	–40°C to +85°C	8-lead PDIP, 8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LTC1441	2	8000	3	CMOS	Programmable	Single	2	11	0.006	–40°C to +85°C	8-lead PDIP, 8-lead SOIC	EAR99
LTC1442	2	8000	3	CMOS	Programmable	Single	2	11	0.006	–40°C to +85°C	8-lead PDIP, 8-lead SOIC	EAR99
ADCMP394	1	9500	1	Open-drain	Fixed	Single	2.3	5.5	0.048	–40°C to +125°C	8-lead SOIC	EAR99
ADCMP395	2	9500	1	Open-drain	Fixed	Single	2.3	5.5	0.052	–40°C to +125°C	10-lead MSOP	EAR99
ADCMP671	2	10,000		Open-drain	Fixed	Single	1.7	5.5	0.011	–40°C to +125°C	6-lead TSOT	EAR99
ADCMP341	2	10,000		Open-drain	Adjustable	Single	1.7	5.5	0.009	–40°C to +125°C	8-lead SOT-23	EAR99
ADCMP343	2	10,000		Open-drain	Adjustable	Single	1.7	5.5	0.009	–40°C to +125°C	8-lead SOT-23	EAR99
ADCMP670	2	10,000		Open-drain	Fixed	Single	1.7	5.5	0.011	–40°C to +125°C	6-lead TSOT	EAR99
LT6703-2	1	18,000	5	Open-collector	Fixed	Single	1.4	18	0.011	0°C to 70°C	5-lead SOT-23, 3-lead DFN	EAR99
LT6703-3	1	18,000	5	Open-collector	Fixed	Single	1.4	18	0.011	0°C to 70°C	5-lead SOT-23, 3-lead DFN	EAR99
LT6703HV-2	1	18,000	5	Open-collector	Fixed	Single	1.4	18	0.011	0°C to 70°C	5-lead SOT-23, 3-lead DFN	EAR99
LT6703HV-3	1	18,000	5	Open-collector	Fixed	Single	1.4	18	0.011	0°C to 70°C	5-lead SOT-23, 3-lead DFN	EAR99
LT6700-1	2	18,000	6	Open-collector	Fixed	Single	1.4	18	0.011	0°C to 70°C	6-lead SOT-23, 6-lead DFN	EAR99
LT6700-2	2	18,000	6	Open-collector	Fixed	Single	1.4	18	0.011	0°C to 70°C	6-lead SOT-23, 6-lead DFN	EAR99
LT6700-3	2	18,000	6	Open-collector	Fixed	Single	1.4	18	0.011	0°C to 70°C	6-lead SOT-23, 6-lead DFN	EAR99
LT6700HV-1	2	18,000	6	Open-collector	Fixed	Single	1.4	18	0.011	0°C to 70°C	6-lead SOT-23, 6-lead DFN	EAR99
LT6700HV-2	2	18,000	6	Open-collector	Fixed	Single	1.4	18	0.011	0°C to 70°C	6-lead SOT-23, 6-lead DFN	EAR99

コンパレータ

コンパレータ（続き） / Comparators (Continued)

Part Number	Number of Channels	Prop Delay V p-p (typ) (ns p-p)	V_{os} (typ) (mV)	Output Logic	Adjustable Hysteresis	V_s Type	V_s Pos-1 (min) (V)	V_{SUPPLY} Pos-1 (max) (V)	I_s Pos (max) (mA)	Temperature Range	Package	ECCN Code
LT6700HV-3	2	18,000	6	Open-collector	Fixed	Single	1.4	18	0.011	0°C to 70°C	6-lead SOT-23, 6-lead DFN	EAR99
LT1017	2	22,000	0.4	CMOS	None	Single	1.2	40	0.06	–40°C to +85°C	8-lead PDIP, 8-lead SOIC, 16-lead SOIC	EAR99
ADCMP380	1	23,000		Open-drain	Fixed	Single	0.9	5.5	0.000	–40°C to +85°C	6-ball WLCSP	EAR99
LTC1540	1	50,000	12	CMOS	Programmable	Single	2	11	0.01	–40°C to +85°C	8-lead SOIC, 8-lead MSOP, 8-lead DFN	EAR99
LTC1042	2	80,000	0.3	CMOS, TTL	None	Single	1.4	18	0.005	0°C to 70°C	8-lead PDIP	EAR99
LTC1042MJ8	2	80,000	0.3	CMOS, TTL	None	Single	1.4	18	0.005		8-lead PDIP	EAR99
LTC1040	2	80,000	0.3	CMOS, TTL	None	Single	1.4	18	0.006	0°C to 70°C	18-lead PDIP, 18-lead SOIC	EAR99
LTC1041	2	80,000	0.3	CMOS, TTL	Programmable	Single	1.4	18	0.005	0°C to 70°C	8-lead PDIP, 8-lead SOIC	EAR99
LTC1998	1	15,0000	5	CMOS	Programmable	Single	1.5	5.5	0.004	–40°C to +85°C	6-lead SOT-23	EAR99
LTC1921	2	220,000			Fixed	Single	2	11	0.25	–40°C to +85°C	8-lead SOIC, 8-lead MSOP	EAR99

高精度ADC

AD400x ファミリー: 20/18/16ビット、2MSPS～0.5MSPS、差動入力／疑似差動入力、SAR ADC

主な特長

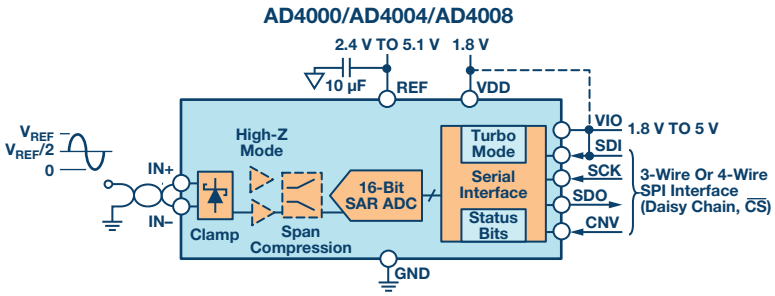
- 入力スパンの圧縮
  - ドライブ・アンプとADCを同一電源で動作させながらADCコードの全範囲を維持
- 入力過電圧クランプ回路
- ノー・ミッシング・コードの16/18/20 ビット分解能
- スループット: 0.5MSPS/1MSPS/1.8MSPS/2MSPS（最大値）
- 1.8Vの電源で、1.71V～5.5Vのロジック・インターフェースに対応する単電源動作
- 動作温度範囲: -40°C～+125°C
- SARアーキテクチャ: レイテンシ／パイプライン遅延なし
- シリアル・インターフェースSPI/QSPI/MICROWIRE/DSP互換
- 複数のADCをデイジーチェーン接続可能、ビジー・インジケータ搭載
- 10ピン・パッケージ: 3mm × 3mmのLFCSPおよび3mm × 4.90mmのMSOP

主な利点

- 駆動が容易: 高インピーダンス・モードと長いアクイジション・フェーズにより、対象帯域幅が低い場合に低消費電力、高精度のADCドライブ・アンプの使用が可能
  - シグナル・チェーンの消費電力を低減
- 簡単なデジタル・インターフェース: SPIの低クロック・レート条件により、入出力の消費電力量を低減し、デジタル・アイソレーションの条件を簡素化
- 外部回路の影響の低減: RCノイズ・フィルタの抵抗値の性能への影響を低減

アプリケーション

- ATE（自動試験装置）
- マシン・オートメーション
- 医療機器
- バッテリ駆動装置
- 高精度データ・アクイジション・システム



Part Number	Resolution	Speed (MSPS)	Input	Power (mW)	INL	SNR (typ @ 1 kHz) (dB)	THD (typ @ 1 kHz) (dB)	Package
AD4000	16-bit	2	Pseudo differential	14	±1 LSB	93	–115	10-lead MSOP, 10-lead LFCSP
AD4001	16-bit	2	Differential	16	±0.4 LSB	96.2	–123	10-lead MSOP, 10-lead LFCSP
AD4002	18-bit	2	Pseudo differential	14	±2.0 LSB	95	–120	10-lead MSOP, 10-lead LFCSP
AD4003	18-bit	2	Differential	16	±1.0 LSB	100.5	–123	10-lead MSOP, 10-lead LFCSP
AD4004	16-bit	1	Pseudo differential	7	±1 LSB	93	–115	10-lead MSOP, 10-lead LFCSP
AD4005	16-bit	1	Differential	8	±0.4 LSB	96.2	–123	10-lead MSOP, 10-lead LFCSP
AD4006	18-bit	1	Pseudo differential	7	±2.0 LSB	95	–120	10-lead MSOP, 10-lead LFCSP
AD4007	18-bit	1	Differential	8	±1.0 LSB	100.5	–123	10-lead MSOP, 10-lead LFCSP
AD4008	16-bit	0.5	Pseudo differential	3.5	±1 LSB	93	–115	10-lead MSOP, 10-lead LFCSP
AD4010	18-bit	0.5	Pseudo differential	3.5	±2.0 LSB	95	–120	10-lead MSOP, 10-lead LFCSP
AD4011	18-bit	0.5	Differential	4	±1.0 LSB	100.5	–123	10-lead MSOP, 10-lead LFCSP
AD4020	20-bit	1.8	Differential	15	±3.1 ppm (max)	101	–123	10-lead MSOP, 10-lead LFCSP

高精度ADC

高精度 ADC / Precision ADCs

記号解説

- ∿ ADCのナイキスト帯域内の高い周波数帯の入力信号でSINAD性能を維持するために最適化されたADC
- ▸ バッファ入力: アナログ入力にバッファを組み込んだADC。非バッファ・スイッチド・キャパシタADC入力を駆動するために通常必要なフロント・エンド・シグナル・コンディショニング回路が不要になるため、スペースとコストの大幅な削減が可能
- ⸙ PGIA入力: アナログ入力にPGIA(プログラマブル・ゲイン計装アンプ)を組み込んだADC。高入力インピーダンスおよびプログラマブル信号スケーリング機能により、センサー出力への直接接続が可能
- ⩛ 抵抗入力: アナログ入力が抵抗入力構造のADC。この入力構造により、真のバイポーラ・アナログ入力信号をユニポーラの単電源レールで駆動するADCに直接接続可能。電流トランス、電圧トランスなど、低出力インピーダンス・センサーに直接接続する場合に最適で、ADCを駆動するために通常必要なフロント・エンド・シグナル・コンディショニング回路が不要

- 表内の推奨品。ADCは、分解能、サンプリング・レート、入力チャンネル数で分類
- 同一表内の同等製品よりも高性能のADC
- 同一表内の同等製品よりもサイズの小さいソリューションを実現できるADC。パッケージのフットプリントが小さく、電圧リファレンス、リファレンス・バッファ、入力バッファ、PGIAなどの追加機能を統合化している製品
- 同一表内の同等製品よりも消費電力が少ないADC。部品レベルでの消費電力が少ないか、使いやすい機能によりシグナル・チェーン・レベルで消費電力を低減可能

シングル・チャンネルSAR ADC / Single-Channel SAR ADCs

Input Type	≤200 kSPS	≤250 kSPS	≤500 kSPS	≤1 MSPS	≤1.8 MSPS	≤2 MSPS	≤6 MSPS	≤10 MSPS	≤15 MSPS
24-Bit									
Fully differential						LTC2380-24			
Pseudo differential				LTC2368-24					
20-Bit									
Fully differential		LTC2376-20	LTC2377-20	LTC2378-20	AD4020∿				
18-Bit									
Fully differential	AD7989-1	LTC2376-18 AD7691	LTC2377-18 AD4011∿	LTC2378-18 AD4007∿	LTC2379-18 AD7984	AD4003∿ AD7986	LTC2385-18∿ AD7960∿	LTC2386-18∿	LTC2387-18∿
Fully differential ±10 V true bipolar		LTC2336-18∿	LTC2337-18∿	LTC2338-18∿					
Pseudo differential		LTC2364-18	LTC2367-18	LTC2368-18	LTC2369-18	LTC2389-18			
Pseudo differential ±10 V true bipolar		LTC2326-18⩛	LTC2327-18⩛	LTC2328-18⩛					
16-Bit									
Fully differential		LTC2376-16 AD7687	LTC2377-16	LTC2378-16 AD4005∿		LTC2380-16 AD4001∿ LTC2310-16∿	LTC2385-16∿ AD7961∿ LTC2311-16∿	LTC2386-16∿ AD7626∿	LTC2387-16∿
Fully differential ±2.5 V true bipolar		LTC1603	LTC1604 LTC1608						
Pseudo differential unipolar	AD7683 AD7988-1	LTC2364-16 AD7685 AD7694	LTC2367-16 AD7686 AD7988-5	LTC2368-16 AD7981 AD4004∿	AD7983	LTC2370-16 AD4000∿	AD7985		
Pseudo differential true bipolar		LTC2326-16⩛	LTC2327-16⩛	LTC2328-16⩛					
Single-ended ±10 V true bipolar	LTC1605⩛ LTC1609⩛	LTC1606							

高精度ADC

シングル・チャンネルSAR ADC（続き） / Single-Channel SAR ADCs (Continued)

Input Type	≤100 kSPS	≤250 kSPS	≤500 kSPS	≤1.5 MSPS	≤3 MSPS	≤6 MSPS
14-Bit						
Differential with wide input Common mode					■ LTC1403A∿ ■ LTC2310-14∿	■ LTC2355-14∿ ■ LTC2356-14∿ ■ LTC2311-14∿
Fully differential ±10 V true bipolar			■ AD7899	■ AD7951		
Pseudo differential		■ AD7942	■ AD7946		■ AD7944 ■ LTC1403A∿ ■ LTC2310-14∿	■ LTC2355-14∿ ■ LTC2356-14∿ ■ LTC2311-14∿
Pseudo differential ±10 V true bipolar				■ AD7951		
Single-ended unipolar	■ AD7940		■ LTC2312-14∿	■ AD7485	■ AD7484 ■ LTC2313-14∿	■ LTC2314-14∿
Single-ended ±10 V true bipolar		■ AD7894				
12-Bit						
Fully differential			■ AD7452	■ AD7450A		
Differential with wide input Common mode					■ LTC1403∿ ■ LTC2310-12∿	■ LTC2355-12∿ ■ LTC2356-12 ■ LTC2311-12∿
Pseudo differential	■ AD7457 ■ LTC2301*	■ LTC1860	■ AD7453 ■ LTC2302	■ AD7472	■ LTC1403∿ ■ LTC2310-12∿	■ LTC2355-12∿ ■ LTC2356-12∿ ■ LTC2311-12∿
Single-ended unipolar	■ AD7466		■ LTC2312-12∿	■ AD7091 ■ AD7091R	■ AD7274 ■ AD7276 ■ AD7482 ■ LTC2313-12∿	■ LTC2315-12∿
Single-ended ±10 V true bipolar	■ AD7893	■ AD7895 ■ AD7898				

■ 推奨品
■ 高性能
■ 低消費電力

* I²C
∿ 高帯域F_{IN}で SINAD 向上

µModuleデータ・アクイジション・システム / µModule Data Acquisition Systems

Resolution	Input Type	Max Output Data Rate		
		≤500 kSPS	≤1 MSPS	≤2 MSPS
16-bit	Pseudo differential	■ ADAQ7988	■ ADAQ7980	
18-bit	Fully differential			■ ADAQ4003 ***Coming Soon***

高精度ADC

AD7768/AD7768-4: 8チャンネル／4チャンネル、24ビット同時サンプリング、電力スケーリング、シグマ・デルタ（ΣΔ）A/Dコンバータ（ADC）

主な特長

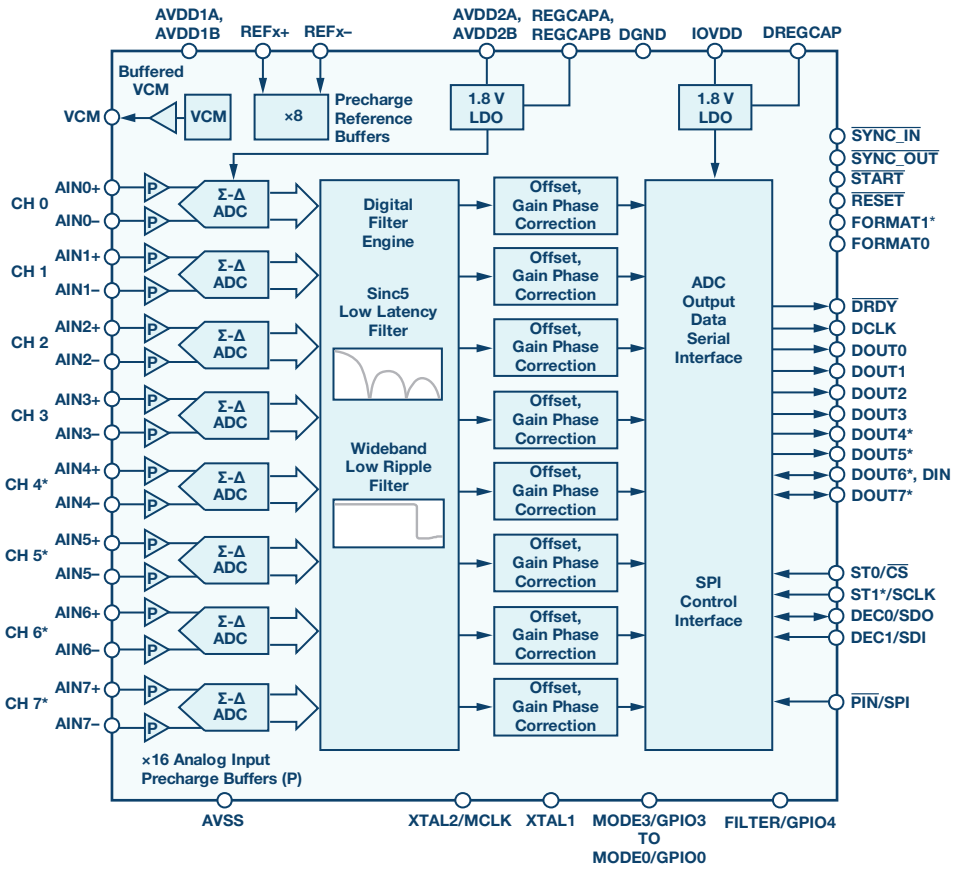
- 8チャンネル／4チャンネル、同時サンプリング
- 電力および帯域幅のスケーリング
- 駆動が容易なプリチャージ入力バッファ
- デジタル・フィルタの柔軟な選択
- 複数のデシメーション・レート
- アナログ入力範囲±VREF（VREF = 4.096V、代表値）
- モードをピンまたはレジスタで設定
- データ・インターフェースCRCモード
- 5Vアナログ電源

利点

- 高い実装密度
  - リファレンス・バッファとパワー・マネージメントを備えた、フットプリント12mm × 12mmの8つの高ダイナミック・レンジADC
- 駆動が容易
  - プリチャージ・バッファでチャージ・キックバックを減らし、信号に依存する入力電流を低減
  - 供給された入力信号に対するコモンモード電圧
- 電力モード
  - 低い電力に合わせた帯域幅のスケーリングが可能
- 幅広い設定範囲
  - 高ダイナミック・レンジに合わせた帯域幅のスケーリングが可能
  - 広帯域幅、低遅延に合わせて選択可能なフィルタ

アプリケーション

- データ・アクイジション・システム: USB／PXI／イーサネット
- 計装および工業用制御ループ
- オーディオのテストおよび測定
- 振動と装置状態の監視
- 3相電力の品質解析
- ソナー
- 高精度医療EEG（脳波）／EMG（筋電図）／ECG（心電図）



*これらのチャンネル／ピンはAD7768のみ

高精度ADC

AD4111/AD4112: ±10Vおよび0mA～20mA入力の低消費電力、24ビット、シグマ・デルタ(ΣΔ)ADC

主な特長

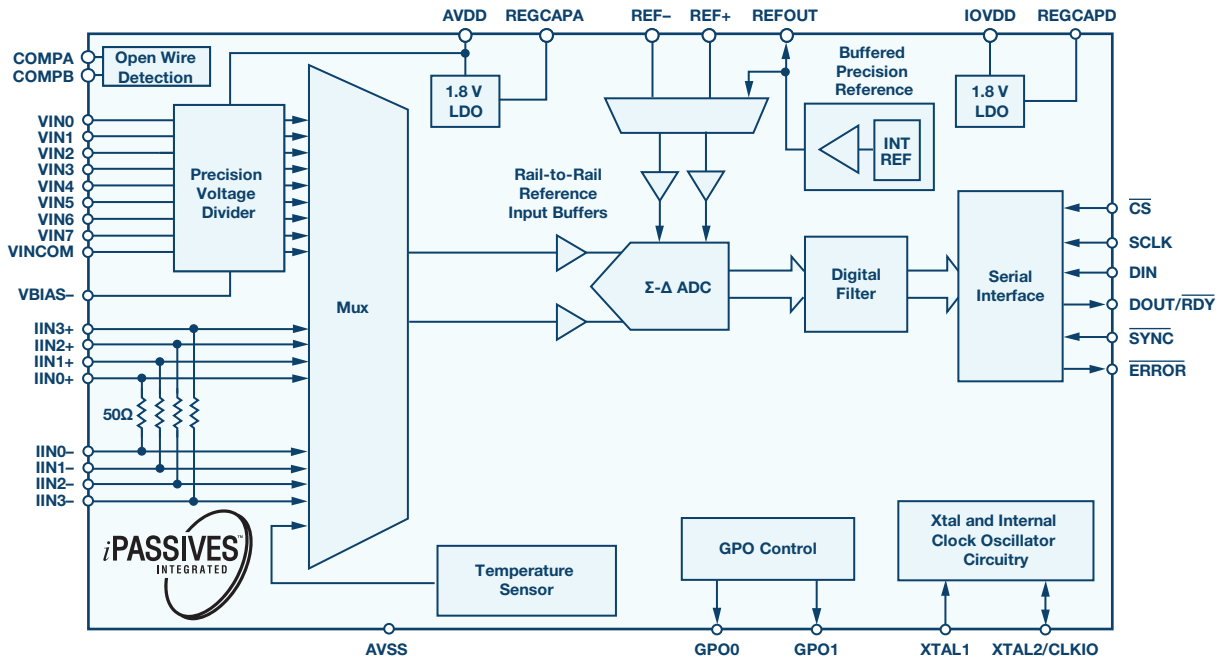
- アナログ・フロント・エンドを内蔵した24ビットADC
  - チャンネルあたり最大6.2kSPS
  - ノイズ・フリー・ビット数:チャンネルあたり1kSPSで16ビット、チャンネルあたり20SPSで19NFB
  - 50Hzと60Hzの除去比:チャンネルあたり16.67SPSで90dB(代表値)
- ±10Vの電圧入力、4つの差動もしくは8つのシングルエンド
  - オーバーレンジ、最大±20Vの入力電圧(5V電源)
  - 過電圧許容誤差±50V(絶対最大定格)
  - インピーダンス:≥ 1MΩ
  - 電圧:25°Cで±0.06%(最大値)
  - 断線検出機能:AD4111
- 0mA～20mAの電流入力、4つのシングルエンド
  - オーバーレンジ、最大-0.5mA～+24mA
  - 入力インピーダンス:60Ω
  - 電流:25°Cで±0.08%(最大値)

利点

- AD411xは、高精度で高度なシステム統合を実現し、全体的なシステム・レベルと製造コストを低減
- AD411xは、シグナル・チェーンの簡素化と容易な構成により、迅速な市場投入を実現

アプリケーション

- プロセス制御
  - PLC/DCSモジュール



高精度ADC

LTC2358ファミリー: 同相電圧範囲が30Vp-pのバッファ内蔵型オクタル16/18ビット、200ksps/チャンネル、±10.24V差動入力ADC

主な特長

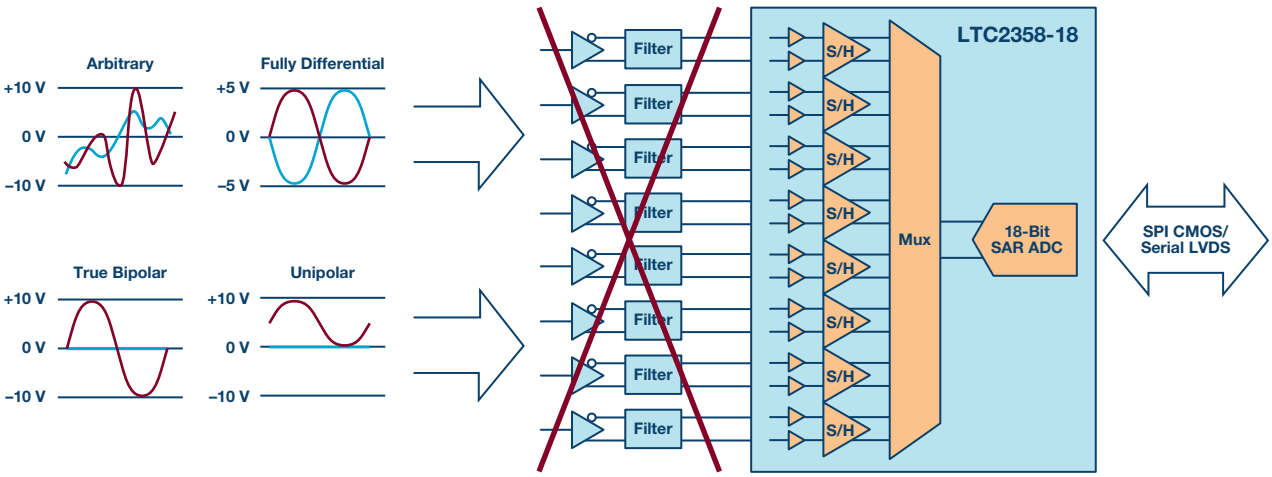
- LTC2358-16: 16ビットのノー・ミッシング・コードを確保
- LTC2358-18: 18ビットのノー・ミッシング・コードを確保
- 各チャンネルのスループット: 200ksps
- バッファ内蔵型8チャンネルの同時サンプリング
- 同相電圧範囲が30Vp-pの差動入力
- チャンネル当たりのSoftSpan™入力電圧範囲設定:
  - ±10.24V、0V～10.24V、±5.12V、0V～5.12V
  - ±12.5V、0V～12.5V、±6.25V、0V～6.25V
- 1変換動作での S/N 比: 96.4（代表値）
- 48ピン（7mm × 7mm）LQFPパッケージ

利点

- フロント・エンド・バッファ内蔵により、測定精度を損なわずに幅広いセンサーにADCを直接接続することが可能
- 基板スペース、消費電力、部品コストを大幅に節約
  - この1つの部品で最大88個のアナログ部品が削減可能に

アプリケーション

- プログラマブル・ロジック・コントローラ
- 産業用プロセス制御
- 電力線のモニタリング
- 試験および計測



高精度ADC

同時サンプリングADC（高分解能） / Simultaneous Sampling ADCs (High Resolution)

Input Type	Channels	≤200 kSPS/Channel	≤400 kSPS/Channel	≤700 kSPS/Channel	≤1 MSPS/Channel	≤2 MSPS/Channel	≤5 MSPS/Channel
24-Bit							
Fully differential/ single-ended	16	■ AD4111 ***New*** ■ AD4112 ***New***					
Fully differential/ pseudo differential	8	■ AD7779 ■ AD7770 ■ AD7771	■ AD7768				
	4		■ AD7768-4				
18-Bit							
Differential with wide input common mode	2			■ LTC2341-18			
	4		■ LTC2344-18				
	8	■ LTC2345-18					
Differential ±10 V true bipolar	2			■ LTC2353-18			
	4		■ LTC2357-18				
	8	■ AD7609 ■ LTC2358-18 ■ LTC2348-18					
Pseudo differential true bipolar	8	■ AD7608					
16-Bit							
Fully differential	2				■ AD7903		■ AD7380 ***New***
Differential with wide input common mode	2			■ LTC2341-16		■ LTC2321-16	■ LTC2323-16
	4		■ LTC2344-16			■ LTC2324-16	■ LTC2325-16
	8	■ LTC2345-16	■ AD7761			■ LTC2320-16	
Differential ±10 V true bipolar	2			■ LTC2353-16			
	4		■ LTC2357-16				
	8	■ LTC2348-16 ■ LTC2358-16					
Pseudo differential single-ended	2			■ LTC2341-16	■ AD7902		
	4		■ LTC2344-16				
	8	■ LTC2345-16					
Pseudo differential ±10 V true bipolar	4	■ AD7606-4	■ AD7605-4				
	6	■ AD7606-6	■ AD7656A/ AD7656A-1				
	8	■ ADAS3023 ■ AD7606 ■ AD7606B ***New*** ■ LTC2358-16 ■ LTC2348-16					

■ 推奨品
■ 高性能
■ 小型ソリューション
* I²C

∿ 高帯域F_{IN}で SINAD向上
▸ バッファ入力
PGIA入力
抵抗入力

高精度ADC

AD7380/AD7381: 小型、差動入力、デュアル同時サンプリング16/14ビットSAR ADC

主な特長

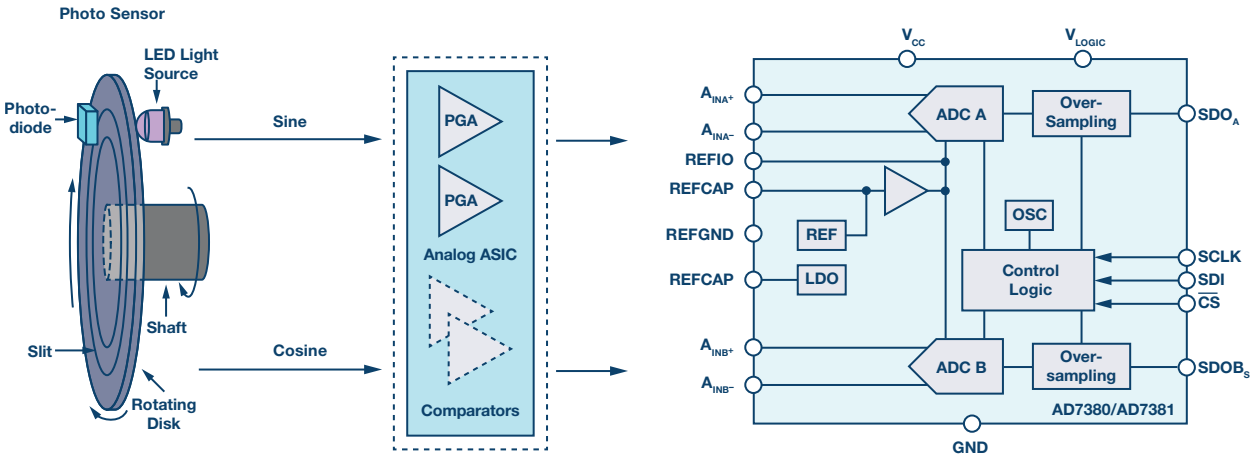
- AD7380: 16ビットのノー・ミッシング・コード、チャンネルあたり4MSPS
- AD7381: 14ビットのノー・ミッシング・コード、チャンネルあたり4MSPS
- 広いコモンモード範囲を有する完全差動アナログ入力
- 内蔵オーバーサンプリングと分解能向上機能
  - S/N比102.8dB（代表値）、オーバーサンプリング比32倍
- シングル変換S/N比92.5dB（代表値）
- 内部リファレンス:2.5V（10ppm/°C）
- 16ピン、3mm × 3mm LFCSPパッケージ

利点

- チャンネルあたり4MSPSのサンプル・レートでサンプル点を増やし、モータ・コントロール、EDFA、汎用DAQモジュールのシステムの応答性と制御効率を向上。また、高いサンプル・レートでトランジェントの検出が可能
- 3mm × 3mmの小型パッケージにより、計測対象のセンサーの近くに配置可能な、より小型の計測器および計測システムを実現。さらに、小さいフォーム・ファクタにより、同じサイズでより多くのデータ・アクイジション・チャンネルを実装可能
- 長いアクイジション時間、広いコモンモード範囲、内蔵オーバーサンプリング機能でフロント・エンド設計を簡素化し、迅速な採用（市場投入）と省コスト、小型化を実現
- 高度な設定、柔軟な内蔵オーバーサンプリング機能により、特定のアプリケーションのニーズに合わせて調整が容易なハードウェア・プラットフォーム設計を実現。16/14/12ビットADCファミリーにより、システム性能のアップグレードが容易

アプリケーション

- モータ・コントロールのポジション・フィードバック
- モータ・コントロールの電流検出
- ソナー
- 電力品質
- データ・アクイジション・システム
- EDFAアプリケーション
- I&Q復調



高精度ADC

同時サンプリングADC / Simultaneous Sampling ADCs

Input Type	Channels	<150 kSPS/Channel	≤400 kSPS/Channel	≤1 MSPS/Channel	≤2 MSPS/Channel	≤5 MSPS/Channel
14-Bit						
Fully differential	2			■ AD7264 ⚡		■ AD7381 ***New***
Differential with wide input common mode	2				■ LTC1407A ∿ ■ LTC2321-14 ∿	■ LTC2323-14 ∿ ■ AD7357 ∿
	4				■ LTC2324-14 ∿	■ LTC2325-14 ∿
	6	■ LTC1408 ∿	■ LTC2351-14 ∿			
	8				■ LTC2320-14 ∿	
Pseudo differential ±10 V true bipolar	6		■ AD7657			
	8	■ AD7607 〰				
12-Bit						
Fully differential	2			■ AD7265 ■ AD7262 ⚡	■ AD7266	
Differential with wide input common mode	2				■ LTC1407 ∿ ■ LTC2321-12 ∿	■ LTC2323-12 ∿ ■ AD7352 ∿ ■ AD7356 ∿
	4				■ LTC2324-12 ∿	■ LTC2325-12 ∿
	6	■ LTC1408-12 ∿	■ LTC2351-12 ∿			
	8				■ LTC2320-12 ∿	
Pseudo differential ±10 V true bipolar	6		■ AD7658			

■ 推奨品
■ 高性能
■ 低消費電力
∿ 高帯域F_{IN}でSINAD向上
⚡ PGIA入力
〰 抵抗入力

絶縁型シグマ·デルタ·モジュレータ / Isolated Σ-Δ Modulators

Channels	Interface	Integrated	Isolated Working Voltage		
			400 V rms	750 V rms Reinforced	884 V rms
1	CMOS	Clock	■ AD7400A		■ AD7402
1	CMOS		■ AD7401A	■ ADuM7701 ***New*** ■ ADuM7701-8 ***New***	■ AD7403
1	LVDS				■ AD7405
2	SPI	*iso*Power®	■ ADE7912		
2	CMOS	*iso*Power	■ ADE7932		
3	SPI	*iso*Power	■ ADE7913		
3	CMOS	*iso*Power	■ ADE7933		

■ アナログ入力範囲: ±250mV
■ アナログ入力範囲: ±500mV、±31.25mV

高精度ADC

マルチプレクサ入力SAR ADC / Muxed Input SAR ADCs

Input Type	Channels	≤250 kSPS	≤500 kSPS	≤1 MSPS	≤1.6 MSPS
18-Bit					
Fully differential	8		■ LTC2372-18	■ LTC2373-18	
Fully differential ±10 V true bipolar	8			■ LTC2333-18 ▸ ■ LTC2335-18	
Pseudo differential	8		■ LTC2372-18		
Pseudo differential ±10 V true bipolar	8			■ LTC2333-18 ▸	
16-Bit					
Fully differential	8		■ LTC2372-16	■ LTC2373-16	■ LTC2374-16
Fully differential ±10 V true bipolar	8	■ LTC1856 ∿ ■ LTC1859 ∿		■ LTC2333-16 ▸ ■ LTC2335-16	
Pseudo differential	2	■ LTC1865			
	4	■ AD7682			
	8	■ LTC1867 ■ AD7689	■ LTC2372-16 ■ AD7699	■ LTC2373-16 ■ ADAS3022 ↯	
Pseudo differential ±10 V true bipolar	8	■ LTC1856 ∿ ■ LTC1859 ∿		■ LTC2333-16 ▸ ■ ADAS3022 ↯	
	16			■ AD7616 ∿	
14-Bit					
Fully differential	4	■ LTC1855 ∿ ■ LTC1858 ∿			
Pseudo differential	8	■ AD7949			
Pseudo differential ±10 V true bipolar	8	■ LTC1855 ∿ ■ LTC1858 ∿			
12-Bit					
Fully differential	4		■ LTC1853		■ LTC1851
Fully differential ±10 V true bipolar	4	■ LTC1854 ∿ ■ LTC1857 ∿			
Pseudo differential	2	■ AD7921 ■ LTC2305* ■ LTC1861	■ LTC2306	■ AD7922 ■ AD7091R-2	
	4	■ AD7091R-5* ■ AD7923	■ AD7934-6	■ AD7924 ■ AD7091R-4	■ AD7934
	8	■ LTC1863 ■ AD7927 ■ LTC2309* ■ AD7998*	■ LTC2308 ■ AD7938-6 ■ LTC1853	■ AD7091R-8	■ LTC1851 ■ AD7938
	16			■ AD7490	
Pseudo differential ±10 V true bipolar	2		■ AD7321	■ AD7322	
	4		■ AD7323	■ AD7324	
	8	■ LTC1854 ∿ ■ LTC1857 ∿		■ AD7329 ■ AD7328	
10-Bit					
Single-ended unipolar	2	■ AD7911		■ AD7912	
	4	■ AD7995*		■ AD7914	■ AD7933
	8	■ AD7997*		■ AD7918	■ AD7939

■ 推奨品
■ 高性能
■ 小型ソリューション
■ 低消費電力
* I²C
▸ バッファ入力
↯ PGIA入力
∿ 抵抗入力

広帯域オーバーサンプリングADC（FIRフィルタ内蔵） / Wideband Oversampled ADCs (FIR Filter)

Input Type	Digital Filter Bandwidth (–3 dB Point)						
	≤5 kHz	≤12.5 kHz	≤25 kHz	≤50 kHz	≤125 kHz	≤250 kHz	≤1 MHz
32-Bit							
Fully differential	■ LTC2508-32					■ LTC2500-32	
24-Bit							
Fully differential		■ AD7767-2 ■ AD7766-2	■ AD7767-1 ■ AD7766-1	■ AD7767 ■ AD7766 ■ AD7765 ▸	■ AD7764 ▸ ■ AD7768-1	■ AD7762 ▸ ■ AD7763 ▸ ■ LTC2512-24	■ AD7760 ▸

▸ バッファ入力

高精度ADC

狭帯域オーバーサンプリングADC / Narrow-Band Oversampling ADCs

Input Type	Channels	Output Data Rate						
		≤0.05 kSPS	≤0.5 kSPS	≤5 kSPS	≤20 kSPS	≤50 kSPS	≤250 kSPS	≤2 MSPS
32-Bit								
Fully differential/pseudo differential	2/4				■ AD7177-2▸			
24-Bit								
Fully differential	1	■ LTC2400 ■ LTC2484 ■ LTC2485*		■ LTC2440				■ LTC2380-24
Pseudo differential	1							■ LTC2368-24
Fully differential/pseudo differential	1/1		■ AD7797↯					
	2/2		■ AD7191↯					
	2/4			■ AD7190↯ ■ AD7192↯ ■ AD7195↯		■ AD7172-2▸	■ AD7175-2▸ ■ AD7176-2	
	3/3		■ AD7793↯ ■ AD7799↯					
	4/7 or 8			■ AD7193↯	■ AD7124-4↯	■ AD7172-4▸		
	6/6		■ AD7794↯					
	8/15 or 16			■ AD7194↯	■ AD7124-8↯	■ AD7173-8▸	■ AD7175-8▸	
Fully differential/single-ended	2/4	■ LTC2492 ■ LTC2493*			■ LTC2442			
	4/8				■ LTC2444 ■ LTC2445 ■ LTC2446 ■ LTC2447			
	8/16	■ LTC2498 ■ LTC2499*			■ LTC2448 ■ LTC2449			
16-Bit								
Fully differential	1	■ LTC2452 ■ LTC2462 ■ LTC2482 ■ LTC2453* ■ LTC2463* ■ LTC2483*		■ LTC2472 ■ LTC2473*				
Fully differential/pseudo differential	1/1		■ AD7796↯					
	3/3		■ AD7792↯ ■ AD7798↯					
	6/6		■ AD7795↯					
Fully differential/single-ended	2/4	■ LTC2488 ■ LTC2489* ■ LTC2486↯ ■ LTC2487*↯						
	8/16	■ LTC2496 ■ LTC2497* ■ LTC2494 ■ LTC2495*↯						
Single-ended	1	■ LTC2450 ■ LTC2451* ■ LTC2460 ■ LTC2461*		■ LTC2470 ■ LTC2471*				

■ 推奨品
▸ バッファ入力
↯ PGIA入力
* I²C

高精度DAC

電圧出力（V_{OUT}）DAC / Voltage Output (V_{OUT}) DACs

記号解説

- 表内の推奨品。DACは、分解能、サンプリング・レート、入力チャンネル数で分類
- 高精度—同一表内の同等製品よりも精度が優れたDAC（優れたINL、ノイズ、グリッチ性能）
- 低消費電力—同一表内の同等製品よりも消費電力が少ないDAC
- 小型ソリューション—同一表内の同等製品よりもサイズの小さいソリューションを実現できるDAC。パッケージのフットプリントが小さく、出力アンプ、監視マルチプレクサなどの追加機能を統合化している製品
- I²Cアドレスが9つ以上—ユーザーが選択可能なI²Cスレーブ・アドレスを9つ以上設定できるため、多くのDACを同一バス上に配置し、他の部品とのアドレス競合を最小限に抑えることが可能なDAC
- 低グリッチ—同一表内の同等製品よりもミッドスケールのグリッチ・インパルスが低いため、高周波、低ノイズ出力の波形生成が可能
- ADC/DAC組み合わせ素子—ADC、DAC、GPIO、温度センサー機能を1つのICで提供するデバイス
- ＞5MHz帯域幅—信号生成に特に適した広い乗算帯域幅を持つDAC。乗算帯域幅は、ゲインが-3dB圧縮するリファレンス入力周波数として仕様規定

1チャンネル～8チャンネル、低電圧単電源V_{OUT} DAC / Single-Channel to 8-Channel, Low Voltage Single-Supply V_{OUT} DACs

Resolution	Output Type	Interface	1-Channel Unbuffered	1-Channel		2-Channel		4-Channel		8-Channel		16-Channel
			Ext. Ref	Ext. Ref	Int. Ref	Ext. Ref	Int. Ref	Ext. Ref	Int. Ref	Ext. Ref	Int. Ref	
18-Bit	Unipolar Single Supply	SPI		AD5680M								
16-Bit	Unipolar Single Supply	SPI	LTC2641-16 AD5541A AD5062M	AD5683 AD5662M AD5060M	AD5683R AD5660M	AD5689M AD5663M AD5065M	AD5689RM AD5663RM	AD5686M AD5664 AD5064M LTC2604M AD5066M	AD5686RM AD5664R LTC2654-16M	AD5676M LTC2600	AD5676RM AD5668M LTC2656-16M AD5678	AD5679R AD5679
		I²C		AD5693 LTC2606M	AD5693R	AD5667 LTC2607M	AD5667R	AD5696M AD5665M LTC2609M	AD5696RM AD5665RM LTC2655-16M	AD5675M LTC2605M	AD5675RM AD5669RM LTC2657-16M	AD5674R
14-Bit	Unipolar Single Supply	SPI	LTC2641-14 AD5551	AD5040M AD5641 LTC2611M	AD5682R AD5640M	AD5045M LTC2612	AD5643R	AD5044M LTC2614M	AD5685RM AD5644R	LTC2610	AD5392 AD5648M	
		I²C		LTC2616M	AD5692R	LTC2617M	AD5647R	LTC2619M	AD5695RM AD5645RM	LTC2615M	AD5392	
12-Bit	Unipolar Single Supply	PWM					LTC2644-12Z		LTC2645-12Z			
		SPI	LTC2641-12 AD5512AM	AD5621 AD5320	AD5681R LTC2630-12M LTC2640-12M AD5620M	AD5687M AD5322 AD5323 LTC2622	AD5687RM LTC2632-12M AD5623R	AD5684M AD5624 AD5024M LTC2624M	AD5684RM AD5624R LTC2654-12M LTC2634-12M	LTC2620 AD5328	AD5672M AD5628M LTC2656-12M LTC2636-12M AD5592R	
		I²C		AD5622 AD5321	AD5691R LTC2631-12M	AD5339 AD5627 LTC2627M	LTC2633-12Z AD5627R AD5697RM	AD5694M AD5326 AD5325 AD5625M LTC2629M	AD5694RM AD5625RM LTC2655-12M LTC2635-12Z	LTC2625M	AD5671RM AD5629RM LTC2657-12M LTC2637-12M AD5593R	
10-Bit	Unipolar Single Supply	PWM					LTC2644-10Z		LTC2645-10Z			
		SPI		AD5611 AD5310	AD5310R LTC2630-10M LTC2640-10M	LTC1662 AD5313 AD5312	AD5313RM LTC2632-10M	AD5314 LTC1664 AD5317	AD5317RM LTC2634-10M	AD5318 LTC1660	LTC2636-10M	
		I²C		AD5612 AD5311	AD5311R LTC2631-10M LTC1669	AD5338	AD5338R LTC2633-10Z	AD5316 AD5315	AD5316RM LTC2635-10Z		LTC2637-10M	
		SMBus			LTC1663							
8-Bit	Unipolar Single Supply	PWM					LTC2644-8Z		LTC2645-8Z			
		SPI		AD5601 AD5300	LTC2630-8M LTC2640-8M	AD5302 AD7303	LTC2632-8M	AD5307 AD5304	LTC2634-8M	AD5308 LTC1665	LTC2636-8M	
		I²C		AD5602 AD5301	LTC2631-8M	AD5337	LTC2633-8M	AD5306 AD5305	LTC2635-8M		LTC2637-8M	

- 高精度
- 低消費電力
- 小型ソリューション
- I²Cアドレスが9つ以上
- 低グリッチ
- ADC/DAC組み合わせ素子
- 推奨品

M ミッドスケールまたはゼロスケールにリセット可能

Z ハイZ、ミッドスケールまたはゼロスケールにリセット可能

高精度DAC

1チャンネル～8チャンネル、バイポーラ電圧出力DAC / Single-Channel to 8-Channel, Bipolar Voltage Output DACs

Resolution	Output Type	Interface	1-Channel Unbuffered	1-Channel		2-Channel		4-Channel		8-Channel	
			Ext. Ref	Ext. Ref	Int. Ref	Ext. Ref	Int. Ref	Ext. Ref	Int. Ref	Ext. Ref	Int. Ref
20-Bit	Bipolar	SPI	■ AD5790 ■ AD5791								
18-Bit	Bipolar	SPI	■ AD5780 ■ AD5781								
16-Bit	SoftSpan Bipolar	SPI		■ AD5761[M]	■ AD5761R[M]	■ AD5752[M]	■ AD5752R[M]	■ LTC2704-16 ■ AD5754[M]	■ LTC2664-16[M] ■ AD5754R[M]		■ LTC2666-16[M]
	Bipolar	SPI	■ AD5760 ■ AD5570 ■ LTC2642-16 ■ AD5542A	■ AD5570 ■ AD7849		■ AD5763	■ AD5762R	■ AD5764 ■ AD5765	■ AD5764R	■ AD5362	
14-Bit	SoftSpan Bipolar	SPI				■ AD5732[M]	■ AD5732R[M]	■ AD5734[M] ■ LTC2704-14	■ AD5734R[M]		
	Bipolar	SPI	■ LTC2642-14 ■ AD5552	■ AD5531				■ AD7834	■ AD5744R	■ AD5363	
12-Bit	SoftSpan Bipolar	SPI		■ AD5721[M]	■ AD5721R[M]	■ AD5722[M]	■ AD5722R[M]	■ LTC2704-12 ■ AD5724[M]	■ LTC2664-12[M] ■ AD5724R[M]		■ LTC2666-12[M]
	Bipolar	SPI	■ LTC2642-12 ■ AD5512A	■ AD5530			■ AD7249	■ AD5726 ■ AD7398			
10-Bit	Bipolar ±5 V	SPI						■ AD7399			
8-Bit	Bipolar ±5 V	SPI						■ AD7304			

■ 推奨品
■ 高精度
■ 低グリッチ
[M] ミッドスケールまたはゼロスケールにリセット可能
[Z] ハイZ、ミッドスケールまたはゼロスケールにリセット可能

高精度DAC

AD5766/AD5767: 16チャンネル、16/12ビット電圧出力*dense*DAC

主な特長

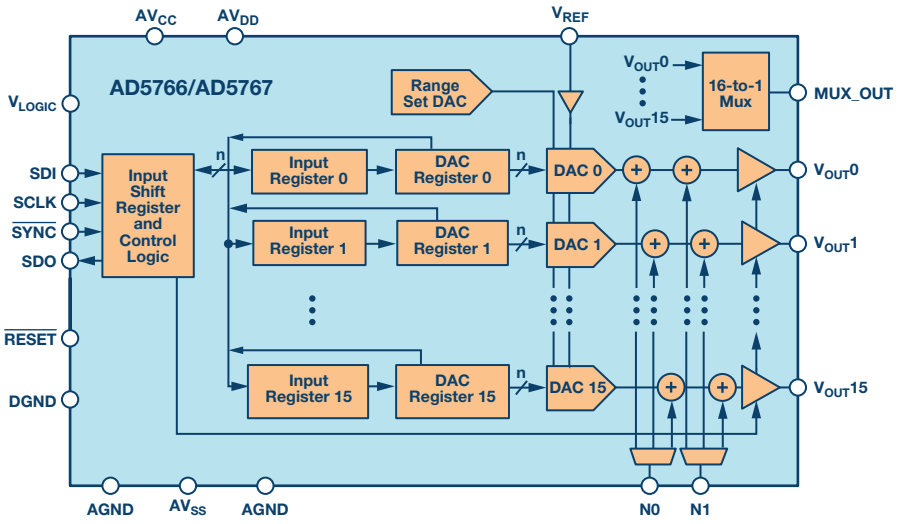
- 全機能内蔵型 16チャンネル、12ビットD/A コンバータ（DAC）
- 4mm × 4mm WLCSPパッケージ
- DAC出力バッファ内蔵、±20mAの出力電流能力
- リファレンス・バッファを内蔵
- チャンネル監視マルチプレクサ
- 1.8Vロジックと互換
- 温度範囲: -40°C～+105°C

利点

- ソフトウェアを若干変更するだけで、異なる動作に簡単に再構成可能
- 設計レベルでの設定の他、最終用途に合わせてソフトウェアで設定可能
- システム機能の強化により、小型化されたモジュールでも機能を維持または向上
- システムのバイアスと制御を1つのチップで提供

アプリケーション

- マッハ・ツェンダー変調器バイアス制御
- 光ネットワーク
- バイアス制御
- アナログ出力モジュール



高精度DAC

16チャンネル～40チャンネル電圧出力DAC / 16-Channel to 40-Channel Voltage Output DACs

Resolution	Output Type	Interface	16-Channel		32-Channel		40-Channel	
			Ext. Ref	Int. Ref	Ext. Ref	Int. Ref	Ext. Ref	Int. Ref
16-Bit	SoftSpan bipolar	SPI		■ LTC2668-16[M]				
	Bipolar	SPI	■ AD5766 ■ AD5360		■ AD5372		■ AD5370	
	Unipolar single supply	SPI		■ LTC2668-16[M] ■ AD5679R		■ AD5382		■ AD5384
14-Bit	Bipolar	SPI	■ AD5361		■ AD5373 ■ AD5378	■ AD5532B/ AD5532HS	■ AD5371 ■ AD5379	
	Unipolar single supply	SPI		■ AD5390		■ AD5382		■ AD5380
		I²C		■ AD5390		■ AD5382		■ AD5380
12-Bit	SoftSpan bipolar	SPI		■ LTC2668-12[M]				
	Bipolar	SPI	■ AD5767 ■ AD5516					
	Unipolar single supply	SPI		■ LTC2668-12[M] ■ AD5674R ■ AD5391 ■ AD5590		■ AD5383		■ AD5381
		I²C		■ AD5391		■ AD5383		■ AD5381

■ 推奨品
■ 低消費電力
■ 小型ソリューション
[M] ミッドスケールまたはゼロスケールにリセット可能
[Z] ハイZ、ミッドスケールまたはゼロスケールにリセット可能

パラレル・インターフェース電圧出力DAC / Parallel Interface Voltage Output DACs

Resolution	Output Type	Interface	1-Channel		2-Channel		4-Channel		8-Channel	32-Channel	40-Channel
			Ext. Ref	Int. Ref	Ext. Ref	Int. Ref	Ext. Ref	Int. Ref	Ext. Ref	Int. Ref	Int. Ref
16-Bit	Bipolar	Parallel	■ AD7846 ■ LTC1821								
	Unipolar single supply	Parallel		■ LTC1657							
14-Bit	Bipolar	Parallel					■ AD7835 ■ AD7836		■ AD7841	■ AD5378	
	Unipolar single supply	Parallel								■ AD5382	■ AD5380
12-Bit	Bipolar	Parallel			■ AD7847 ■ AD7837	■ AD7247 ■ AD7237	■ DAC8412 ■ DAC8413[M] ■ AD5725[M]				
	Unipolar single supply	Parallel	■ AD5340 ■ AD5341	■ LTC1450	■ AD5342 ■ AD5343		■ AD5344 ■ AD5725[M]			■ AD5383	■ AD5381
10-Bit	Bipolar	Parallel					■ AD5583				
	Unipolar single supply	Parallel	■ AD5331		■ AD5333		■ AD5335 ■ AD5336		■ AD5347		
8-Bit	Bipolar	Parallel	■ AD7224				■ AD7225 ■ AD7226 ■ AD7305		■ AD7228		
	Unipolar single supply	Parallel	■ AD5330 ■ AD7801		■ AD5332 ■ AD7302		■ AD5334 ■ AD7305	■ AD7339	■ AD5346		

■ 推奨品
[M] ミッドスケールまたはゼロスケールにリセット可能
[Z] ハイZ、ミッドスケールまたはゼロスケールにリセット可能

高精度DAC

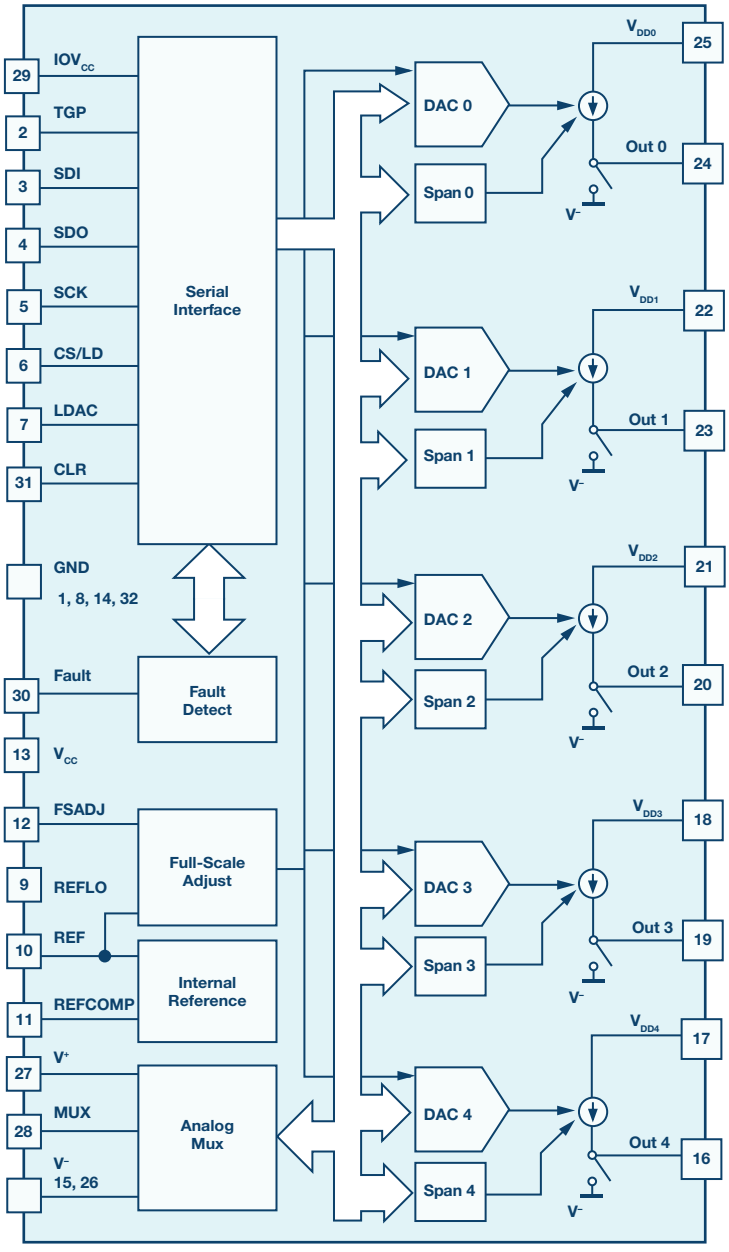
LTC2662: 5チャンネル、300mA電流源出力、16ビットSoftSpan DAC

主な特長

- 出力範囲をチャンネルごとに設定可能: 300mA、200mA、100mA、50mA、25mA、12.5mA、6.25mA、3.125mA
- 柔軟な電源電圧:2.85V～33V
- 1Vのドロップアウトを保証
- 出力チャンネルごとの電源供給
- 内蔵スイッチでオプションの負電源に切り替え
- すべての範囲でフル16ビット分解能
- 保証動作:-40°C～+125°C
- 高精度(最大10ppm/°C)内部リファレンスまたは外部リファレンス入力
- アナログ・マルチプレクサによる電圧と電流の監視
- SPIまたは専用ピンによるA/Bトグル
- シリアル・インターフェース:1.8V～5V SPI
- 5mm × 5mm、32ピンQFNパッケージ

アプリケーション

- チューナブル・レーザ
- 半導体光アンプ
- 抵抗加熱器
- 電流モード・バイアス
- 比例ソレノイド・ドライブ



高精度DAC

乗算型(I_{OUT})DAC / Multiplying (I_{OUT}) DACs

Resolution		Output Type	Interface	1-Channel	2-Channel	4-Channel	8-Channel
	18-Bit	SoftSpan bipolar	SPI	■ LTC2756	■ LTC2758		
			Parallel	■ LTC2757			
	16-Bit	SoftSpan bipolar	SPI	■ LTC1592	■ LTC2752	■ LTC2754-16	
			Parallel	■ LTC2751-16	■ LTC2753-16	■ LTC2755-16	
		Bipolar	SPI	■ AD5543 ■ LTC1596[M] ■ LTC1595	■ AD5545[M]	■ AD5544[M]	
			Parallel	■ AD5546[M] ■ LTC1597[M]	■ AD5547[M]		
	14-Bit	SoftSpan bipolar	SPI	■ LTC1589			
			Parallel	■ LTC2751-14	■ LTC2753-14	■ LTC2755-14	
		Bipolar	SPI	■ AD5453 ■ AD5553 ■ AD5446	■ AD5555[M]	■ AD5554[M]	
			Parallel	■ LTC1591[M] ■ AD5556[M]	■ AD5557[M]		
	12-Bit	SoftSpan bipolar	SPI	■ LTC1588		■ LTC2754-12	
			Parallel	■ LTC2751-12	■ LTC2753-12	■ LTC2755-12	
		Bipolar	SPI	■ AD5441 ■ AD5443 ■ AD5444 ■ AD5452	■ LTC1590 ■ AD5415 ■ AD5449		
			Parallel	■ AD5445	■ AD5405 ■ AD5447		
	10-Bit	Bipolar	SPI	■ AD5451 ■ AD5432	■ AD5439	■ AD7564	■ AD7568
			Parallel	■ AD5433	■ AD5440		
	8-Bit	Bipolar	SPI	■ AD5450 ■ AD5425 ■ AD5426	■ AD5429		
			Parallel	■ AD5424	■ AD5428		

■ 推奨品
■ > 5MHz帯域幅
[M] ミッドスケールまたはゼロスケールにリセット可能

特殊機能DAC / Special Function DACs

4mA～20mAループDAC / 4 mA to 20 mA Loop DACs

Resolution		Current Output Range	Interface	Voltage Output Range	1-Channel	4-Channel
	16-Bit	4 mA to 20 mA, 0 mA to 20 mA, 0 mA to 24 mA	SPI	None	■ AD5420 ■ AD5421	
				0 V to 5 V, 0 to 10 V, ±5 V, ±10 V	■ AD5422	
		4 mA to 20 mA				■ AD5755-1
	12-Bit	4 mA to 20 mA, 0 mA to 20 mA, 0 mA to 24 mA	SPI	None	■ AD5410	
		4 mA to 20 mA		0 V to 5 V, 0 V to 10 V, ±5 V, ±10 V	■ AD5412	

■ 推奨品
■ ループ駆動
■ ダイナミック消費電力制御

高精度DAC

高電圧DAC / High Voltage DACs

	Voltage Output Range	Interface	1-Channel	4-Channel	32-Channel
Resolution 14-Bit	50 V to 200 V	SPI			■ AD5535B
Resolution 12-Bit	30 V or 60 V	SPI	■ AD5501	■ AD5504	

■ 推奨品

高速、高精度DAC（> 30MSPS）/ Fast Precision DACs (>30 MSPS)

	Output Type	Interface	1-Channel	
			Part Number	Speed
Resolution 16-Bit	Current steering	Parallel	■ LTC1668	50 MSPS
Resolution 14-Bit	Current steering	Parallel	■ LTC1667	50 MSPS
Resolution 12-Bit	Current steering	Parallel	■ LTC1666	50 MSPS

■ 推奨品

マイクロパワー電圧出力DAC / Micropower Voltage Output DACs

	Interface	1-Channel		2-Channel				4-Channel		8-Channel	
			I_0 (3 V)	Ext. Ref	I_0 (3 V)	Int. Ref	I_0 (3 V)	Ext. Ref	I_0 (3 V)	Ext. Ref	I_0 (3 V)
Resolution 14-Bit	SPI	■ AD5641	60 µA								
Resolution 12-Bit	Parallel	■ AD5340 ■ AD5341	115 µA								
Resolution 10-Bit	SPI			■ LTC1662	3 µA			■ LTC1664	186 µA	■ LTC1660	340 µA
				■ LTC1661	95 µA						
	I²C					■ LTC1669	60 µA				
	SMBus					■ LTC1663	60 µA				
	Parallel	■ AD5331	115 µA								
Resolution 8-Bit	SPI									■ LTC1665	340 µA
	Parallel	■ AD5330	115 µA								

■ 推奨品

電流ソース／シンクDAC / Current Source-Sink DACs

	Interface	Channels	Current Sink		Current Source	
			Part Number	Output Range	Part Number	Output Ranges
Resolution 16-Bit	SPI	5			■ LTC2662-16 ***New*** ■ LTC2652-16 ***Coming Soon***	Software selectable all channels: 3.125 mA, 6.25 mA, 12.5 mA, 25 mA, 50 mA, 100 mA, 200 mA, 300 mA
Resolution 14-Bit	SPI	6			■ AD5770R ***New***	Software selectable all channels: 3.125 mA, 6.25 mA, 12.5 mA, 25 mA, 50 mA, 100 mA, 200 mA, 300 mA, and a switch to V_{ss} to sink current
Resolution 12-Bit	SPI	5			■ LTC2662-12 ***New*** ■ LTC2652-12 ***Coming Soon***	Software selectable all channels: 3.125 mA, 6.25 mA, 12.5 mA, 25 mA, 50 mA, 100 mA, 200 mA, 300 mA
Resolution 10-Bit	I²C	1	■ AD5398A ■ AD5821A	3 mA to 120 mA		

■ 推奨品
■ 低消費電力

高精度DAC

ADC/DAC組み合わせ製品 / ADC/DAC Combos

Resolution	Output Type	Interface	4-Channel		8-Channel		16-Channel	
			Part Number	# of ADC Channels	Part Number	# of ADC Channels	Part Number	# of ADC Channels
12-Bit	Bipolar	SPI			■ AD7293	4		
12-Bit	Unipolar single supply	SPI			■ AD5592R	8	■ AD5590	16
12-Bit	Unipolar single supply	I²C	■ AD7294-2	2	■ AD5593R	8		
12-Bit	Unipolar single supply	I²C	■ AD7294	4				
12-Bit	Unipolar single supply	SPI/I²C	■ AD7517	4				
10-Bit	Unipolar single supply	SPI	■ AD7292	8				
10-Bit	Unipolar single supply	SPI/I²C	■ AD7516	4				

■ 推奨品

PWM～電圧出力DAC / PWM to Voltage Output DACs

Resolution	Voltage Output Range	Interface	2-Channel	4-Channel
12-Bit	0 V to 5 V	PWM	■ LTC2644-12	■ LTC2645-12
10-Bit	0 V to 5 V	PWM	■ LTC2644-10	■ LTC2645-10
8-Bit	0 V to 5 V	PWM	■ LTC2644-8	■ LTC2645-8

■ 推奨品

デジタル・ポテンショメータ

不揮発性メモリ（EEPROM、あるいはヒューズROM）内蔵 / Nonvolatile Memory

Part Number	Resolution (Number of Wiper Steps)	Number of Channels	Maximum Terminal Voltage Range (V)	Interface	Nominal Resistance (kΩ)	Absolute Tempco (ppm/°C)	Package	Comments	ECCN Code
One Time Programmable (OTP) Memory									
AD5273	64	1	5.5	I²C	1, 10, 50, 100	300	8-lead SOT-23	1 kΩ option has high bandwidth	EAR99
AD5171	64	1	5.5	I²C	5, 10, 50, 100	35	8-lead SOT-23	Tempco is 5 ppm/°C in potentiometer mode	EAR99
AD5172	256	2	5.5	I²C	2.5, 10, 50, 100	35	10-lead MSOP	Tempco is 15 ppm/°C in potentiometer mode	EAR99
AD5173	256	2	5.5	I²C	2.5, 10, 50, 100	35	10-lead MSOP	Additional address pins (AD0 and AD1)	EAR99
Multitime Programmable (MTP) Memory									
AD5271	256	1	±2.75, 5.5	SPI	20, 100	35	10-lead LFCSP, 10-lead MSOP	1% R-tolerance, 50 TP,† internal fuse programming supply	EAR99
AD5291	256	1	±16.5, 33	SPI	20, 50, 100	35	14-lead TSSOP	High voltage, 1% R-tolerance, 20 TP,† internal fuse programming supply, low THD	EAR99
AD5170	256	1	5.5	I²C	2.5, 10, 50, 100	35	10-lead MSOP	2 TP†	EAR99
AD5274	256	1	±2.75, 5.5	I²C	20, 100	35	10-lead LFCSP, 10-lead MSOP	1% R-tolerance, 50 TP,† internal fuse programming supply	EAR99
AD5270	1024	1	±2.75, 5.5	SPI	20, 50, 100	35	10-lead LFCSP, 10-lead MSOP	1% R-tolerance, 50 TP,† internal fuse programming supply	EAR99
AD5174	1024	1	±2.75, 5.5	SPI	10	35	10-lead LFCSP, 10-lead MSOP	50 TP,† internal fuse programming supply	EAR99
AD5292	1024	1	±16.5, 33	SPI	20, 50, 100	35	14-lead TSSOP	High voltage, 1% R-tolerance, 20 TP,† internal fuse programming supply, low THD	EAR99
AD5272	1024	1	±2.75, 5.5	I²C	20, 50, 100	35	10-lead LFCSP, 10-lead MSOP	1% R-tolerance, 50 TP,† internal fuse programming supply	EAR99
AD5175	1024	1	±2.75, 5.5	I²C	10	35	10-lead LFCSP, 10-lead MSOP	50 TP,† internal fuse programming supply	EAR99
EEPROM									
AD5114	32	1	5.5	I²C	10, 80	35	8-lead LFCSP	8% R-tolerance; 2.3 V_{SUPPLY} operation, low power consumption	EAR99
AD5115	32	1	5.5	Up/down	10, 80	35	8-lead LFCSP	8% R-tolerance; 2.3 V_{SUPPLY} operation, low power consumption	EAR99
AD5112	64	1	5.5	I²C	5, 10, 80	35	8-lead LFCSP	8% R-tolerance; 2.3 V_{SUPPLY} operation, low power consumption	EAR99
AD5113	64	1	5.5	Up/down	5, 10, 80	35	8-lead LFCSP	8% R-tolerance; tempco is 5 ppm/°C in potentiometer mode	EAR99
AD5116	64	1	5.5	Push-button	5, 10, 80	35	8-lead LFCSP	8% R-tolerance; 2.3 V_{SUPPLY} operation, low power consumption	EAR99
AD5258	64	1	5.5	I²C	1, 10, 50, 100	300	10-lead MSOP	% R-tolerance error stored in NVM	EAR99
AD5110	128	1	5.5	I²C	10, 80	35	8-lead LFCSP	8% R-tolerance; 2.3 V_{SUPPLY} operation, low power consumption	EAR99
AD5111	128	1	5.5	Up/down	10, 80	35	8-lead LFCSP	8% R-tolerance; 2.3 V_{SUPPLY} operation, low power consumption	EAR99
AD5121	128	1	±2.75, 5.5	SPI/I²C	10, 100	35	16-lead LFCSP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99
AD5259	256	1	5.5	I²C	5, 10, 50, 100	300	10-lead LFCSP, 10-lead MSOP	% R-tolerance error stored in NVM	EAR99
AD5141	256	1	±2.75, 5.5	SPI/I²C	10, 100	35	16-lead LFCSP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99
AD5231	1024	1	±2.75, 5.5	SPI	10, 50, 100	600	16-lead TSSOP	28 bytes of user-programmable NVM	EAR99
AD5251	64	2	±2.75, 5.5	I²C	1, 10, 50, 100	600	14-lead TSSOP	% R-tolerance error stored in NVM, 12 bytes of user-programmable NVM	EAR99
AD5122A	128	2	±2.75, 5.5	I²C	10, 100	35	16-lead LFCSP, 16-lead TSSOP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99
AD5122	128	2	±2.75, 5.5	SPI	10, 100	35	16-lead LFCSP, 16-lead TSSOP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99
AD5232	256	2	±2.75, 5.5	SPI	10, 50, 100	300	16-lead TSSOP	14 bytes of user-programmable NVM	EAR99
AD5252	256	2	±2.75, 5.5	I²C	1, 10, 50, 100	300	14-lead TSSOP	% R-tolerance error stored in NVM, 12 bytes of user-programmable NVM	EAR99
AD5142A	256	2	±2.75, 5.5	I²C	10, 100	35	16-lead LFCSP, 16-lead TSSOP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99
AD5142	256	2	±2.75, 5.5	SPI	10, 100	35	16-lead LFCSP, 16-lead TSSOP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99
AD5235	1024	2	±2.75, 5.5	SPI	25, 250	35	16-lead TSSOP	% R-tolerance error stored in NVM, 26 bytes of user-programmable NVM	EAR99
ADN2850	1024	2	±2.75, 5.5	SPI	25, 250	35	16-lead LFCSP, 16-lead TSSOP	% R-tolerance error stored in NVM, 26 bytes of user-programmable NVM	EAR99
AD5233	64	4	±2.75, 5.5	SPI	10, 50, 100	600	24-lead TSSOP	11 bytes of user-programmable NVM	EAR99

† TP = ヒューズによる不揮発性データの書き換え可能回数（タイム・プログラマブル）

* リニア・ゲイン設定モード

デジタル・ポテンショメータ

不揮発性メモリ（EEPROM、あるいはヒューズ ROM）内蔵（続き） / Nonvolatile Memory

Part Number	Resolution (Number of Wiper Steps)	Number of Channels	Maximum Terminal Voltage Range (V)	Interface	Nominal Resistance (kΩ)	Absolute Tempco (ppm/°C)	Package	Comments	ECCN Code
AD5253	64	4	±2.75, 5.5	I²C	1, 10, 50, 100	300	20-lead TSSOP	% R-tolerance error stored in NVM, 12 bytes of user-programmable NVM	EAR99
AD5123	128	4	±2.75, 5.5	I²C	10, 100	35	16-lead LFCSP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99
AD5124	128	4	±2.75, 5.5	SPI/I²C	10, 100	35	24-lead LFCSP, 20-lead TSSOP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99
AD5254	256	4	±2.75, 5.5	I²C	1, 10, 50, 100	300	20-lead TSSOP	% R-tolerance error stored in NVM, 12 bytes of user-programmable NVM	EAR99
AD5143	256	4	±2.75, 5.5	I²C	10, 100	35	16-lead LFCSP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99
AD5144A	256	4	±2.75, 5.5	I²C	10, 100	35	20-lead TSSOP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99
AD5144	256	4	±2.75, 5.5	SPI/I²C	10, 100	35	24-lead LFCSP, 20-lead TSSOP	LGST,* 8% R-tolerance; 2.3 V_{SUPPLY} operation	EAR99

† TP = ヒューズによる不揮発性データの書き換え可能回数（タイム・プログラマブル）

* リニア・ゲイン設定モード

揮発性メモリ デジタル・ポテンショメータ / Volatile Digital Potentiometers

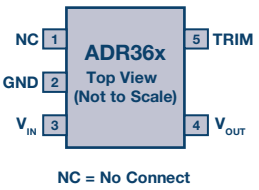
Part Number	Resolution (Number of Wiper Steps)	Number of Channels	Maximum Terminal Voltage Range (V)	Interface	Nominal Resistance (kΩ)	Absolute Tempco (ppm/°C)	Package	Comments	ECCN Code
AD5228	32	1	5.5	Push-button	10, 50, 100	35	8-lead TSOT	Manual with built-in debouncer	EAR99
AD5201	33	1	±2.75, 5.5	SPI	10, 50	500	10-lead MSOP	Low wiper resistance	EAR99
AD5227	64	1	5.5	Up/down	10, 50, 100	35	8-lead TSOT	Tempco is 10 ppm/°C in potentiometer mode	EAR99
AD5246	128	1	5.5	I²C	5, 10, 50, 100	35	6-lead SC70	Ultracompact, rheostat only	EAR99
AD5247	128	1	5.5	I²C	5, 10, 50, 100	35	6-lead SC70	Ultracompact	EAR99
AD5220	128	1	5.5	Up/down	10, 50, 100	800	8-lead MSOP, 8-lead SOIC		EAR99
AD7376	128	1	±16.5, 33	SPI	10, 50, 100	300	14-lead TSSOP, 16-lead SOIC	High voltage	EAR99
AD5160	256	1	5.5	SPI	5, 10, 50, 100	35	8-lead SOT-23		EAR99
AD5165	256	1	5.5	SPI	100	35	8-lead TSOT	Low power: 0.05 µA	EAR99
AD5245	256	1	5.5	I²C	5, 10, 50, 100	35	8-lead SOT-23		EAR99
AD5161	256	1	5.5	SPI	5, 10, 50, 100	35	10-lead MSOP		EAR99
AD5241	256	1	±2.75, 5.5	I²C	10, 100, 1000	30	14-lead TSSOP, 14-lead SOIC		EAR99
AD5200	256	1	±2.75, 5.5	SPI	10, 50	500	10-lead MSOP		EAR99
AD8400	256	1	5.5	SPI	1, 10, 50, 100	500	8-lead SOIC	1 kΩ option has high bandwidth	EAR99
AD5260	256	1	±5.5, 16.5	SPI	20, 50, 200	35	14-lead TSSOP		EAR99
AD5280	256	1	±5.5, 16.5	I²C	20, 50, 200	35	14-lead TSSOP		EAR99
AD5290	256	1	±16.5, 33	SPI	10, 50, 100	35	10-lead MSOP	High voltage	EAR99
AD5293	1024	1	±16.5, 33	SPI	20, 50, 100	35	14-lead TSSOP	High voltage, 1% R-tolerance, low THD	EAR99
AD5222	128	2	±2.75, 5.5	Up/down	10, 50, 100, 1000	35	14-lead TSSOP, 14-lead SOIC		EAR99
AD5162	256	2	5.5	SPI	2.5, 10, 50, 100	35	10-lead MSOP	Rheostat/potentiometer	EAR99
AD5207	256	2	±2.75, 5.5	SPI	10, 50, 100	500	14-lead TSSOP	AD8402 replacement	EAR99
AD8402	256	2	5.5	SPI	1, 10, 50, 100	500	14-lead TSSOP, 14-lead SOIC	1 kΩ option has high bandwidth	EAR99
AD5262	256	2	±5.5, 16.5	SPI	20, 50, 200	35	16-lead TSSOP		EAR99
AD5243	256	2	5.5	I²C	2.5, 10, 50, 100	35	10-lead MSOP	Rheostat/potentiometer	EAR99
AD5248	256	2	5.5	I²C	2.5, 10, 50, 100	35	10-lead MSOP	Rheostat only	EAR99
AD5242	256	2	±2.75, 5.5	I²C	10, 100, 1000	30	16-lead TSSOP, 16-lead SOIC		EAR99
AD5282	256	2	±5.5, 16.5	I²C	20, 50, 200	35	16-lead TSSOP		EAR99
AD5203	64	4	5.5	SPI	10, 100	700	24-lead TSSOP, 24-lead SOIC		EAR99
AD5204	256	4	±2.75, 5.5	SPI	10, 50, 100	700	32-lead LFCSP, 24-lead TSSOP, 24-lead SOIC	Preset to midscale/zero-scale pin	EAR99
AD8403	256	4	5.5	SPI	1, 10, 50, 100	500	24-lead TSSOP, 24-lead SOIC	1 kΩ option has high bandwidth	EAR99
AD5263	256	4	±7.5, 16.5	SPI/I²C	20, 50, 200	30	24-lead TSSOP	Additional I²C address pins (AD0 and AD1)	EAR99
AD5206	256	6	±2.75, 5.5	SPI	10, 50, 100	700	24-lead TSSOP, 24-lead SOIC	Preset to midscale/zero-scale pin	EAR99

電圧リファレンス

ADR365W: ADR365W:低消費電力、低ノイズ電圧リファレンス、ソース／シンク能力

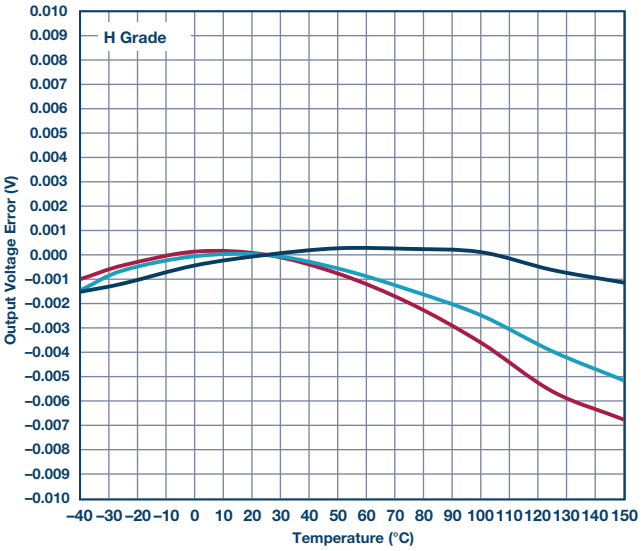
主な特長

- 市場初の車載グレード0電圧リファレンス
- 車載グレード0（-40°C～+150°C）
- 車載グレード1（-40°C～+125°C）
- グレード0、グレード1の両モデルで最大25ppm/°C
- 外付けコンデンサは不要
- 小型5ピンTSOTパッケージ



利点

- 低ドロップアウト:300mV
- 最大15Vの電圧供給、+5mA/-1mAの出力電流容量
- 最大電源電流はわずか190µA（150°C）
- TRIMピンによる出力の微調整が可能
- 3.3V（グレード0、ADR366W）のデバイスも入手可能



アプリケーション

- エンジン管理アプリケーション（エンジン／トランスミッション）
- 排気系アプリケーション（センシング）

高安定電圧リファレンス / High Stability Voltage References

Part Number	Output Voltage (V)	Tempco (ppm/°C) (max)	Initial Accuracy (%) (max)	Supply Voltage Range (V)	ISY (max)	Output Current Source/ Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
LTZ1000	7	0.05	0.04				1.2	0.17	–55°C to +125°C	Shunt	TO-5	EAR99
LM399A	7	1, 2	0.05				10	1.4	0°C to 70°C	Shunt	TO-46	EAR99
ADR4525 ***New***	2.5	1	0.02, 0.04	3.0 to 15	950 µA	–10 to +10	1.25	0.6	0°C to 70°C	Series	SOIC	EAR99
LT6657 ***New***	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	1.5, 3	0.1	1.3 to 40	1.2 mA	±10		0.5	–40°C to +125°C	Series	8-lead MSOP	EAR99
AD588	±5, ±10	1.5, 3	0.01, 0.02, 0.03, 0.05, 0.06, 0.1	±18	10 mA	–10 to +10	6		–55°C to +125°C	Series	SOIC	EAR99
LTC6655	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	2, 5	0.025, 0.05	3.0 to 13.2	5 mA	±10		0.25	–40°C to +125°C	Series	8-lead MSOP, 8-lead LS	EAR99
LTC6655LN ***New***	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	2, 5	0.025, 0.05	3.0 to 13.2	5 mA	±10		0.25	–40°C to +125°C	Series	8-lead MSOP, 8-lead LS	EAR99
LT1027	5	2, 3, 5, 7.5	0.05, 0.1	8 to 40	3.1mA	–10 to +15		0.6	–40°C to +85°C	Series	8-lead DIP	EAR99
ADR4520	2.048	2, 4	0.02, 0.04	3.0 to 15	950 µA	–10 to +10	1.25	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR4525	2.5	2, 4	0.02, 0.04	3.0 to 15	950 µA	–10 to +10	1.25	0.6	–40°C to +125°C	Series	SOIC	EAR99

電圧リファレンス

高安定電圧リファレンス（続き） / High Stability Voltage References (Continued)

Part Number	Output Voltage (V)	Tempco (ppm/°C) (max)	Initial Accuracy (%) (max)	Supply Voltage Range (V)	ISY (max)	Output Current Source/ Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
ADR4530	3	2, 4	0.02, 0.04	3.1 to 15	950 µA	–10 to +10	1.6	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR4533	3.3	2, 4	0.02, 0.04	3.4 to 15	950 µA	–10 to +10	2.1	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR4540	4.096	2, 4	0.02, 0.04	4.2 to 15	950 µA	–10 to +10	2.7	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR4550	5	2, 4	0.02, 0.04	5.1 to 15	950 µA	–10 to +10	2.8	0.6	–40°C to +125°C	Series	SOIC	EAR99
AD586	5	2, 5, 10	0.04	10.8 to 36	3 mA	–5 to +10	4	0.8	–55°C to +125°C	Series	SOIC	EAR99
AD780	2.5	3, 7	0.04, 0.2	4.0 to 36	1 mA	±10	4	1.6	–40°C to +85°C	Series	SOIC	EAR99
AD688	±10	3, 8	0.015, 0.03	±13.5 to 18	12 mA	+10, –10	6		–55°C to +125°C	Series	SOIC	EAR99
LT1031	10	5, 15, 25	0.05, 0.1, 0.2	11 to 40	1.7 mA	±10	6	0.6	–55°C to +125°C	Series	TO-39	EAR99
LT1021	5, 7, 10	5, 20	0.05, 1	7.2 to 40	1.2 mA	±10		0.6	–55°C to +125°C	Series	TO-5, 8-lead DIP	EAR99

LT6657: ドリフトが1.5ppm/°Cの低ノイズ、バッファ内蔵型リファレンス

主な特長

- 40Vまでの広い電源電圧範囲とわずか50mVの低ドロップアウト電圧により、幅広いアプリケーションでの使用が可能
- -40°C～+125°Cで完全に仕様を規定
- 出力電圧オプション: 1.25V、2.5V、3V、4.096V、5V
  8ピンMSOPパッケージを採用

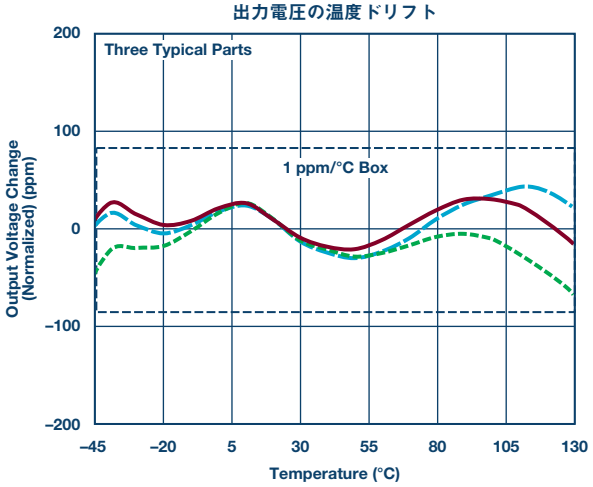
利点

- 正または負の電圧出力構成により、幅広いアプリケーションに対応
- 正または負のシャント構成とシャットダウン・ピンにより、設計の柔軟性が向上し、既存製品の置き換えに最適
- ±10mAのシンク電流およびソース電流により、回路設計が簡素化され、容易に導入可能

アプリケーション

- 高温産業用機器
- 高分解能データ収集システム
- 計測機器およびプロセス制御機器
- 車載制御機器およびモニタ機器
- 医療機器
- シャント型電圧リファレンスと負電圧リファレンス

出力電圧の温度ドリフト



Initial Accuracy (%) (Max)	Supply Voltage Range (V)	I_{SY} (mA) (max)	Tempco (ppm/°C) (max)	Output Current Source/Sink (mA)	0.1 Hz to 10 Hz Noise ppm p-p
0.1	1.3 to 40	1.2	1.5	±10	0.5

電圧リファレンス

オートモーティブ認定リファレンス / Automotive Qualified References

Part Number	Output Voltage (V)	Initial Accuracy (%) (max)	Supply Voltage Range (V)	ISY (max)	Tempco (ppm/°C) (max)	Output Current Source/Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
LT6657 ***New***	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.1	1.3 to 40	1.2 mA	1.5, 3	±10		0.5	–40°C to +125°C	Series	MS-8	EAR99
ADR4525 ***New***	2.5	0.02	3.0 to 15	950 µA	2	–10 to +10	1.25	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR3512 ***New***	1.2	0.1	2.3 to 5.5	100 µA	4, 8	–3 to +10	8	6.7	–40°C to +125°C	Series	MSOP	EAR99
ADR3525 ***New***	2.5	0.1	2.7 to 5.5	100 µA	5, 8	–3 to +10	18	7.2	–40°C to +125°C	Series	MSOP	EAR99
ADR3530 ***New***	3	0.1	3.2 to 5.5	100 µA	5, 8	–3 to +10	22	7.3	–40°C to +125°C	Series	MSOP	EAR99
ADR3533 ***New***	3.3	0.1	3.5 to 5.5	100 µA	5, 8	–3 to +10	25	7.6	–40°C to +125°C	Series	MSOP	EAR99
ADR3540 ***New***	4.096	0.1	4.3 to 5.5	100 µA	5, 8	–3 to +10	29	7.1	–40°C to +125°C	Series	MSOP	EAR99
ADR3550 ***New***	5	0.1	5.2 to 5.5	100 µA	5, 8	–3 to +10	35	7.0	–40°C to +125°C	Series	MSOP	EAR99
ADR03	2.5	0.2	4.5 to 36	1 mA	10	10	6	2.4	–40°C to +125°C	Series	SOIC	EAR99
ADR06	3	0.2	5.0 to 36	1 mA	10	10	10	3.3	–40°C to +125°C	Series	SOIC	EAR99
ADR02	5	0.1	7.0 to 36	1 mA	10	10	10	2.0	–40°C to +125°C	Series	SOIC	EAR99
ADR01	10	0.14	12 to 36	1 mA	10	10	20	2.0	–40°C to +125°C	Series	SOIC	EAR99
LT1461	2.5, 3, 3.3, 4.096, 5	0.04, 0.06, 0.08, 0.15	2.8 to 20	50 µA	3, 7, 12, 20	50		8.0	–40°C to +125°C	Series	8-lead SO	EAR99
ADR366	3.3	0.25	3.6 to 15	190 µA	25	–1 to +5	9.3	2.8	–40°C to +125°C	Series	SOT-23	EAR99
ADR365	5	0.16	5.3 to 15	190 µA	25	–1 to +5	12.8	2.6	–40°C to +125°C	Series	SOT-23	EAR99
ADR365 (H-grade) ***New***	5	0.16	5.3 to 15	190 µA	25	–1 to +5	12.8	2.6	–40°C to +150°C	Series	SOT-23	EAR99
LT6654 ***New***	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.05, 0.1	1.75 to 36	350 µA	10, 20	±10		1.6	–40°C to +125°C	Series	SOT-23	EAR99
ADR291	2.5	0.332	3.0 to 15	15 µA	15	5	8	3.2	–40°C to +125°C	Series	SOIC	EAR99
AD1582	2.5	0.08, 0.8	2.7 to 12	70 µA	50, 100	±5	70	28.0	–40°C to +125°C	Series	SOT-23	EAR99
AD1583	3	0.1, 1.0	3.2 to 12	70 µA	50, 100	±5	85	28.3	–40°C to +125°C	Series	SOT-23	EAR99
ADR512	1.2	0.3			60	0.3	4	3.3	–40°C to +85°C	Shunt	SOT-23	EAR99
ADR5041 ***New***	2.5	0.1, 0.2			75, 100		19.2	7.7	–40°C to +125°C	Shunt	SOT-23	EAR99
ADR5044 ***New***	4.096	0.1, 0.2			75, 100		32.2	7.9	–40°C to +125°C	Shunt	SOT-23	EAR99

電圧リファレンス

LT6658: 高精度、デュアル出力、高電流、低ノイズ、電圧リファレンス

主な特長

- リファレンスとレギュレータを1つのパッケージに組み合わせ、デュアル・トラッキングおよびケルビン検出出力を採用
- デフォルトの出力電圧:1.2V、1.8V、2.5V、3V、3.3V、5V
- 150mAと50mA出力を組み合わせた総出力電流:200mA

アプリケーション

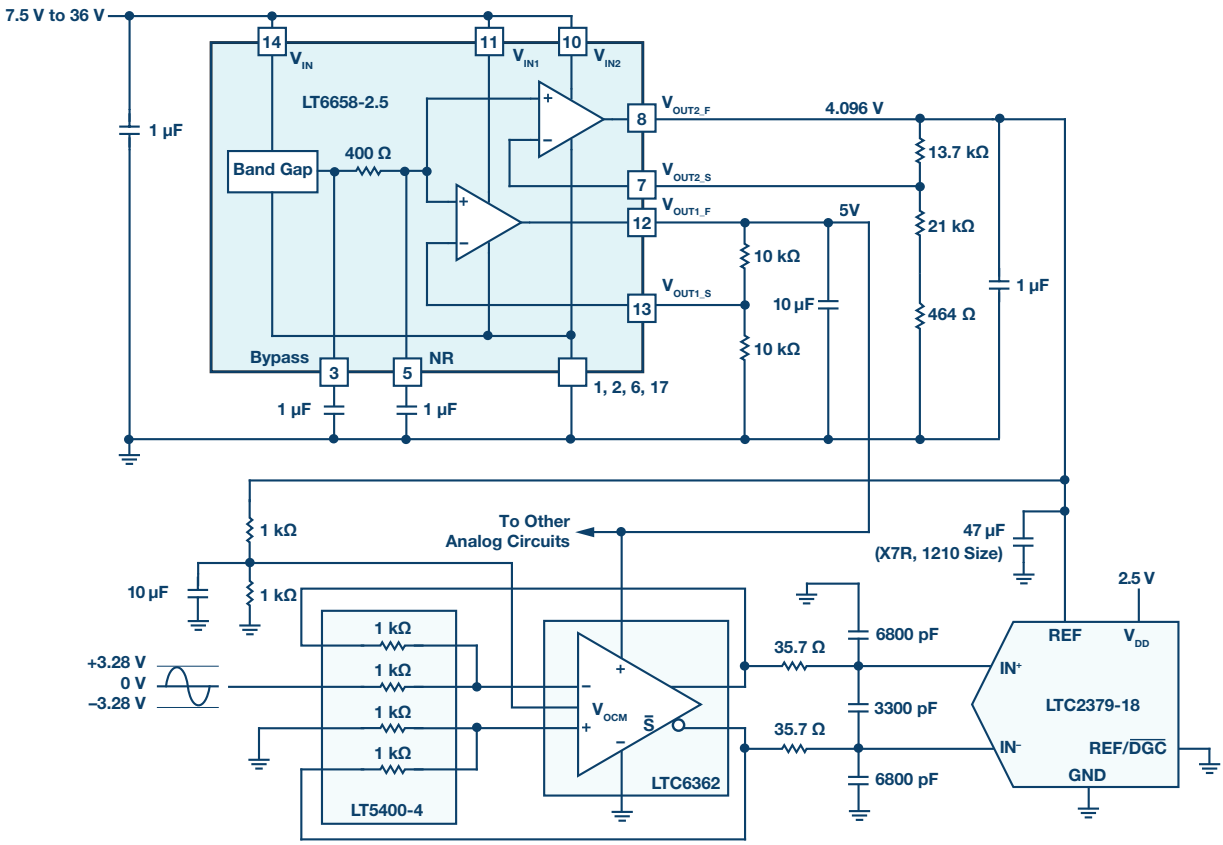
- マイクロコントローラまたはFPGAとADC/DACを組み合わせたアプリケーション
- データ・アクイジション・システム
- 自動車の制御と監視
- 高精度、低ノイズのレギュレータ
- 計測およびプロセス制御

利点

- 2つの機能を組み合わせてシステムの設計を簡素化し、省スペース、省コストとシステムの信頼性の向上を同時に実現
- ケルビン検出により負荷レギュレーションを向上し、すべての出力電圧を外付け抵抗で調整可能な柔軟性を実現
- 出力ごとに独立した電源ピンにより、150dB PSRRの出力段を構築可能(回路についてはデータシートを参照)

Initial Accuracy (%) (max)	Supply Voltage Range (V)	I_{SY} (mA) (max)	Tempco (ppm/°C) (max)	Output Current Source/ Sink (mA)	0.1 Hz to 10 Hz Noise ppm p-p
0.1	3.5 to 36	2.5	10	+150/–20 mA and +50 mA/–20 mA	2.2

高精度のリファレンスと供給電圧をミックスド・シグナル・アプリケーションに提供



電圧リファレンス

高出力電流リファレンス / High Output Current References

Part Number	Output Voltage (V)	Initial Accuracy (%) (max)	Supply Voltage Range (V)	ISY (max)	Tempco (ppm/°C) (max)	Output Current Source/ Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
LT6658 ***New***	1.2, 1.8, 2.5, 3, 3.3, 5	0.05, 0.1	5 to 36	2 mA	10, 20	+150/–20		1.6	–40°C to +125°C	Series	16-lead DFN, 16-lead MSOP-EP	EAR99
LT1461	2.5, 3, 3.3, 4.096, 5	0.04, 0.06, 0.08, 0.15	2.8 to 20	50 µA	3, 7, 12, 20	50		8.0	–40°C to +125°C	Series	8-lead SO	EAR99
REF191	2.048	0.1, 0.49	3.0 to 15	45 µA	5, 25	30	20	9.8	–40°C to +85°C	Series	SOIC	EAR99
REF192	2.5	0.08, 0.2, 0.4	3.0 to 15	45	5, 10, 25	30	25	10.0	–40°C to +85°C	Series	TSSOP, SOIC	EAR99
REF198	4.096	0.05, 0.12, 0.24	4.5 to 15	45	5, 10, 25	30	40	9.8	–40°C to +85°C	Series	TSSOP, SOIC	EAR99
REF194	4.5	0.04, 0.2	4.75 to 15	45	5, 25	30	45	10.0	–40°C to +85°C	Series	SOIC	EAR99
REF195	5	0.04, 0.1, 0.2	5.15 to 15	45	5, 10, 25	30	50	10.0	–40°C to +85°C	Series	TSSOP, SOIC	EAR99
LT1460	2.5, 3, 3.3, 5, 10	0.075, 0.1, 0.125, 0.15, 0.2, 0.25, 0.4, 0.5	3.4 to 20	175	10, 15, 20, 25, 50	–1 to +20		4.0	–40°C to +125°C	Series	8-lead DIP, 8-lead SO, 8-lead MSOP, SOT-23	EAR99

標準電圧リファレンス—直列モード動作 / Standard REF – Series Mode

Part Number	Output Voltage (V)	Initial Accuracy (%) (max)	Supply Voltage Range (V)	ISY (max)	Tempco (ppm/°C) (max)	Output Current Source/Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
LT6657 ***New***	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.1	1.3 to 40	1.2 mA	1.5, 3	±10		0.5	–40°C to +125°C	Series	8-lead MSOP	EAR99
AD588	±5, ±10	0.01, 0.02, 0.03, 0.05, 0.06, 0.1	±18	10 mA	1.5, 3	–10 to +10	6		–55°C to +125°C	Series	SOIC	EAR99
LTC6655 ***New***	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.025, 0.05	3.0 to 13.2	5 mA	2, 5	±10		0.25	–40°C to +125°C	Series	8-lead MSOP	EAR99
LT1027	5	0.05, 0.1	8 to 40	3.1 mA	2, 3, 5, 7.5	–10 to +15		0.6	–40°C to +85°C	Series	8-lead DIP	EAR99
ADR4520	2.048	0.02, 0.04	3.0 to 15	950 µA	2, 4	–10 to +10	1.25	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR4525	2.5	0.02, 0.04	3.0 to 15	950 µA	2, 4	–10 to +10	1.25	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR4530	3	0.02, 0.04	3.1 to 15	950 µA	2, 4	–10 to +10	1.6	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR4533	3.3	0.02, 0.04	3.4 to 15	950 µA	2, 4	–10 to +10	2.1	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR4540	4.096	0.02, 0.04	4.2 to 15	950 µA	2, 4	–10 to +10	2.7	0.6	–40°C to +125°C	Series	SOIC	EAR99
ADR4550	5	0.02, 0.04	5.1 to 15	950 µA	2, 4	–10 to +10	2.8	0.6	–40°C to +125°C	Series	SOIC	EAR99
AD586	5	0.04	10.8 to 36	3 mA	2, 5, 10	–5 to +10	4	0.8	–55°C to +125°C	Series	SOIC	EAR99
ADR440	2.048	0.05, 0.15	3.0 to 18	3.75 mA	3, 10	–5 to +10	1	0.5	–40°C to +125°C	Series	MSOP, SOIC	EAR99
ADR441	2.5	0.04, 0.12	3.0 to 18	3.75 mA	3, 10	–5 to +10	1.2	0.5	–55°C to +125°C	Series	MSOP, SOIC	EAR99
ADR443	3	0.04, 0.13	3.5 to 18	3.75 mA	3, 10	–5 to +10	1.4	0.5	–40°C to +125°C	Series	MSOP, SOIC	EAR99
ADR444	4.096	0.04, 0.13	4.5 to 18	3.75 mA	3, 10	–5 to +10	1.8	0.5	–40°C to +125°C	Series	MSOP, SOIC	EAR99
ADR445	5	0.04, 0.12	5.5 to 18	3.75 mA	3, 10	–5 to +10	2.25	0.5	–40°C to +125°C	Series	MSOP, SOIC	EAR99
ADR420	2.048	0.05, 0.15	4.0 to 18	600 µA	3, 10	10	1.75	0.9	–40°C to +125°C	Series	MSOP, SOIC	EAR99
ADR421	2.5	0.04, 0.12	4.5 to 18	600 µA	3, 10	10	1.75	0.7	–40°C to +125°C	Series	MSOP, SOIC	EAR99
ADR423	3	0.04, 0.13	5.0 to 18	600 µA	3, 10	10	2	0.7	–40°C to +125°C	Series	MSOP, SOIC	EAR99
ADR425	5	0.04, 0.12	7.0 to 18	600 µA	3, 10	10	3.4	0.7	–40°C to +125°C	Series	MSOP, SOIC	EAR99
ADR430	2.048	0.05, 0.15	4.1 to 18	800 µA	3, 10	–20 to +30	3.5	1.7	–40°C to +125°C	Series	MSOP, SOIC	EAR99
ADR431	2.5	0.04, 0.12	4.5 to 18	800 µA	3, 10	–20 to +30	3.5	1.5	–55°C to +125°C	Series	MSOP, SOIC	EAR99
ADR433	3	0.05, 0.13	5 to 18	800 µA	3, 10	–20 to +30	3.75	1.5	–40°C to +125°C	Series	MSOP, SOIC	EAR99
ADR434	4.096	0.04, 0.12	6.1 to 18	800 µA	3, 10	–20 to +30	6.25	1.5	–55°C to +125°C	Series	MSOP, SOIC	EAR99
ADR435	5	0.04, 0.12	7 to 18	800 µA	3, 10	–20 to +30	8	1.5	–55°C to +125°C	Series	MSOP, SOIC	EAR99
AD780	2.5	0.04, 0.2	4.0 to 36	1 mA	3, 7	±10	4	1.6	–40°C to +85°C	Series	SOIC	EAR99
AD688	±10	0.015, 0.03	±13.5 to 18	12 mA	3, 8	+10, –10	6		–55°C to +125°C	Series	SOIC	EAR99
ADR03	2.5	0.1, 0.2	4.5 to 36	1 mA	3, 9, 10, 25	10	6	2.4	–55°C to +125°C	Series	SC70, SOT-23, SOIC	EAR99
ADR06	3	0.1, 0.2	5.0 to 36	1 mA	3, 9, 25	10	10	3.3	–40°C to +125°C	Series	SC70, SOT-23, SOIC	EAR99
ADR02	5	0.06, 0.1	7.0 to 36	1 mA	3, 9, 10, 25, 40	10	10	2.0	–40°C to +125°C	Series	SC70, SOT-23, SOIC	EAR99

[1] DIP、TO-52またはTO-99パッケージ製品　[2] 10Hz～10kHz

電圧リファレンス

標準電圧リファレンス—直列モード動作（続き） / Standard REF—Series Mode (Continued)

Part Number	Output Voltage (V)	Initial Accuracy (%) (max)	Supply Voltage Range (V)	ISY (max)	Tempco (ppm/°C) (max)	Output Current Source/Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
ADR01	10	0.05, 0.1	12 to 36	1 mA	3, 9, 10, 25	10	20	2.0	–55°C to +125°C	Series	SC70, SOT-23, SOIC	EAR99
LT1461	2.5, 3, 3.3, 4.096, 5	0.04, 0.06, 0.08, 0.15	2.8 to 20	50 µA	3, 7, 12, 20	50		8.0	–40°C to +125°C	Series	8-lead SO	EAR99
LT1031	10	0.05, 0.1, 0.2	11 to 40	1.7 mA	5, 15, 25	±10	6	0.6	–55°C to +125°C	Series	TO-39	EAR99
LT1236	5, 10	0.05, 0.075, 0.1	10 to 40	1.2 mA	5, 10, 15	±10		0.6	–40°C to +85°C	Series	8-lead DIP, 8-lead SO	EAR99
LT1021	5, 7, 10	0.05, 1	7.2 to 40	1.2 mA	5, 20	±10		0.6	–55°C to +125°C	Series	TO-5, 8-lead DIP	EAR99
LTC6652	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.05, 0.1	2.8 to 13.2	560 µA	5, 10	±5		2.1	–40°C to +125°C	Series	8-lead MSOP	EAR99
LT1019	2.5, 4.5, 5, 10	0.05, 0.2	4 to 40	1 mA	5, 20	±10		2.5	–40°C to +85°C	Series	8-lead DIP, 8-lead SO	EAR99
ADR3512W ***New***	1.2	0.1	2.3 to 5.5	100 µA	4, 8	–3 to +10	8	6.7	–40°C to +125°C	Series	MSOP	EAR99
ADR3525W ***New***	2.5	0.1	2.7 to 5.5	100 µA	5, 8	–3 to +10	18	7.2	–40°C to +125°C	Series	MSOP	EAR99
ADR3530W ***New***	3	0.1	3.2 to 5.5	100 µA	5, 8	–3 to +10	22	7.3	–40°C to +125°C	Series	MSOP	EAR99
ADR3533W ***New***	3.3	0.1	3.5 to 5.5	100 µA	5, 8	–3 to +10	25	7.6	–40°C to +125°C	Series	MSOP	EAR99
ADR3540W ***New***	4.096	0.1	4.3 to 5.5	100 µA	5, 8	–3 to +10	29	7.1	–40°C to +125°C	Series	MSOP	EAR99
ADR3550W ***New***	5	0.1	5.2 to 5.5	100 µA	5, 8	–3 to +10	35	7.0	–40°C to +125°C	Series	MSOP	EAR99
REF191	2.048	0.1, 0.49	3.0 to 15	45 µA	5, 25	30	20	9.8	–40°C to +85°C	Series	SOIC	EAR99
REF192	2.5	0.08, 0.2, 0.4	3.0 to 15	45 µA	5, 10, 25	30	25	10.0	–40°C to +85°C	Series	TSSOP, SOIC	EAR99
REF198	4.096	0.05, 0.12, 0.24	4.5 to 15	45 µA	5, 10, 25	30	40	9.8	–40°C to +85°C	Series	TSSOP, SOIC	EAR99
REF194	4.5	0.04, 0.2	4.75 to 15	45 µA	5, 25	30	45	10.0	–40°C to +85°C	Series	SOIC	EAR99
REF195	5	0.04, 0.1, 0.2	5.15 to 15	45 µA	5, 10, 25	30	50	10.0	–40°C to +85°C	Series	TSSOP, SOIC	EAR99
AD581	10	0.05, 0.1, 0.3	13 to 30	1 mA	5, 10, 15, 30	5	40	4.0	–55°C to +125°C	Series	Other	EAR99
AD584	5	0.06, 0.12, 0.3	7.5 to 30	1 mA	5, 15, 30	+10	50	10.0	–55°C to +125°C	Series	Other	EAR99
AD584	7.5	0.05, 0.1, 0.27	10 to 30	1 mA	5, 15, 30	+10	50	6.7	–55°C to +125°C	Series	Other	EAR99
AD584	10	0.05, 0.1, 0.3	12.5 to 30	1 mA	5, 15, 30	+10	50	5.0	–55°C to +125°C	Series	Other	EAR99
ADR293	5	0.06, 0.2	6.0 to 15	20 µA	8, 25	5	15	3.0	–55°C to +125°C	Series	TSSOP, SOIC	EAR99
ADR3412 ***New***	1.2	0.1	2.3 to 5.5	100 µA	8	–3 to +10	8	6.7	–40°C to +125°C	Series	SOT-23	EAR99
ADR3420 ***New***	2.048	0.1	2.3 to 5.5	100 µA	8	–3 to +10	15	7.3	–40°C to +125°C	Series	SOT-23	EAR99
ADR3425 ***New***	2.5	0.1	2.7 to 5.5	100 µA	8	–3 to +10	18	7.2	–40°C to +125°C	Series	SOT-23	EAR99
ADR3430 ***New***	3	0.1	3.2 to 5.5	100 µA	8	–3 to +10	22	7.3	–40°C to +125°C	Series	SOT-23	EAR99
ADR3433 ***New***	3.3	0.1	3.5 to 5.5	100 µA	8	–3 to +10	25	7.6	–40°C to +125°C	Series	SOT-23	EAR99
ADR3440 ***New***	4.096	0.1	4.3 to 5.5	100 µA	8	–3 to +10	29	7.1	–40°C to +125°C	Series	SOT-23	EAR99
ADR3450 ***New***	5	0.1	5.2 to 5.5	100 µA	8	–3 to +10	35	7.0	–40°C to +125°C	Series	SOT-23	EAR99
REF02	5	0.3	8.0 to 36	1.4 mA	8.5, 25, 65	10	15	3.0	–55°C to +125°C	Series	SOIC	EAR99
REF01	10	0.3	12 to 36	1.4 mA	8.5, 25, 65	10	30	3.0	–55°C to +125°C	Series	SOIC	EAR99
ADR391	2.5	0.16, 0.24	2.8 to 15	140 µA	9, 25	5	5	2.0	–40°C to +125°C	Series	SOT-23	EAR99
ADR392	4.096	0.12, 0.15	4.3 to 15	140 µA	9, 25	5	7	1.7	–40°C to +125°C	Series	SOT-23	EAR99
ADR395	5	0.1, 0.12	5.3 to 15	140 µA	9, 25	5	8	1.6	–40°C to +125°C	Series	SOT-23	EAR99
ADR360	2.048	0.15, 0.29	2.35 to 15	190 µA	9, 25	–1 to +5	6.8	3.3	–40°C to +125°C	Series	SOT-23	EAR99
ADR361	2.5	0.12, 0.24	2.8 to 15	190 µA	9, 25	–1 to +5	8.25	3.3	–40°C to +125°C	Series	SOT-23	EAR99
ADR363	3	0.1, 0.2	3.3 to 15	190 µA	9, 25	–1 to +5	8.7	2.9	–40°C to +125°C	Series	SOT-23	EAR99
ADR366	3.3	0.12, 0.25	3.6 to 15	190 µA	9, 25	–1 to +5	9.3	2.8	–40°C to +125°C	Series	SOT-23	EAR99
ADR364	4.096	0.1, 0.2	4.4 to 15	190 µA	9, 25	–1 to +5	11	2.7	–40°C to +125°C	Series	SOT-23	EAR99
ADR365	5	0.08, 0.16	5.3 to 15	190 µA	9, 25	–1 to +5	12.8	2.6	–40°C to +125°C	Series	SOT-23	EAR99
ADR127	1.25	0.12, 0.24	2.7 to 18	125 µA	9, 25	–2 to +5	9	7.2	–40°C to +125°C	Series	SOT-23	EAR99
LT6654 ***New***	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.05, 0.1	1.75 to 36	350 µA	10, 20	±10		1.6	–55°C to +125°C	Series	SOT-23	EAR99

[1] DIP、TO-52またはTO-99パッケージ製品　[2] 10Hz～10kHz

電圧リファレンス

標準電圧リファレンス—直列モード動作（続き） / Standard REF—Series Mode (Continued)

Part Number	Output Voltage (V)	Initial Accuracy (%) (max)	Supply Voltage Range (V)	ISY (max)	Tempco (ppm/°C) (max)	Output Current Source/Sink (mA)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
							µV p-p	ppm p-p				
LT6658 ***New***	1.2, 1.8, 2.5, 3, 3.3, 5	0.05, 0.1	5 to 36	2 mA	10, 20	+150/–20		1.6	–40°C to +125°C	Series	16-lead MSE	EAR99
AD587	10	0.05, 0.1	13.5 to 36	4 mA	10, 20	±10	4	0.4	–55°C to +125°C	Series	SOIC	EAR99
REF43	2.5	0.1, 0.6	4.5 to 40	450 µA	10, 25	20/1.2	7	2.8	–40°C to +85°C	Series	SOIC	EAR99
AD580	2.5	0.4	4.5 to 30	1.5 mA	10, 25, 40, 85	10	8	3.2	–55°C to +125°C	Series	Other	EAR99
ADR291	2.5	0.08, 0.12, 0.24	3.0 to 15	15 µA	10, 20, 30	5	8	3.2	–40°C to +125°C	Series	TSSOP, SOIC	EAR99
ADR292	4.096	0.07, 0.1, 0.15	4.5 to 15	15 µA	10, 20, 30	5	12	2.9	–40°C to +125°C	Series	TSSOP, SOIC	EAR99
LT1460	2.5, 3, 3.3, 5, 10	0.075, 0.1, 0.125, 0.15, 0.2, 0.25, 0.4, 0.5	3.4 to 20	175 µA	10, 15, 20, 25, 50	–1 to 20		4.0	–40°C to +125°C	Series	8-lead DIP, 8-lead SO, 8-lead MSOP, SOT-23	EAR99
LT1790	1.2, 2.048, 2.5, 3, 3.3, 4.096, 5	0.05, 0.1	2.6 to 18	60 µA	10, 25	–3 to 5		16.0	–40°C to +85°C	Series	SOT-23	EAR99
LT6656	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.05, 0.1	2.51 to 18	0.85 µA	10, 20	–0.1 to 10		24.0	–40°C to +85°C	Series	SOT-23	EAR99
AD584	2.5	0.1, 0.14, 0.3	5.0 to 30	1 mA	10, 15, 30	5	50	20.0	–55°C to +125°C	Series	Other	EAR99
ADR827	1.25	0.2, 0.4	2.7 to 15	400 µA	15, 30	41762	8	6.4	–40°C to +125°C	Series	MSOP	EAR99
LT6660H	2, 3, 3.3, 5, 10	0.2, 0.4, 0.5	3.4 to 20	200 µA	20, 50	–1 to +20		4.0	0°C to 70°C	Series	DFN	EAR99
AD680	2.5	0.2, 0.4	4.5 to 36	280 µA	20, 25, 30	10	10	4.0	–40°C to +85°C	Series	SOIC	EAR99
ADR380	2.048	0.24	2.4 to 18	140 µA	25	5	5	2.4	–40°C to +85°C	Series	SOT-23	EAR99
ADR381	2.5	0.24	2.8 to 18	140 µA	25	5	5	2.0	–40°C to +85°C	Series	SOT-23	EAR99
ADR130	0.5	0.35, 0.70	2.0 to 18	150 µA	25, 50	4/2	3	6.0	–40°C to +125°C	Series	SOT-23	EAR99
ADR130	1	0.35, 0.70	2.0 to 18	150 µA	25, 50	4/2	6	6.0	–40°C to +125°C	Series	SOT-23	EAR99
REF193	3	0.33	3.3 to 15	45 µA	25	25	30	10.0	–40°C to +85°C	Series	SOIC	EAR99
REF196	3.3	0.3	3.5 to 15	45 µA	25	25	33	10.0	–40°C to +85°C	Series	TSSOP, SOIC	EAR99
ADR225	2.5	0.4, 2.4	3.3 to 15	50 µA	30, 80	10	25	10.0	–40°C to 210°C	Series	SOIC	EAR99
LT6650	Adjustable	0.5	1.4 to 18	11 µA	30 typ	±0.2		50.0	–40°C to +125°C	Series	SOT-23	EAR99
LTC1798	2.5, 3, 4.096, 5	0.15	2.7 to 12.6	6.5 µA	40	–2 to +10		8.0	0°C to 70°C	Series	8-lead SO	EAR99
LTC1258	2.5, 3, 4.096, 5	0.15	2.7 to 12.6	6.5 µA	40	–2 to +10		8.0	0°C to 70°C	Series	8-lead MSOP, 8-lead SO	EAR99
REF03	2.5	0.6	4.5 to 33	1.4 mA	50	10 /0.5	6	2.4	–40°C to +85°C	Series	SOIC	EAR99
AD1582	2.5	0.08, 0.8	2.7 to 12	70 µA	50, 100	±5	70	28.0	–40°C to +125°C	Series	SOT-23	EAR99
AD1583	3	0.1, 1.0	3.2 to 12	70 µA	50, 100	±5	85	28.3	–40°C to +125°C	Series	SOT-23	EAR99
AD1584	4.096	0.1, 0.98	4.3 to 12	70 µA	50, 100	±5	110	26.9	–40°C to +125°C	Series	SOT-23	EAR99
AD1585	5	0.1, 1.0	5.2 to 12	70 µA	50, 100	±5	140	28.0	–40°C to +125°C	Series	SOT-23	EAR99

[1] DIP、TO-52またはTO-99パッケージ製品　[2] 10Hz～10kHz

標準電圧リファレンス—シャント・モード動作 / Standard REF – Shunt Mode

Part Number	Output Voltage (V)	Initial Accuracy (%)	Current Range		Tempco (ppm/°C) (max)	Output Impedance (Ω)	0.1 Hz to 10 Hz Noise		Temperature Range (°C)	Type	Package	ECCN Code
			Min	Max (mA)			µV p-p	ppm p-p				
LTZ1000	7	0.04			0.05		1.2	0.17	–55°C to +125°C	Shunt	TO-5	EAR99
LM399A	7	0.05			1, 2	1.5	10	1.4	0°C to 70°C	Shunt	TO-46	EAR99
LT6657 ***New***	1.25, 2.048, 2.5, 3, 3.3, 4.096, 5	0.1	2.5 mA	11	1.5, 3			0.5	–40°C to +125°C	Shunt	8-lead MSOP	EAR99
LT1389	1.2, 2.5, 4.096, 5	0.05, 0.075	0.6 µA	2	10, 20, 50	1		20	0°C to 70°C	Shunt	8-lead SO	EAR99
LT1634	1.2, 2.5, 4.096, 5	0.05	8 µA	20	10, 25	1		7	–40°C to +85°C	Shunt	8-lead SO, 8-lead MSOP, TO-92	EAR99
AD589	1.2	1.2	50 µA	5	10, 50, 100	0.6			–55°C to +125°C	Shunt	SOIC, Other	EAR99

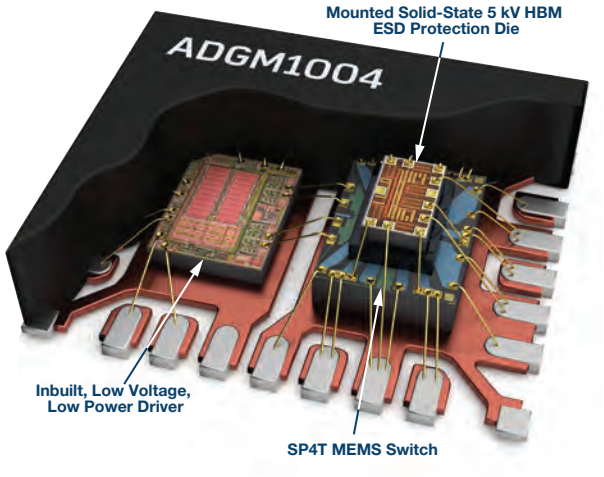
電圧リファレンス

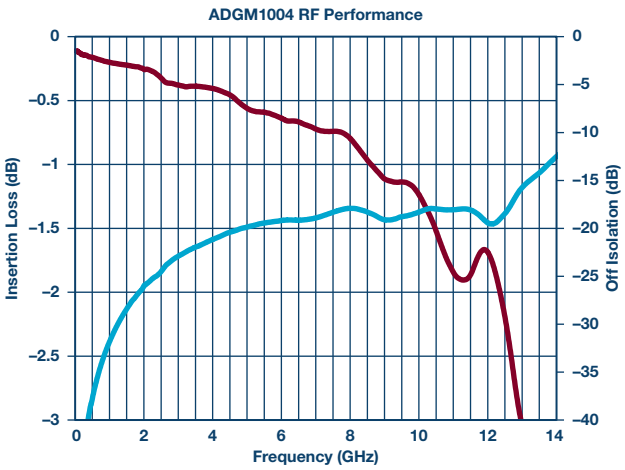
標準電圧リファレンス—シャント・モード動作（続き） / Standard REF—Shunt Mode (Continued)

Part Number	Output Voltage (V)	Initial Accuracy (%)	Current Range		Tempco (ppm/°C) (max)	Output Impedance (Ω)	0.1 Hz to 10 Hz Noise		Temperature Range °C	Type	Package	ECCN Code
			Min (µA)	Max (mA)			µV p-p	ppm p-p				
LT1029	5	0.2, 1	700 µA	10	20, 34	0.6			–55°C to +125°C	Shunt	TO-92	EAR99
LT1004	1.2, 2.5	0.003	10 µA	20	20 typ	0.6			–40°C to +85°C	Shunt	8-lead SO, TO-92	EAR99
LT1034	1.2, 2.5, 7	0.012	20 µA	20	20, 40	1		2.4	–40°C to +85°C	Shunt	8-lead SO, TO-92	EAR99
LT1009	2.5	0.002	400 µA	10	25	0.6			–40°C to +85°C	Shunt	8-lead SO, 8-lead MSOP, TO-92	EAR99
LTC1431	Adjustable	0.004	1 µA	100	30 Typ	0.1	10		–55°C to +125°C	Shunt	8-lead DIP, TO-92	EAR99
ADR525	2.5	0.2, 0.4	50 µA	15	40, 70	0.27	18	7.2	–40°C to +85°C	Shunt	SC70, SOT-23	EAR99
ADR530	3	0.2, 0.4	50 µA	15	40, 70	0.27	22	7.3	–40°C to +85°C	Shunt	SC70, SOT-23	EAR99
ADR550	5	0.2, 0.4	50 µA	15	40, 70	0.27	48	9.6	–40°C to +85°C	Shunt	SC70, SOT-23	EAR99
ADR1581	1.25	0.08, 0.8	60 µA	10	50, 100	0.5	4.5	3.6	–40°C to +85°C	Shunt	SOT-23	EAR99
AD1580	1.225	0.08, 0.8	50 µA	10	50, 100	0.5	5	4.1	–40°C to +85°C	Shunt	SC70, SOT-23	EAR99
ADR512	1.2	0.3	100 µA	10	60	0.3	4	3.3	–40°C to +85°C	Shunt	SOT-23	EAR99
ADR5040 ***New***	2.048	0.1, 0.2	50 µA	15	75, 100	0.2	16.8	8.2	–40°C to +125°C	Shunt	SC70, SOT-23	EAR99
ADR5041 ***New***	2.5	0.1, 0.2	50 µA	15	75, 100	0.2	19.2	7.7	–40°C to +125°C	Shunt	SC70, SOT-23	EAR99
ADR5043 ***New***	3	0.1, 0.2	50 µA	15	75, 100	0.2	25.8	8.6	–40°C to +125°C	Shunt	SC70, SOT-23	EAR99
ADR5044 ***New***	4.096	0.1, 0.2	50 µA	15	75, 100	0.2	32.2	7.9	–40°C to +125°C	Shunt	SC70, SOT-23	EAR99
ADR5045 ***New***	5	0.1, 0.2	50 µA	15	75, 100	0.2	39.6	7.9	–40°C to +125°C	Shunt	SC70, SOT-23	EAR99
ADR510	1	0.35	100 µA	10	85	0.3	4	4.0	–40°C to +85°C	Shunt	SOT-23	EAR99
ADR1500	1.288	0.2	50 µA	10	220	1	5	3.9	–40°C to +85°C	Shunt	SC70	EAR99

スイッチとマルチプレクサ

ADGM1004: SP4T MEMSスイッチ、ドライバ内蔵、0Hz/DC～13GHz 帯域幅、5kVのHBM ESD をRFピンに内蔵





製品ファミリーの利点

- チャンネル密度の向上により、競合する メカニカルRF リレー・ソリューションと比較して容積を最大95%低減
  - 縦横の占有面積を80%低減し、高さを1.5mm未満にすることで、両面配置が可能
- スイッチング速度が20倍向上し、DUTスループットを高めます。
  - 消費電流を1/10に削減し、同時切り替えが可能に
- 信頼性の向上とRF リレー
  - コールド・スイッチング時の寿命を10倍向上
  - 5kVのHBM ESDをRFピンに内蔵することで、手作業の懸念を解消
  - チャージ・ポンプ内蔵により、消費電力を1/10に削減

製品ファミリーのアプリケーション

- 高精度アプリケーションおよびRFアプリケーション用のRFリレーとリード・リレーの置き換え
- 計測器、ATE、高マルチチャンネル・システム

スイッチとマルチプレクサ

MEMS（マイクロ・マシン）スイッチ、0Hz/DC～RF性能まで規定、ドライバ内蔵 / 0 Hz/DC to RF Performance, MEMS Switches with Integrated Driver

Part Number	Configuration	Specifications									Interface	HBM ESD Level—RF Pins (kV)	Package	ECCN Code
		R_{ON} (Ω) (typ)	Off Leakage (nA) (typ)	Frequency Response (Hz) (min)	Frequency Response (GHz) (max)	Insertion Loss (dB) (typ)	Off Isolation (dB) (typ)	IIP3 (dBm) (typ)	Input Power (dBm) (max)	Specified at Frequency (GHz)				
ADGM1304 ***New***	(4:1) × 1	1.6	0.5	0	14	0.26	24	69	36	2.5	Parallel	0.1	LFCSP	EAR99
ADGM1004 ***New***	(4:1) × 1	1.8	0.5	0	13	0.45	24	67	32	2.5	Parallel	5	LFCSP	EAR99

デジタル・エラー検出を持つSPI+インターフェース / SPI+ Interface with Digital Error Detection

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})							Interface	Package	ECCN Code
						Single				Dual					
		R_{ON} (Ω) (typ)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	3.3	5	12	36	±5	±15	±20			
ADGS1412 ***New***	SPST × 4	1.5	0.15	20	170		•	•		•	•		SPI+	LFCSP	EAR99
ADGS5412 ***New***	SPST × 4	9.8	0.1	245	167			•	•		•	•	SPI+	LFCSP	EAR99
ADGS1212 ***New***	SPST × 4	120	0.02	0.9	1000			•		•	•		SPI+	LFCSP	EAR99
ADGS1612 ***New***	SPST × 4	1	0.2	120	34	•	•	•		•			SPI+	LFCSP	EAR99
ADGS5414 ***New***	SPST × 8	13.5	0.15	125	200			•	•		•	•	SPI+	LFCSP	EAR99
ADGS1208/ADGS1209 ***New***	8:1 diff, 4:1 mux	120	0.02	0.4	550			•			•		SPI+	LFCSP	EAR99
ADGS1408/ADGS1409 ***New***	8:1 diff, 4:1 mux	4	0.1	50	60		•	•		•	•		SPI+	LFCSP	EAR99

SPI+: 動作モードが複数ある SPI デバイス

過電圧検出と保護: -55V OVP～+55V OVP / Overvoltage Detection and Protection: –55 V OVP to +55 V OVP

Part Number	Configuration	HBM ESD Level (kV)	Specifications					Characterization Voltages (V_{NOM})				Interface	Package	ECCN Code
								Single		Dual				
			R_{ON} (Ω) (typ)	R_{ON} Flatness (Ω)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	12	36	±15	±20			
ADG5412F/ADG5413F	SPST × 4	5.5	10	0.6	0.3	680	270	•	•	•	•	Parallel	TSSOP,* LFCSP	EAR99
ADG5412BF/ADG5413BF	SPST × 4	3	10	0.6	0.3	680	270	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5436F ***New***	SPDT × 2	6	10	0.6	0.3	654	108	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5243F ***New***	SPDT × 3	3.5	270	7	0.3	0.8	350	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5404F	4:1 mux	5	10	0.6	0.3	680	108	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5208F/ADG5209F ***New***	8:1 diff, 4:1 mux	3.5	250	6.5	0.3	0.4	190/290	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5248F/ADG5249F ***New***	8:1 diff, 4:1 mux	3.5	250	6.5	0.3	0.8	190/320	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99

* 特定のパッケージでは、標準的なスイッチに加えて拡張特性スイッチを提供

チャンネル過電圧検出と保護: -55V OVP～+55V OVP / Channel Overvoltage Detection and Protection: –55 V OVP to +55 V OVP

Part Number	Configuration	HBM ESD Level (kV)	Specifications					Characterization Voltages (V_{NOM})				Interface	Package	ECCN Code
								Single		Dual				
			R_{ON} (Ω) (typ)	R_{ON} Flatness (Ω)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	12	36	±15	±20			
ADG5462F	Channel protector × 4	4	10	0.6	0.3	—	318	•	•	•	•	—	TSSOP, LFCSP	EAR99

スイッチとマルチプレクサ

ADG5401F: ADG5401F:アナログ出力保護のための強力な機能により、過電圧保護を実現

アナログ・デバイセズは、最大±22Vの供給動作電圧で過酷な環境下で使用されるアプリケーションや工業用アプリケーションでラッチアップ耐性を確保し、最大±60Vの過電圧保護を実現する幅広いスイッチを提供しています。アナログ・デバイセズのトレンチ・アイソレーション・プロセスを使用したこれらのデバイスは、ラッチアップに対する耐性を備えています。ラッチアップとは、電源を切らない限り高電流が流れ続け、デバイスを損傷させる可能がある現象であり、できる限り避ける必要があります。

Benefits

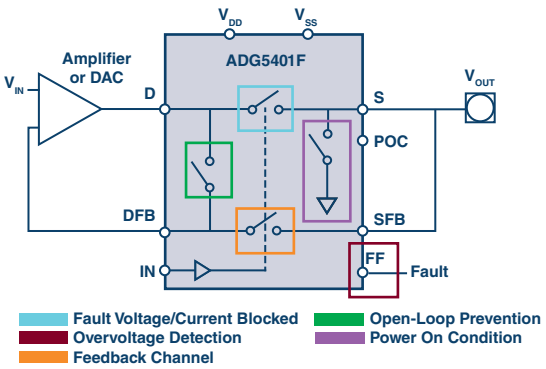
ADG5401Fは、出力駆動アンプ周辺のオープンループを防ぎながら、最大±60Vのアナログ出力過電圧保護を実現します。

- 過電圧保護:スイッチがオフに切り替わり、スイッチの電源電圧を超えるアナログ入力の規定電圧までの耐性を確保します。過電圧状態では、スイッチは高インピーダンス状態にあるため、後段のアナログ部品が保護されます。
- 過電圧検出:デジタル・インジケータで過電圧状態の発生を示し、その結果、チャンネルの不具合を防ぎ、是正措置を講じることができます。
- 帰還チャンネル:この高抵抗チャンネルを使用して、スイッチ抵抗が原因となる誤差を排除します。
- オープンループ防止:内蔵スイッチにより、アンプがオープンループ状態になるのを防ぎます。
- パワーオン状態:ユーザーが選択可能な、ソース・ノードのフロート状態を防ぐ機能です。
- パワーオフ保護:電源がなくても、デバイスを高インピーダンス(オフ)状態で維持します。

最適な堅牢性と保護性能を有し、過電圧保護と検出機能を備えたADG5401Fは、業界で最も小型のパッケージで高性能を実現します。ADG5401Fは、3mm × 2mmのLFCSPパッケージで提供されます。

Applications

- DACおよびアンプ出力保護
- アナログ入力／出力モジュール
- プロセス制御システム／分散型制御システム
- センサー・バイアス



チャンネル過電圧検出と保護: -60V OVP～+60V OVP / Channel Overvoltage Detection and Protection: –60 V OVP to +60 V OVP

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})				Interface	Package	ECCN Code
						Single		Dual				
		R_{ON} (Ω) (typ)	R_{ON} Flatness (Ω)	On Leakage (nA) (typ)	Comment	12	36	±15	±20			
±15 V Analog												
ADG5401F	SPST × 1	7	0.5	0.2	Additional feedback channel, used for DAC and amplifier output protection	•	•	•	•	Parallel	LFCSP	EAR99
ADG5421F	SPST × 2	20	2	0.1		•	•	•	•	Parallel	LFCSP	EAR99

チャンネル過電圧保護: -40V OVP～+40V OVP / Channel Overvoltage Protection: –40 V OVP to +40 V OVP

Part Number	Configuration	Specifications					Characterization Voltages (V_{NOM})				Interface	Package	ECCN Code
							Single		Dual				
		R_{ON} (Ω) (typ)	R_{ON} Flatness (Ω)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	5	12	±5	±15			
ADG465	Channel protector × 1	80	—	0.2	—	—				•	Parallel	SOT-23, MSOP	EAR99
ADG467	Channel protector × 8	62	—	0.2	—	21				•	Parallel	SOIC, SSOP	EAR99

スイッチとマルチプレクサ

過電圧保護: -5.5V OVP～+16V OVP / Overvoltage Protection: –5.5 V OVP to +16 V OVP

Part Number	Configuration	Specifications					Characterization Voltages (V_{NOM})				Interface	Package	ECCN Code
							Single		Dual				
		R_{ON} (Ω) (typ)	R_{ON} Flatness (Ω)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	5	12	±5	±15			
ADG4612/ ADG4613	SPST × 4	5.2	1.4	10	225	293	•	•	•		Parallel	TSSOP, LFCSP	EAR99

±15Vラッチアップなし、高 ESD / ±15 V Latch-Up Immune and High ESD

Part Number	Configuration	HBM ESD Level I/O Port to I/O Port (kV)	HBM ESD Level—All Other Pins (kV)	Specifications				Characterization Voltages (V_{NOM})				Interface	Package	ECCN Code
				R_{ON} (Ω) (typ)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	Single		Dual				
								12	36	±15	±20			
ADG5401	SPST × 1	8	8	6.5	0.2	220	170	•	•	•	•	Parallel	LFCSP, MSOP	EAR99
ADG5421/ADG5423	SPST × 2	8	8	13.5	0.1	240	250	•	•	•	•	Parallel	LFCSP, MSOP	EAR99
ADG5412/ADG5413	SPST × 4	8	8	9.8	0.1	240	167	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5212/ADG5213	SPST × 4	2.5	2.5	160	0.02	0.07	435	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5419	SPDT × 1	8	8	13.5	0.1	130	190	•	•	•	•	Parallel	LFCSP, MSOP	EAR99
ADG5436	SPDT × 2	8	8	9.8	0.1	200	102	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5236	SPDT × 2	2	2	160	0.02	0.6	266	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5433	SPDT × 3	8	8	13.5	0.1	130	145	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5233	SPDT × 3	1.5	8	160	0.08	0.6	205	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5434	SPDT × 4	8	8	13.5	0.1	130	145	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5234	SPDT × 4	1.5	8	160	0.08	0.6	205	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5404	4:1 mux	8	8	9.8	0.1	220	53	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5204	4:1 mux	2	2	160	0.02	0.6	136	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG5408/ADG5409	8:1 diff, 4:1 mux	8	8	13.5	0.1	115	50	•	•	•	•	Parallel	TSSOP, LFCSP*	EAR99
ADG5208/ADG5209	8:1 diff, 4:1 mux	2	8	160	0.01	0.4	54/133	•	•	•	•	Parallel	TSSOP,* LFCSP	EAR99
ADG5206/ADG5207	16:1 diff, 8:1 mux	1	8	155	0.02	0.35	60/140	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99

* 特定のパッケージでは、標準的なスイッチに加えて拡張特性スイッチを提供

±15Vアナログ信号用 / ±15 V Analog

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})				Interface	Package	ECCN Code
		R_{ON} (Ω) (typ)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	Single		Dual				
						5	12	±5	±15			
ADG1401/ADG1402	SPST × 1	1	0.2	12	120	•	•	•	•	Parallel	LFCSP, MSOP	EAR99
ADG417	SPST × 1	25	0.1	7	—	•	•	•	•	Parallel	DIP, SOIC	EAR99
ADG1201	SPST × 1	120	0.04	0.8	660		•	•	•	Parallel	SOT	EAR99
ADG1421/ADG1422/ADG1423	SPST × 2	2.1	0.2	5	180	•	•	•	•	Parallel	LFCSP, MSOP	EAR99
ADG1221/ADG1222/ADG1223	SPST × 2	120	0.01	0.1	960		•	•	•	Parallel	MSOP	EAR99
ADG1411/ADG1412/ADG1413	SPST × 4	1.5	0.15	20	170	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
LTC201A/LTC202/LTC203	SPST × 4	65	0.02	5	—	•			•	Parallel	DIP, SOIC	EAR99
LTC221/LTC222	SPST × 4	65	0.02	5	—	•			•	Parallel	DIP, SOIC	EAR99
ADG1211/ADG1212/ADG1213	SPST × 4	120	0.02	0.3	1000		•	•	•	Parallel	TSSOP,* LFCSP	EAR99
ADG1311/ADG1312/ADG1313	SPST × 4	130	10	2	600		•		•	Parallel	TSSOP, SOIC	EAR99
ADG1414	SPST × 8	9.5	0.1	10	256	•	•	•	•	SPI	TSSOP, LFCSP	EAR99
ADG1419	SPDT × 1	2.1	0.2	16	135		•	•	•	Parallel	LFCSP, MSOP	EAR99
ADG1219	SPDT × 1	120	0.02	0.1	520		•	•	•	Parallel	SOT	EAR99
ADG1436	SPDT × 2	1.5	0.1	20	110	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG1236	SPDT × 2	120	0.02	1	1000		•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG1433/ADG1434	SPDT × 3/SPDT × 4	4	0.05	50	200	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG1233/ADG1234	SPDT × 3/SPDT × 4	120	0.02	0.5	900		•	•	•	Parallel	TSSOP, LFCSP	EAR99

* 特定のパッケージでは、標準的なスイッチに加えて拡張特性スイッチを提供

スイッチとマルチプレクサ

±15Vアナログ信号用（続き） / ±15 V Analog (Continued)

Part Number	Configuration	Specifications				Characterization Voltages (VNOM)				Interface	Package	ECCN Code
		RON (Ω) (typ)	On Leakage (nA) (typ)	QINJ (pC) (typ)	BW (MHz)	Single		Dual				
						5	12	±5	±15			
ADG1334	SPDT × 4	130	10	2	700		•		•	Parallel	SSOP	EAR99
ADG1404	4:1 mux	1.5	0.1	20	55	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG1204	4:1 mux	120	0.02	0.7	800		•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG1408/ADG1409	8:1 diff, 4:1 mux	4	0.1	50	60/115	•	•	•	•	Parallel	TSSOP,* LFCSP	EAR99
ADG1438/ADG1439	8:1 diff, 4:1 mux	9.5	0.1	4	82/130	•	•	•	•	SPI	TSSOP, LFCSP	EAR99
ADG1208/ADG1209	8:1 diff, 4:1 mux	120	0.02	0.4	550		•	•	•	Parallel	TSSOP, LFCSP, SOIC	EAR99
ADG1308/ADG1309	8:1 diff, 4:1 mux	130	1	2	500		•		•	Parallel	TSSOP, SOIC	EAR99
ADG1406/ADG1407	16:1 diff, 8:1 mux	9.5	0.05	10	60/110	•	•	•	•	Parallel	TSSOP, LFCSP	EAR99
ADG1206/ADG1207	16:1 diff, 8:1 mux	120	0.08	0.5	280/490		•	•	•	Parallel	TSSOP, LFCSP	EAR99

* 特定のパッケージでは、標準的なスイッチに加えて拡張特性スイッチを提供

±5Vアナログ信号用 / ±5 V Analog

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})							Interface	Package	ECCN Code
		R_{ON} (Ω) (typ)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	Single			Dual						
						2 to 12	2.7 to 5.5	3.3 to 16	±5	±2 to ±6	±2.7 to ±5.5	±3.3 to ±8			
ADG601/ADG602	SPST × 1	2	0.01	250	180		•				•		Parallel	SOT, MSOP	EAR99
ADG621	SPST × 2	4	0.01	110	230		•				•		Parallel	MSOP	EAR99
ADG1611/ADG1612/ ADG1613	SPST × 4	1	0.2	140	42			•				•	Parallel	TSSOP, LFCSP	EAR99
ADG511/ADG512/ADG513	SPST × 4	30	0.05	11	—		•				•		Parallel	DIP, CerDIP, SOIC	EAR99
ADG611/ADG612/ADG613	SPST × 4	85	0.01	0.5	680		•				•		Parallel	TSSOP,*	EAR99
ADG619	SPDT × 1	4	0.01	110	190		•				•		Parallel	SOT,* MSOP	EAR99
ADG1636	SPDT × 2	1	0.3	130	25			•				•	Parallel	TSSOP, LFCSP	EAR99
ADG636	SPDT × 2	85	0.01	1.2	610		•				•		Parallel	TSSOP	EAR99
ADG1633	SPDT × 3	4.5	0.02	12.5	103			•				•	Parallel	TSSOP, LFCSP	EAR99
ADG633	SPDT × 3	52	0.005	2	580	•				•			Parallel	TSSOP, LFCSP	EAR99
ADG1634	SPDT × 4	4.5	0.02	12.5	103			•				•	Parallel	TSSOP, LFCSP	EAR99
ADG1604	4:1 mux	1	0.2	140	15			•				•	Parallel	TSSOP, LFCSP	EAR99
ADG604	4:1 mux	85	0.01	1	280		•				•		Parallel	TSSOP	EAR99
ADG608/ADG609	8:1 diff, 4:1 mux	22	0.05	6	—		•				•		Parallel	TSSOP, DIP, SOIC	EAR99
ADG1608/ADG1609	8:1 diff, 4:1 mux	4.5	0.03	24	40/71			•				•	Parallel	TSSOP, LFCSP	EAR99
LTC1380/LTC1393	8:1 diff, 4:1 mux	35	0.05	1	—		•		•				SMBus, I²C	SOIC, QSOP	EAR99
ADG658/ADG659	8:1 diff, 4:1 mux	45	0.005	2	160	•				•			Parallel	TSSOP, LFCSP, QSOP	EAR99
LTC1390	8:1 mux	45	0.05	2	—		•		•				SPI	DIP, SOIC	EAR99
LTC1391	8:1 mux	45	0.05	2	—		•		•				SPI	DIP, SOIC, QSOP	EAR99
ADG1606/ADG1607	16:1 diff, 8:1 mux	4.5	0.1	27	21/37			•				•	Parallel	TSSOP, LFCSP	EAR99

* 特定のパッケージでは、標準的なスイッチに加えて拡張特性スイッチを提供

低電圧、DC～高周波RF / Low Voltage, DC to High Frequency RF

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})	Interface	Package	ECCN Code
		Off Isolation	Insertion Loss	Power (dBm)	–3 dB BW (MHz)	Single			
ADG901/ADG902	SPST × 1	40 dB (1 GHz)	0.8 dB (1 GHz)	17	4500	1.65 to 2.75	Parallel	LFCSP,* MSOP	EAR99
ADG918/ADG919	SPDT × 1	43 dB (1 GHz)	0.8 dB (1 GHz)	17	4000	1.65 to 2.75	Parallel	LFCSP, MSOP	EAR99
ADG936/ADG936-R	SPDT × 2	36 dB (1 GHz)	0.9 dB (1 GHz)	16	4000	1.65 to 2.75	Parallel	TSSOP, LFCSP	EAR99
ADG904/ADG904-R	4:1 mux	37 dB (1 GHz)	1.1 dB (1 GHz)	16	2500	1.65 to 2.75	Parallel	TSSOP, LFCSP*	EAR99

* 特定のパッケージでは、標準的なスイッチに加えて拡張特性スイッチを提供

スイッチとマルチプレクサ

バッファ非内蔵型アナログ・クロスポイント・アレイ / Unbuffered Analog Crosspoint Arrays

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})		Interface	Packaging	ECCN Code
		R_{ON} (Ω) (typ)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	Single	Dual			
						12	±5			
ADG2128	8 mm × 12 array	30	0.03	3.5	300	•	•	I²C	LFCSP	EAR99
ADG2188	8 mm × 8 array	30	0.03	3.5	300	•	•	I²C	LFCSP	EAR99

バス・スイッチ / Bus Switches

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})						Level Translation	Package	ECCN Code
		R_{ON} (Ω) (typ)	Propagation Delay (ps) (max)	Bus Enable (ns) (typ)	Data Rate (Mbps)	Single				Dual				
						1.15 to 5.5	1.65 to 3.6	2.3 to 3.6	3.3 to 5.0	0 to –24.2	10.8 to 35			
ADG3241	1-bit bidirectional	4.5	225	3.2	1500			•				Down	SC70	EAR99
ADG3242	2-bit bidirectional	4.5	225	3.2	1500			•				Down	SOT-23, die	EAR99
ADG3243	2-bit bidirectional	4.5	225	3.2	1500			•				Down	SOT-23	EAR99
ADG3245	8-bit bidirectional	4.5	225	3.2	1244			•				Down	TSSOP, LFCSP	EAR99
ADG3246	10-bit bidirecional	4.5	225	3.2	1244			•				Down	LFCSP	EAR99
ADG3247	16-bit bidirecional	4.5	225	3.2	1244			•				Down	TSSOP	EAR99
ADG3248	1-bit 2:1 bidirectional	4.5	225	3.2	1244			•				Down	SC70	EAR99
ADG3257	4-bit 2:1 bidirectional	2	100	5	933				•			Down	QSOP	EAR99

レベル変換器 / Level Translators

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})						Level Translation	Package	ECCN Code
		R_{ON} (Ω) (typ)	Propagation Delay (ps) (max)	Bus Enable (ns) (typ)	Data Rate (Mbps)	Single				Dual				
						1.15 to 5.5	1.65 to 3.6	2.3 to 3.6	3.3 to 5.0	0 to –24.2	10.8 to 35			
ADG3231	1-bit unidirectional	—	4000	—	—		•					Up/down	SOT-23	EAR99
ADG3233	1-bit bypass unidirectional	—	3500	4	—		•					Up/down	SOT-23, MSOP	EAR99
ADG3123	8-bit CMOS to HV unidirectional	—	8000	—	0.2					•	•	Up	TSSOP	EAR99
ADG3301	1-bit bidirectional	—	5000	1000	50	•						Up/down	SC70	EAR99
ADG3304	4-bit bidirectional	—	5000	1000	50	•						Up/down	TSSOP,* LFCSP, WLCSP	EAR99
ADG3300	8-bit bidirectional	—	5000	1000	50	•						Up/down	TSSOP	EAR99
ADG3308/ ADG3308-1	8-bit bidirectional	—	5000	1000	50	•						Up/down	TSSOP, LFCSP, WLCSP	EAR99

* 特定のパッケージでは、標準的なスイッチに加えて拡張特性スイッチを提供

< 5.5Vアナログ信号用 / <5.5 V Analog

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})				Interface	Package	ECCN Code
		R_{ON} (Ω) (typ)	On Leakage (nA) (typ)	Q_{INJ} (pC) (typ)	BW (MHz)	Single			Dual			
						1.65 to 3.6	2.7 to 5.5	1.8 to 5.5	±2.5			
ADG801/ADG802	SPST × 1	0.25	0.01	50	12			•		Parallel	SOT, MSOP	EAR99
ADG841/ADG842	—	0.28	0.2	200	21	•				Parallel	SC70	EAR99
ADG701/ADG702/ADG701L/ ADG702L	SPST × 1	2	0.01	5	200			•		Parallel	SOT, MSOP	EAR99
ADG741/ADG742	SPST × 1	2	0.01	5	200			•		Parallel	SC70	EAR99
ADG751	SPST × 1	15	0.01	1	300			•		Parallel	SOT, MSOP	EAR99
ADG821/ADG822/ADG823	SPST × 2	0.5	0.01	15	24			•		Parallel	MSOP	EAR99
ADG721/ADG722/ADG723	SPST × 2	2.5	0.01	2	200			•		Parallel	LFCSP, MSOP	EAR99
ADG811/ADG812	SPST × 4	0.5	0.2	30	90	•				Parallel	TSSOP	EAR99
ADG711/ADG712/ADG713	SPST × 4	2.5	0.01	3	200			•		Parallel	TSSOP, SOIC	EAR99
ADG781/ADG782/ADG783	SPST × 4	2.5	0.01	3	200			•		Parallel	LFCSP	EAR99
ADG714	SPST × 8	2.5	0.01	3	155		•		•	SPI	TSSOP	EAR99
ADG715	SPST × 8	2.5	0.01	3	155		•		•	I²C	TSSOP	EAR99
ADG819	SPDT × 1	0.5	0.01	20	17			•		Parallel	SOT, MSOP, WLCSP	EAR99

* 特定のパッケージでは、標準的なスイッチに加えて拡張特性スイッチを提供

スイッチとマルチプレクサ

< 5.5Vアナログ信号用（続き） / <5.5 V Analog (Continued)

Part Number	Configuration	Specifications				Characterization Voltages (V_{NOM})				Interface	Package	ECCN Code
						Single			Dual			
		R_{ON} (Ω) (typ)	On Leakage (nA) (typ))	Q_{INJ} (pC) (typ)	BW (MHz)	1.65 to 3.6	2.7 to 5.5	1.8 to 5.5	±2.5			
ADG839	SPDT × 1	0.35	0.2	70	25	•				Parallel	SC70	EAR99
ADG849	SPDT × 1	0.5	0.04	50	38			•		Parallel	SC70	EAR99
ADG852	SPDT × 1	0.8	0.03	30	100			•		Parallel	LFCSP	EAR99
ADG719	SPDT × 1	2.5	0.01	—	200			•		Parallel	SOT,* MSOP	EAR99
ADG749	SPDT × 1	2.5	0.01	—	200			•		Parallel	SC70	EAR99
ADG779	SPDT × 1	2.5	0.01	2	200			•		Parallel	SC70	EAR99
ADG752	SPDT × 1	15	0.01	—	250			•		Parallel	SOT, MSOP	EAR99
ADG884	SPDT × 2	0.28	0.2	125	18			•		Parallel	LFCSP, MSOP, WLCSP	EAR99
ADG824	SPDT × 2	0.5	0.2	27	90	•				Parallel	LFCSP	EAR99
ADG836/ADG836L	SPDT × 2	0.5	0.2	40	57	•				Parallel	LFCSP, MSOP	EAR99
ADG854	SPDT × 2	0.8	0.03	30	100			•		Parallel	LFCSP	EAR99
ADG736/ADG736L	SPDT × 2	2.5	0.01	—	200			•		Parallel	MSOP	EAR99
ADG787	SPDT × 2	2.5	0.05	14	145			•		Parallel	LFCSP, MSOP, WLCSP	EAR99
ADG772	SPDT × 2	6.7	0.2	0.5	630	•				Parallel	LFCSP	EAR99
ADG733	SPDT × 3	2.5	0.01	3	160			•	•	Parallel	TSSOP, QSOP	EAR99
ADG786	SPDT × 3	2.5	0.01	3	160			•	•	Parallel	LFCSP	EAR99
ADG858	SPDT × 4	0.58	0.01	45	70			•		Parallel	LFCSP	EAR99
ADG774	SPDT × 4	2.2	0.01	7	240			•		Parallel	SOIC, QSOP	EAR99
ADG784	SPDT × 4	2.2	0.01	10	240			•		Parallel	LFCSP	EAR99
ADG774A	SPDT × 4	2.2	0.001	6	400			•		Parallel	LFCSP, QSOP	EAR99
ADG734	SPDT × 4	2.5	0.01	3	160			•	•	Parallel	TSSOP	EAR99
ADG788	SPDT × 4	2.5	0.01	3	160			•	•	Parallel	LFCSP	EAR99
ADG794	SPDT × 4	5	0.001	6	300		•			Parallel	QSOP	EAR99
ADG888	DPDT × 2	0.4	0.2	70	29			•		Parallel	TSSOP, LFCSP, WLCSP	EAR99
ADG804	4:1 mux	0.5	0.1	28	33	•				Parallel	MSOP	EAR99
ADG704	4:1 mux	2.5	0.01	3	200			•		Parallel	MSOP	EAR99
ADG728/ADG729	8:1 diff, 4:1 mux	2.5	0.01	3	65/100		•			I²C	TSSOP	EAR99
ADG738/ADG739	8:1 diff, 4:1 mux	2.5	0.01	3	65/100		•			SPI	TSSOP	EAR99
ADG708/ADG709	8:1 diff, 4:1 mux	3	0.01	3	55			•	•	Parallel	TSSOP	EAR99
ADG758/ADG759	8:1 diff, 4:1 mux	3	0.01	3	55			•	•	Parallel	LFCSP	EAR99
ADG706/ADG707	16:1 diff, 8:1 mux	2.5	0.01	5	25/36			•	•	Parallel	TSSOP	EAR99
ADG726/ADG732	32:1 diff-dual, 16:1 mux	4	0.05	5	34/18			•	•	Parallel	LFCSP, TQFP	EAR99
ADG725/ADG731	32:1 diff-dual, 16:1 mux	4	0.05	5	34/18			•	•	SPI	TSSOP, LFCSP, TQFP	EAR99

* 特定のパッケージでは、標準的なスイッチに加えて拡張特性スイッチを提供

高温動作保証品 / High Temperature

Part Number	Configuration	Temperature Range	Specifications				Characterization Voltages (V_{NOM})							Interface	Package	ECCN Code
							Single				Dual					
			R_{ON} (Ω) (max)	On Leakage (nA) (max)	Q_{INJ} (pC)	BW (MHz)	3	5	12	36	±2.5	±15	±20			
ADG798 ***New***	8:1 mux	−55°C to +210°C	10	2600	3	55	•	•			•			Parallel	Ceramic flatpack, ceramic flatpack RFG	EAR99
ADG5298 ***New***	8:1 mux	−55°C to +210°C	400	70	0.2	110			•	•		•	•	Parallel	Ceramic flatpack, ceramic flatpack RFG	EAR99

温度センサー

ADT7420/ADT7320: 補正無しで ±0.25°C精度の16ビット・デジタル温度センサー

主な特長

- ADT7420: I²Cインターフェース
- ADT7320: SPIインターフェース
- 業界をリードする高精度: 最大精度範囲: -20°C～+105°C
- 温度範囲: -40°C～+150°C
- 16 ビット温度分解能: 0.0078°C
- キャリブレーション不要
- 自己発熱なし、直線性補正不要
- パワーセービング・モードでは1サンプル/1秒（SPS）
- クリティカル温度インジケータ
- 高温／低温設定値による割り込み
- RoHS 準拠の16 ピンLFCSPパッケージ

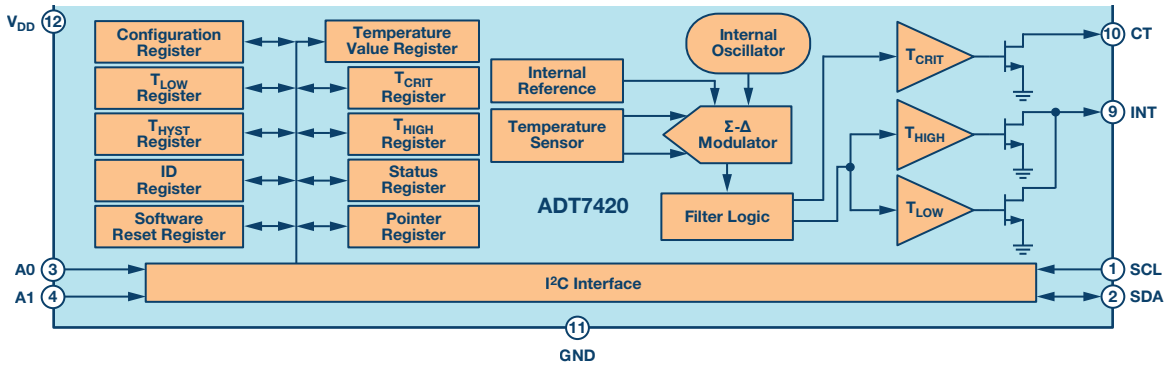
利点

- 完全に統合化されたデジタル温度計測ソリューション
- デジタル・インターフェース（SPI/I²C）により容易に導入可能、ユーザーによる温度キャリブレーション／補正が不要
- 優れた長期安定性と信頼性—抵抗、ノイズ、バッチのばらつきの問題なし

アプリケーション

- RTD とサーミスタの置き換え
- 医療機器
- 冷接点補償
- 工業用制御とテスト
- 食料の輸送と保管
- 環境モニタと HVAC

V_{RANGE}	Active Current	Shutdown Current	Interface	Package	T_{RANGE}
2.7 V to 5.5 V	210 µA (typ)	2 µA (typ)	SPI/I²C	4 mm × 4 mm LFCSP	–40°C to +150°C



温度センサー

アナログ出力 / Analog Output

Part Number	Interface	Function/ Resolution	Max Accuracy	Operating Range (°C)	Supply Range (V)	Max Current	Packages	Features	ECCN Code
ADT5912 ***Coming Soon***	Voltage output	10 mV/K	±0.1°C @ –20°C to +90°C	–40 to +125	–4.75 to +5.2	–2 mA	4-lead LFCSP	2-terminal temperature transducer	EAR99
AD590	Current output	1 µA/K	±1.0°C @ –55°C to +150°C	–55 to +150	4 to 30	298.2 µA	TO-52, 2-lead FP, 8-lead SOIC, die, 4-lead LFCSP	2-terminal temperature transducer	EAR99
AD592	Current output	1 µA/K	±1.0°C @ –25°C to +105°C	–25 to +105	4 to 30	298.2 µA	TO-92, die	2-terminal temperature transducer	EAR99
TMP35/TMP36	Voltage output	10 mV/°C	±2°C @ 25°C	–40 to +125	2.7 to 5.5	50 µA	TO-92, 5-lead SOT-23, 8-lead SOIC	Voltage output, wide temperature range	EAR99
TMP37	Voltage output	20 mV/°C	±2°C @ 25°C	5 to 100	2.7 to 5.5	50 µA	TO-92, 5-lead SOT-23, 8-lead SOIC	Voltage output, limited temperature range	EAR99
AD22100	Voltage output	22.5 mV/°C	±2°C @ –50°C to +150°C	–50 to +150	4 to 6.5	650 µA	TO-92, 8-lead SOIC, die	Ratiometric sensor	EAR99
AD22103	Voltage output	28 mV/°C	±2.5°C @ 0°C to 100°C	0 to 100	2.7 to 3.6	600 µA	TO-92, 8-lead SOIC	Ratiometric sensor	EAR99
LTC2997	Voltage output	4 mV/K	±1°C @ 0°C to 100°C	–40 to +125	2.5 to 5.5	250 µA	6-lead LFCSP	Voltage ouptut, internal/external temperature sensor	EAR99

デジタル出力 / Digital Output

Part Number	Interface	Function/ Resolution	Max Accuracy	Operating Range (°C)	Supply Range (V)	Max Current	Packages	Features	ECCN Code
ADT7422 ***Coming Soon***	I²C/SMBus	16-bit local	±0.1°C @ 37°C to 39°C	–40 to +150	2.7 to 5.5	270 µA	16-lead LFCSP	16-bit digital temperature sensor, critical temperature indicator, programmable interrupt	EAR99
ADT7420	I²C/SMBus	16-bit local	±0.25°C @ –20°C to +105°C	–40 to +150	2.7 to 5.5	270 µA	16-lead LFCSP	16-bit digital temperature sensor, critical temperature indicator, programmable interrupt	EAR99
ADT7320	SPI	16-bit local	±0.25°C @ –20°C to +105°C	–40 to +150	2.7 to 5.5	270 µA	16-lead LFCSP	16-bit digital temperature sensor, critical temperature indicator, programmable interrupt	EAR99
ADT7410	I²C/SMBus	16-bit local	±0.5°C @ –40°C to +105°C	–55 to +150	2.7 to 5.5	270 µA	8-lead SOIC, 16-lead LFCSP	16-bit digital temperature sensor, critical temperature indicator, programmable interrupt	EAR99
ADT7310	SPI	16-bit local	±0.5°C @ –40°C to +105°C	–55 to +150	2.7 to 5.5	270 µA	8-lead SOIC, 16-lead LFCSP	16-bit digital temperature sensor, critical temperature indicator, programmable interrupt	EAR99
ADT7311	SPI	16-bit local	±0.5°C @ –40°C to +105°C	–55 to +150	2.7 to 5.5	270 µA	8-lead SOIC	Automotive qualified, 16-bit digital temperature sensor	EAR99
ADT7312	SPI	16-bit local	±1°C @ –40°C to +175°C	–55 to +175	2.7 to 5.5	350 µA	Die form	Automotive qualified, 16-bit digital temperature sensor	EAR99
ADT75	I²C/SMBus	12-bit local	±1°C @ 0°C to 70°C	–55 to +125	2.7 to 5.5	525 µA	8-lead SOIC, 8-lead MSOP	12-bit digital temperature sensor	EAR99
ADT7301	SPI	13-bit local	±1°C @ 0°C to 70°C	–40 to +150	2.7 to 5.25	1.6 mA	6-lead SOT-23, 8-lead MSOP	13-bit digital temperature sensor	EAR99
ADT7302	SPI	13-bit local	±2°C @ 0°C to 70°C	–40 to +150	2.7 to 5.25	1.6 mA	6-lead SOT-23, 8-lead MSOP	13-bit digital temperature sensor	EAR99
TMP05/TMP06	PWM	0.025°C resolution	±1°C @ 0°C to 70°C	–40 to +150	2.7 to 5.5	0.6 mA	5-lead SC70, 5-lead SOT-23	Open-drain, push-pull, daisy-chain mode, one shot mode	EAR99
AD7414/ AD7415	I²C/SMBus	10-bit local	±1.5°C @ –40°C to 70°C	–40 to +125	2.7 to 5.5	0.1 mA	6-lead SOT-23, 5-lead SOT-23, 8-lead MSOP	10-bit digital temperature sensor, supports SMBus alert function	EAR99
AD7814	SPI	10-bit local	±2°C @ 0°C to +85°C	–55 to +125	2.7 to 5.5	400 µA	6-lead SOT-23	10-bit digital temperature sensor	EAR99
ADT7408	I²C/SMBus	10-bit local	±3°C @ 40°C to +125°C	–20 to +125	3 to 3.6	550 µA	8-lead LFCSP	12-bit digital temperature sensor	EAR99
TMP03/TMP04	PWM	0.1°C/LSB	±4°C @ –20°C to +100°C	–40 to +150	4.5 to 7	1.3 mA	TO-92, 8-lead SOIC, 8-lead TSSOP	Open collector, CMOS-/TTL-compatible output	EAR99

温度センサー

トリップ・ポイント検出 / Trip Point

Part Number	Interface	Function/ Resolution	Max Accuracy	Operating Range (°C)	Supply Range (V)	Max Current (µA)	Packages	Features	ECCN Code
ADT6501/ ADT6503	Factory set	10°C increments	±4°C @ –15°C to +15°C	–55 to +125	2.7 to 5.5	50	5-lead SOT-23	Factory set over/undertemperature indicators; open-drain output	EAR99
ADT6502/ ADT6504	Factory set	10°C increments	±4°C @ –15°C to +15°C	–55 to +125	2.7 to 5.5	50	5-lead SOT-23	Factory set over/undertemperature indicators; push-pull output	EAR99
ADT6401	Pin selectable	10°C increments	±4°C @ –15°C to +15°C	–55 to +125	2.7 to 5.5	50	6-lead SOT-23	Pin set over/undertemperature indicators; open-drain output	EAR99
ADT6402	Pin selectable	10°C increments	±4°C @ –15°C to +15°C	–55 to +125	2.7 to 5.5	50	6-lead SOT-23	Pin set over/undertemperature indicators; push-pull output	EAR99
TMP01	Resistor programmable	Voltage output (5 mV/K)	±1.5°C @ 25°C	–55 to +125	4.5 to 13.2	500	8-lead SOIC, 8-lead PDIP	Resistor programmable window comparator; voltage output	EAR99

DAC、ADC または両方を備えたデジタル出力 / Integrated Digital Output with DACs/ADCs/Both

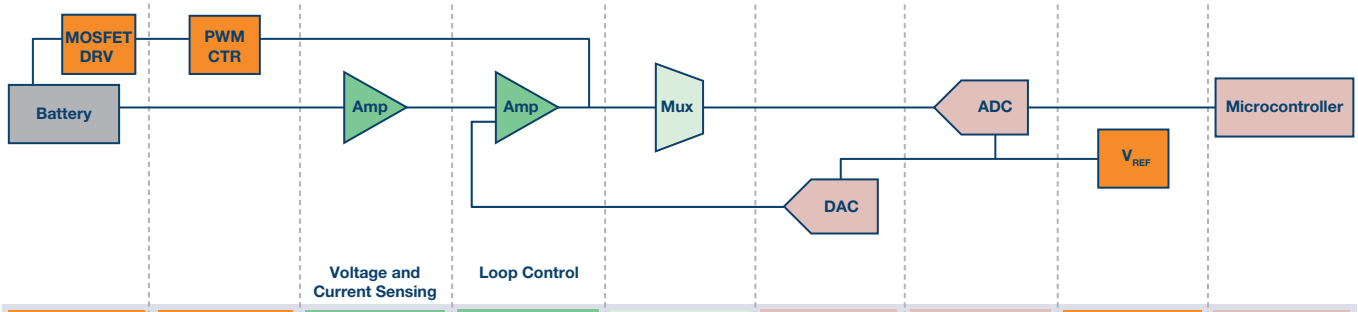
Part Number	Interface	Function/ Resolution	Max Accuracy	Operating Range (°C)	Supply Range (V)	Max Current (mA)	Packages	Features	ECCN Code
AD7417	I²C/SMBus	10-bit local	±1°C @ 25°C	–40 to +125	2.7 to 5.5	0.6	16-lead SOIC, 16-lead TSSOP	4-channel, external, 10-bit ADC input and temperature sensor	EAR99
AD7418	I²C/SMBus	10-bit local	±1°C @ 25°C	–40 to +125	2.7 to 5.5	0.6	8-lead SOIC, 8-lead MSOP	1-channel, external, 10-bit ADC input and temperature sensor	EAR99
AD7817	SPI	10-bit local	±1°C @ 25°C	–55 to +125	2.7 to 5.5	2	16-lead SOIC, 16-lead TSSOP	4-channel, external, ADC input and temperature sensor	EAR99
AD7818	SPI	10-bit local	±2°C @ 25°C	–55 to +125	2.7 to 5.5	2	8-lead SOIC, 8-lead MSOP	1-channel, external, ADC input and temperature sensor	EAR99
ADT7516	SMBus/SPI	10-bit local and 10-bit remote	±2°C @ 0°C to +85°C	–40 to +125	2.7 to 5.5	3	16-lead QSOP	12-bit, quad DAC; 10-bit, 4-channel ADC; 10-bit temperature sensors	EAR99
ADT7411	SMBus/SPI	10-bit local	±3°C @ 0°C to +85°C	–40 to +125	2.7 to 5.5	3	16-lead QSOP	10-bit, 8-channel ADC with 10-bit local and remote temperature sensors	EAR99
ADT7316	SMBus/SPI	10-bit local	±3°C @ 0°C to +85°C	–40 to +125	2.7 to 5.5	3	16-lead QSOP	12-bit, quad DAC with 10-bit local and remote temperature sensors	EAR99

ファン・コントローラ / Fan Controllers

Part Number	Interface	Function/ Resolution	Max Accuracy	Operating Range (°C)	Supply Range (V)	Max Current	Packages	Features	ECCN Code
ADT7470	I²C/SMBus	PWM fan control	Connects to TMP05/TMP06	–40 to +125	3.0 to 5.5	0.8 mA	16-lead QSOP	4-channel PWM fan control using TMP05/ TMP06 temperature sensor	EAR99

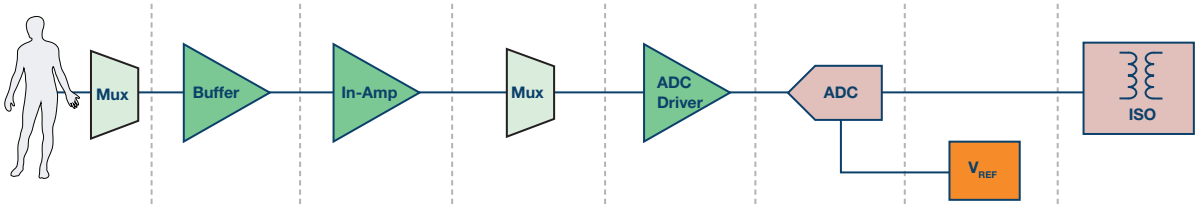
センサー・インターフェース・シグナル・チェーン・ソリューション

バッテリのフォーメーションおよびテスト



		Voltage and Current Sensing	Loop Control					
ADuM7223	ADP1972	AD8221/ AD8226	ADA4177	ADG52xxF	AD5689R	AD7173/ AD7175	LT6657	Blackfin®
	ADP1974	LT6015	LTC2057	ADG12xx	AD5360	AD7124	LTC6655	
		AD8276	ADTL082		AD5371	AD7779	ADR44x	
		ADA8479	ADA4522				ADR45xx	
		LTC6375/ LTC6376					LTC6652	
		LT1997-3/ LT1997-2/ LT1997-1						
		AD8450						
		AD8451						
		AD8452						

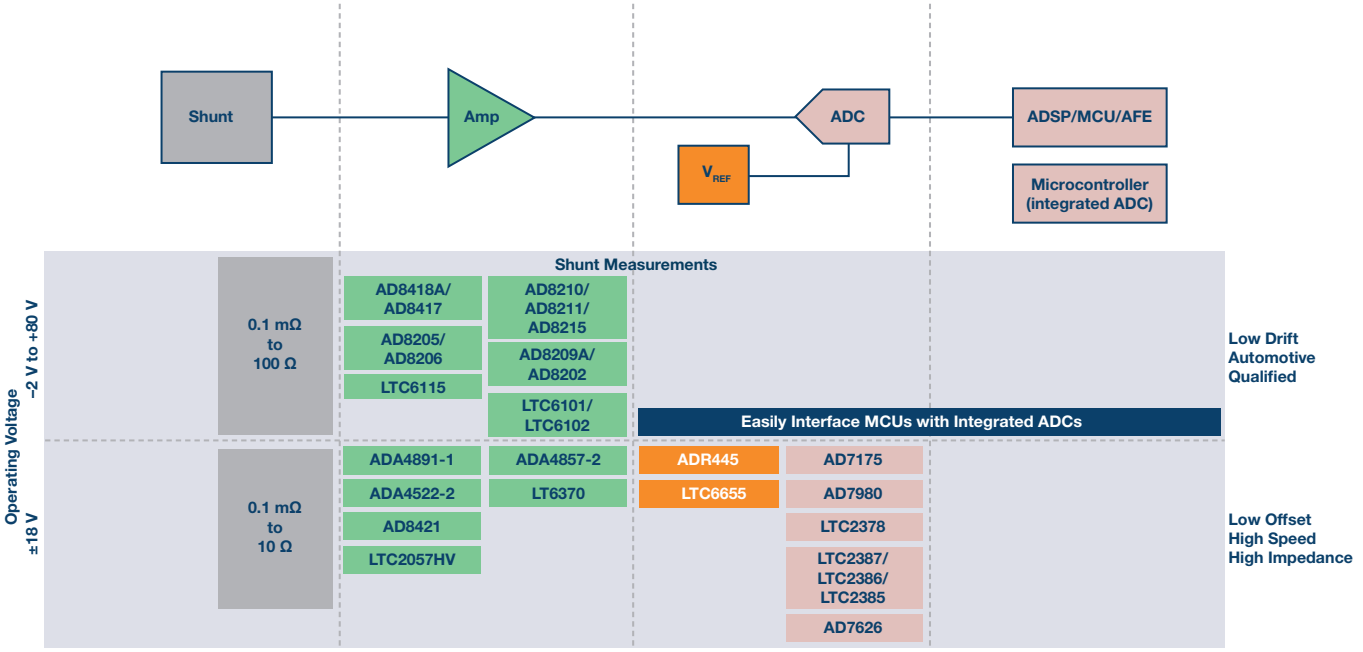
生体電位検出



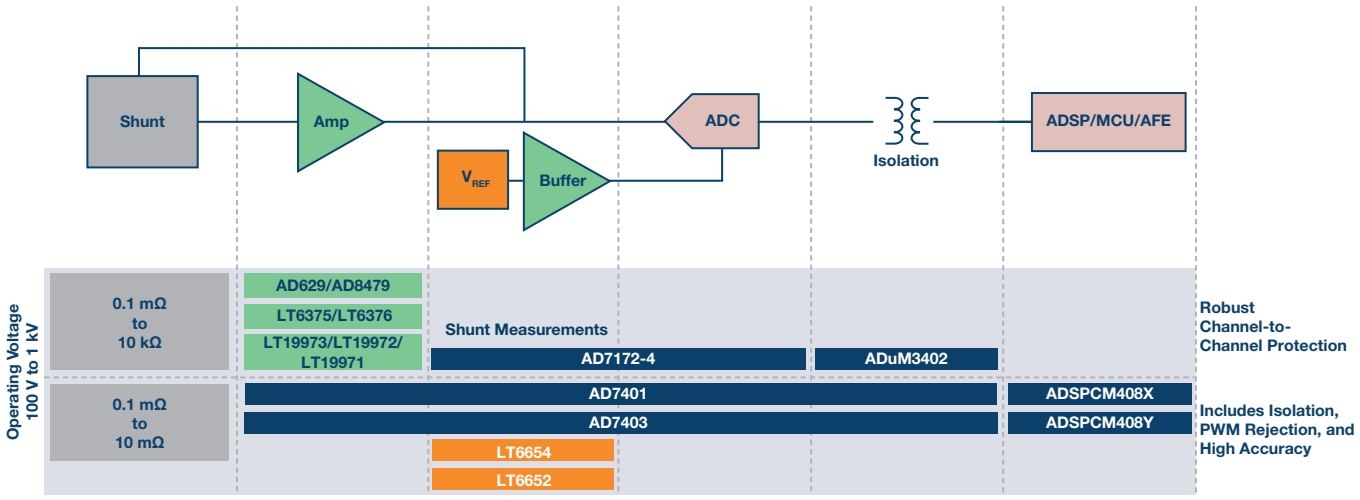
ADG1204	AD8244	AD8237	ADG1204	ADA4522	AD7982	LT6657	ADuM440x	ECG/EEG/EMG Discrete and Core Technology
ADG1436	AD8606	AD8235	ADG1436	AD8475	AD7960	ADR43xx		
	ADA4661	AD8422		LTC6363	AD7091	LTC6652		
	LTC6240/ LTC6244	AD8226			AD4001			
	LTC6078/ LTC6081	AD8220			LTC2387/ LTC2386/ LTC2385			
		LT6370			LTC2378			
AD8232								Integrated Solutions
AD8233								
ADAS1000								

センサー・インターフェース・シグナル・チェーン・ソリューション

電流検出—中電圧レール・シャント

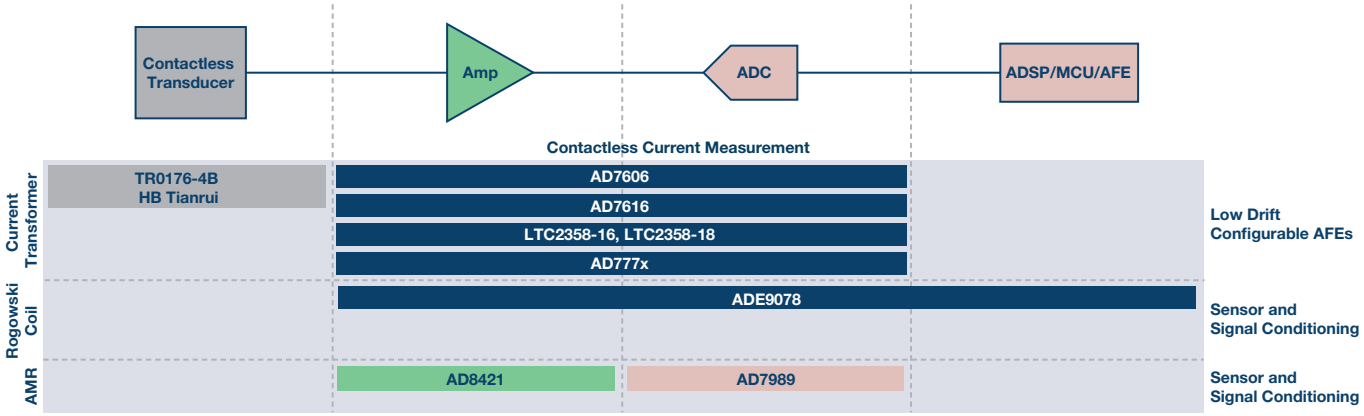


電流検出—高電圧レール・シャント

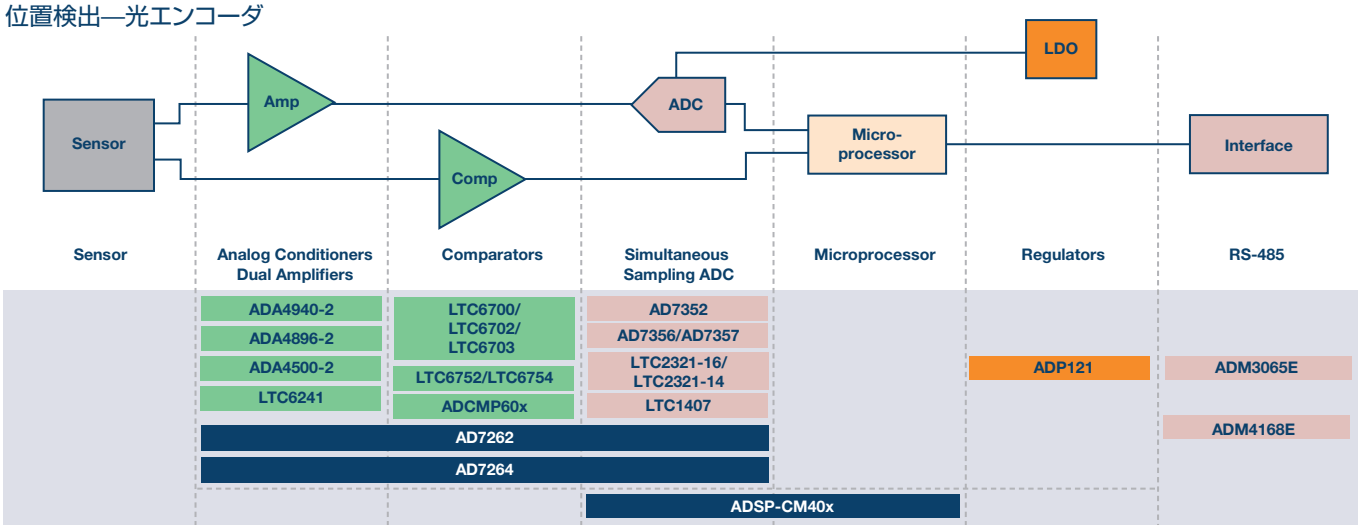


センサー・インターフェース・シグナル・チェーン・ソリューション

電流検出—非接触電流測定

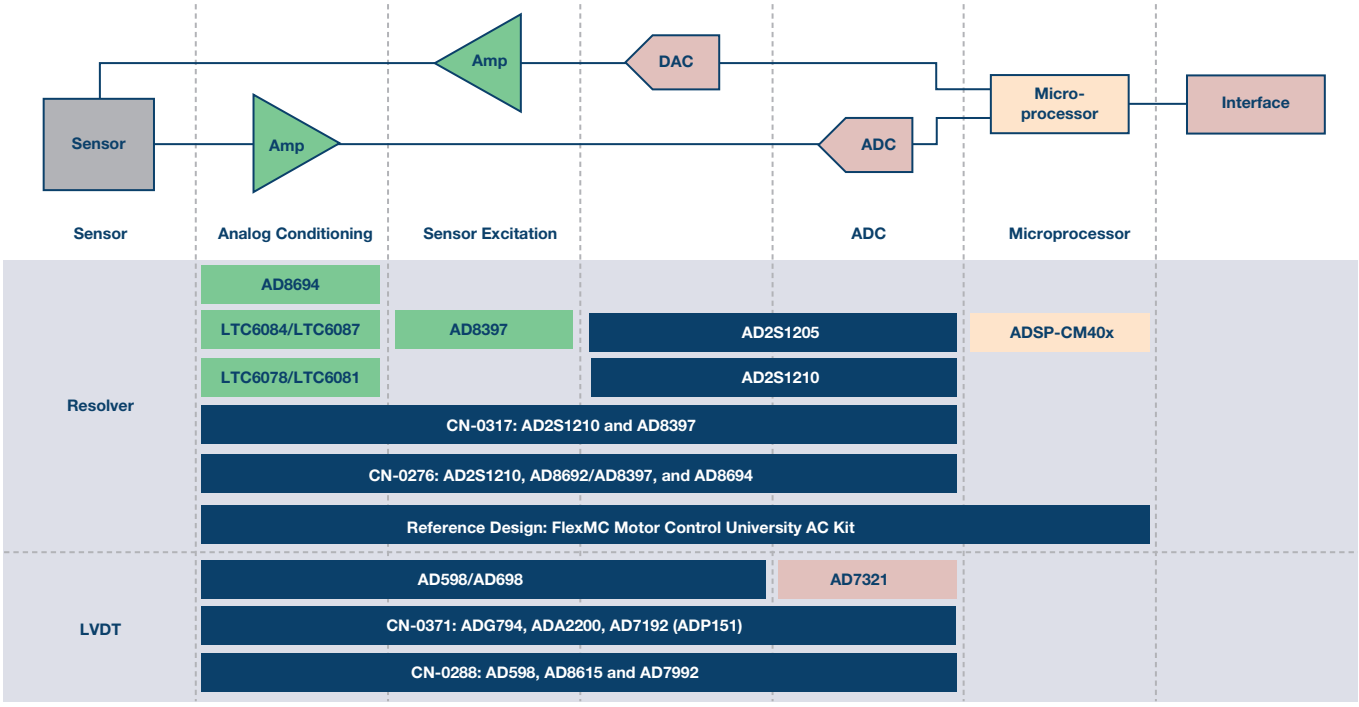


位置検出—光エンコーダ

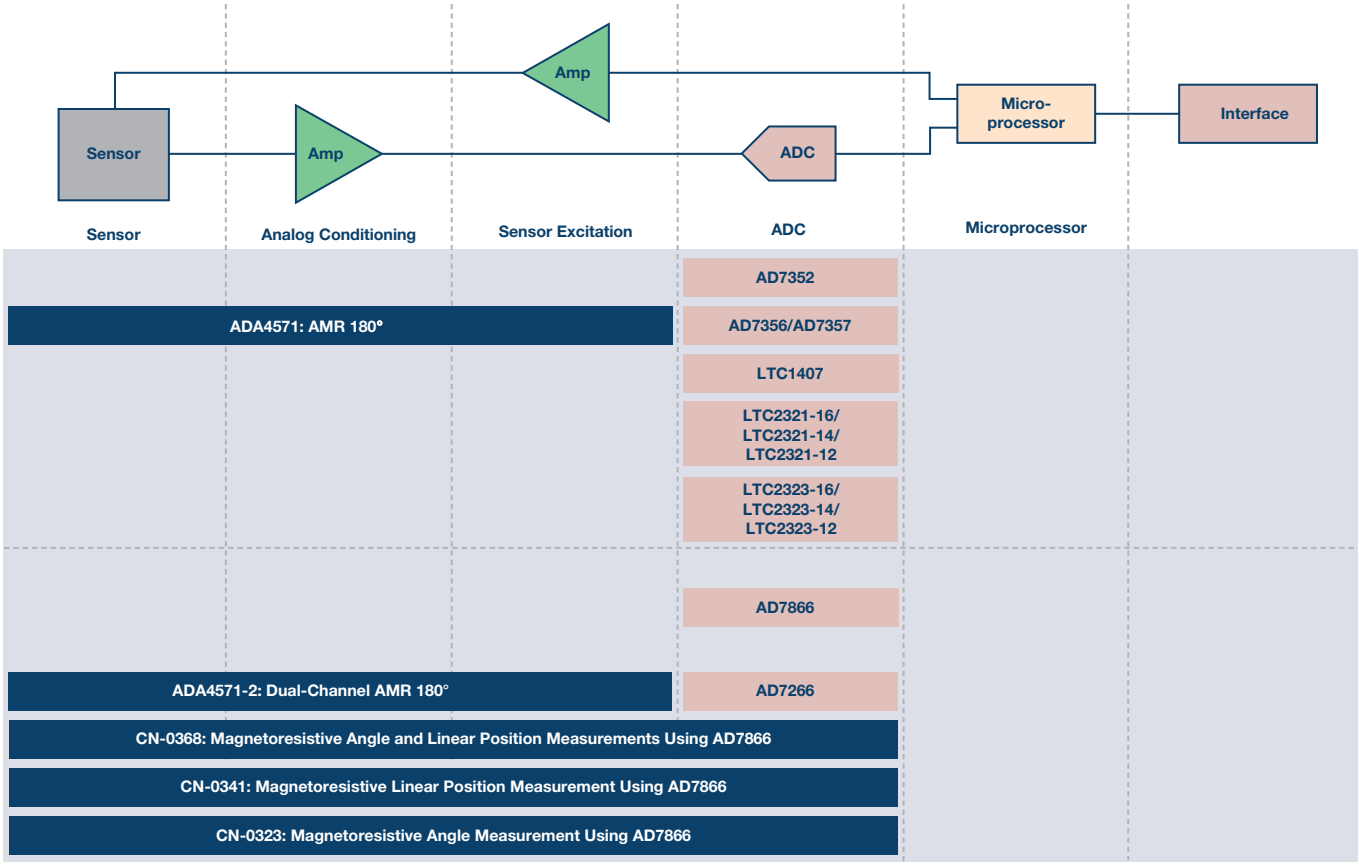


センサー・インターフェース・シグナル・チェーン・ソリューション

位置検出—レゾルバおよびLVDT

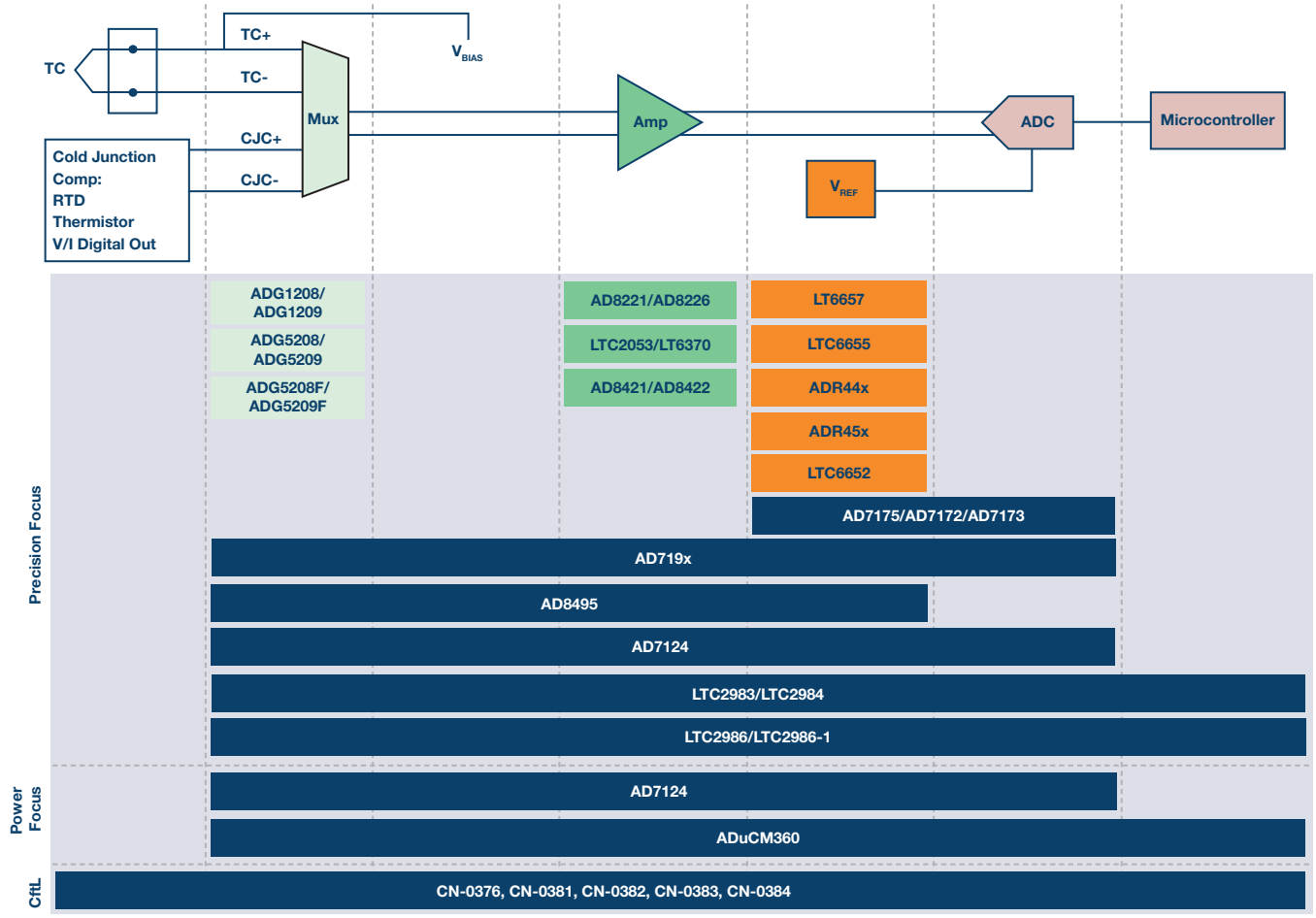


位置検出—AMRおよびTMR



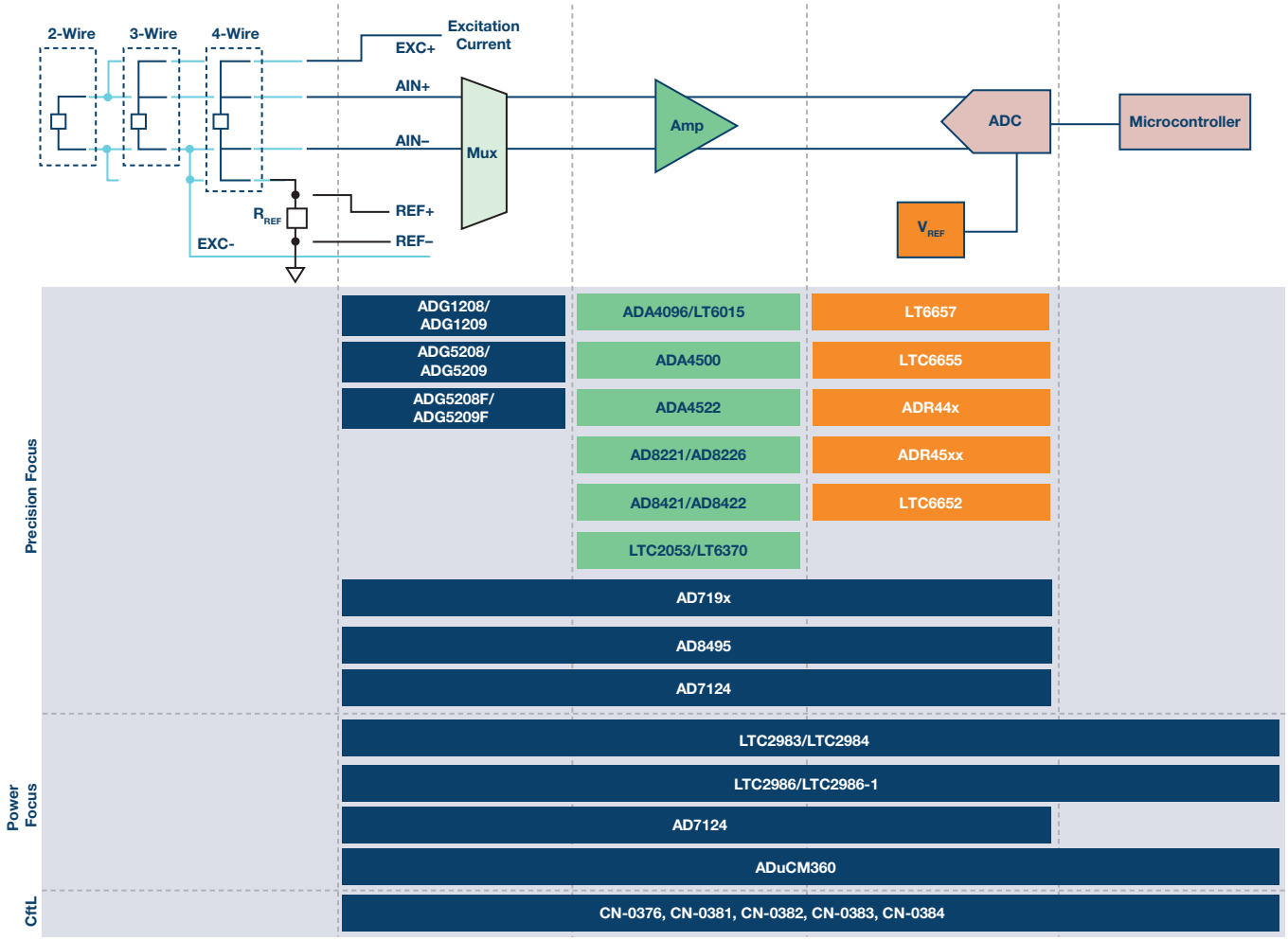
センサー・インターフェース・シグナル・チェーン・ソリューション

温度検出—熱電対（TC）



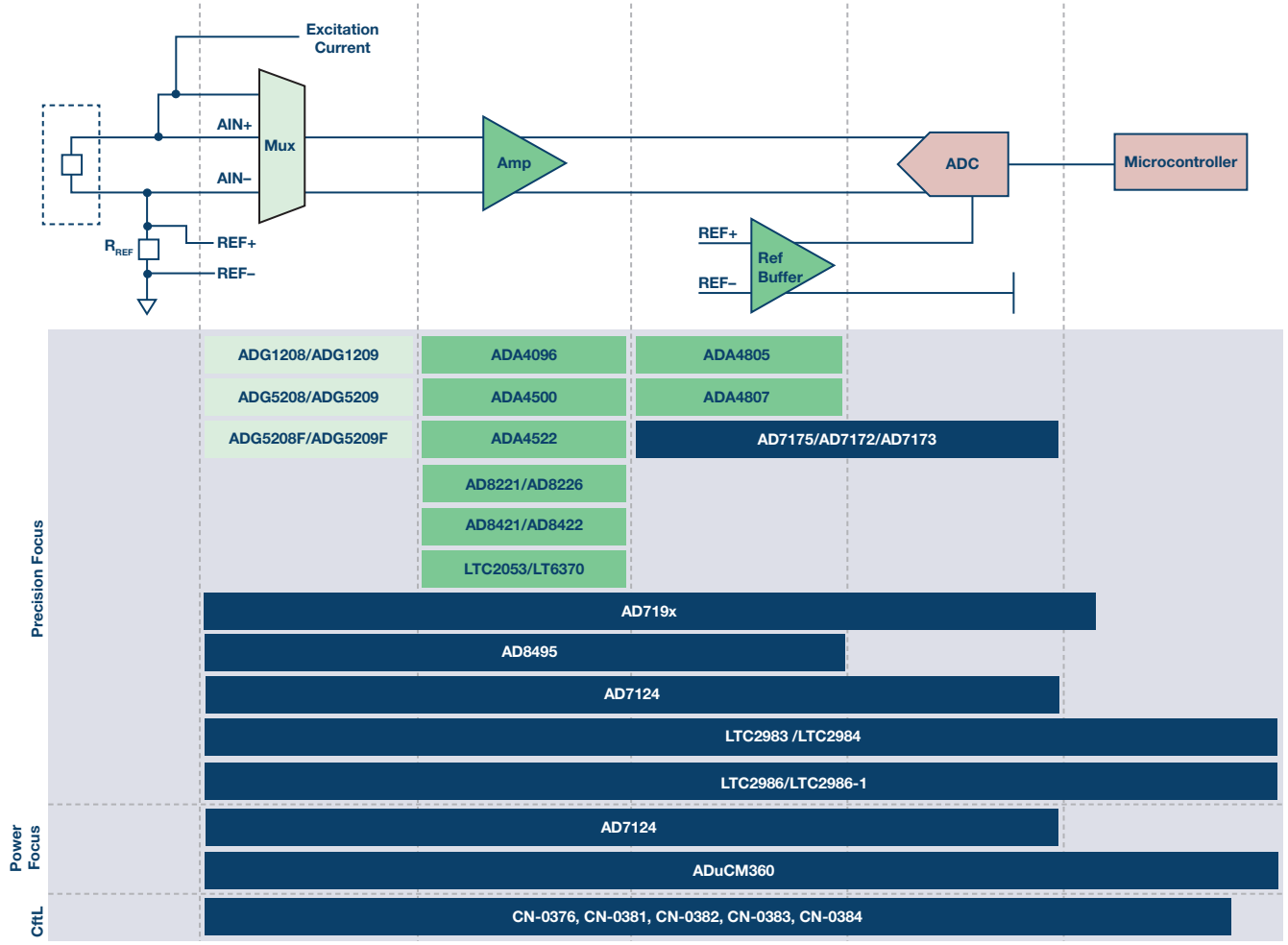
センサー・インターフェース・シグナル・チェーン・ソリューション

温度検出—測温抵抗体(RTD)



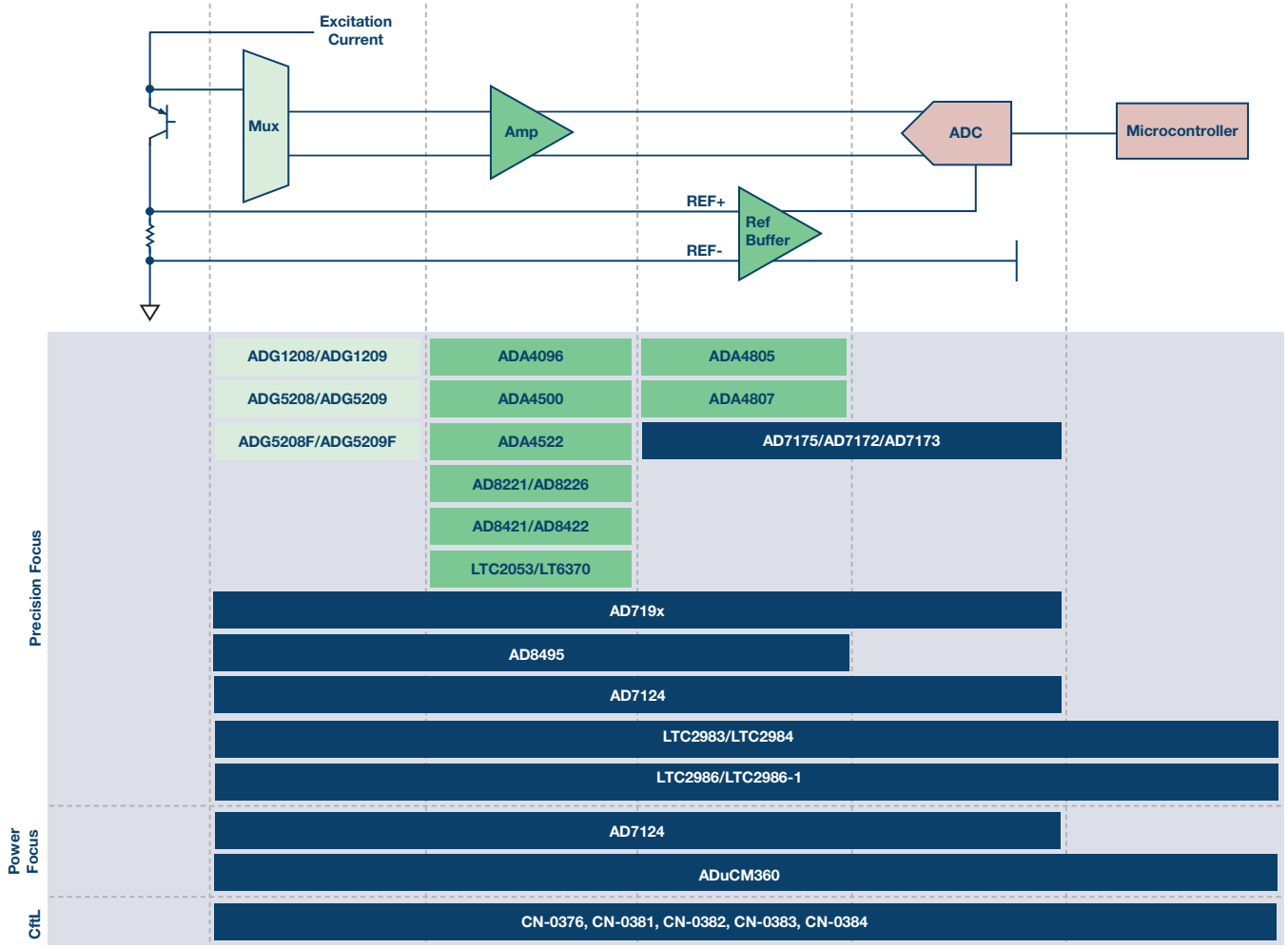
センサー・インターフェース・シグナル・チェーン・ソリューション

温度検出—サーミスタ



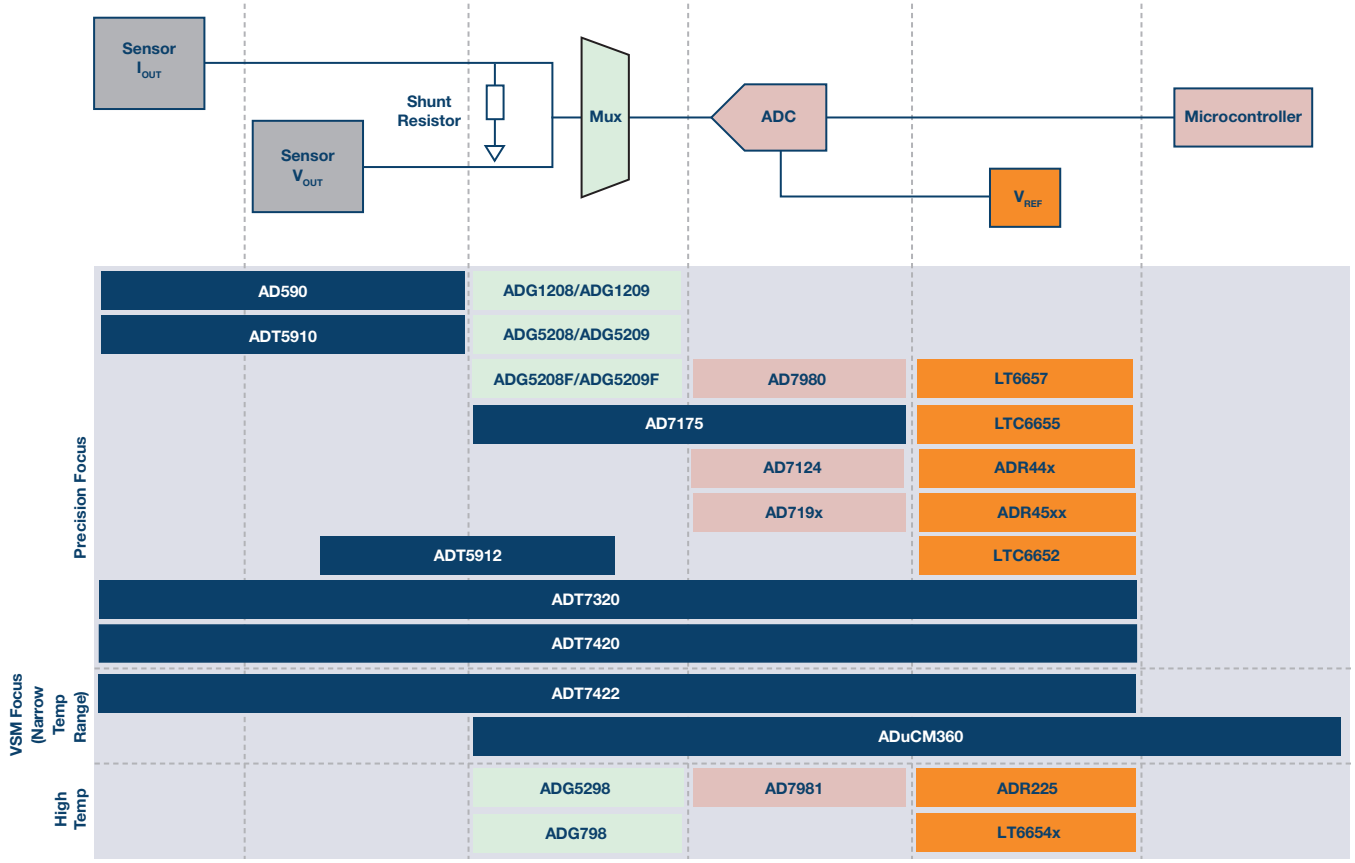
センサー・インターフェース・シグナル・チェーン・ソリューション

温度検出—ダイオード

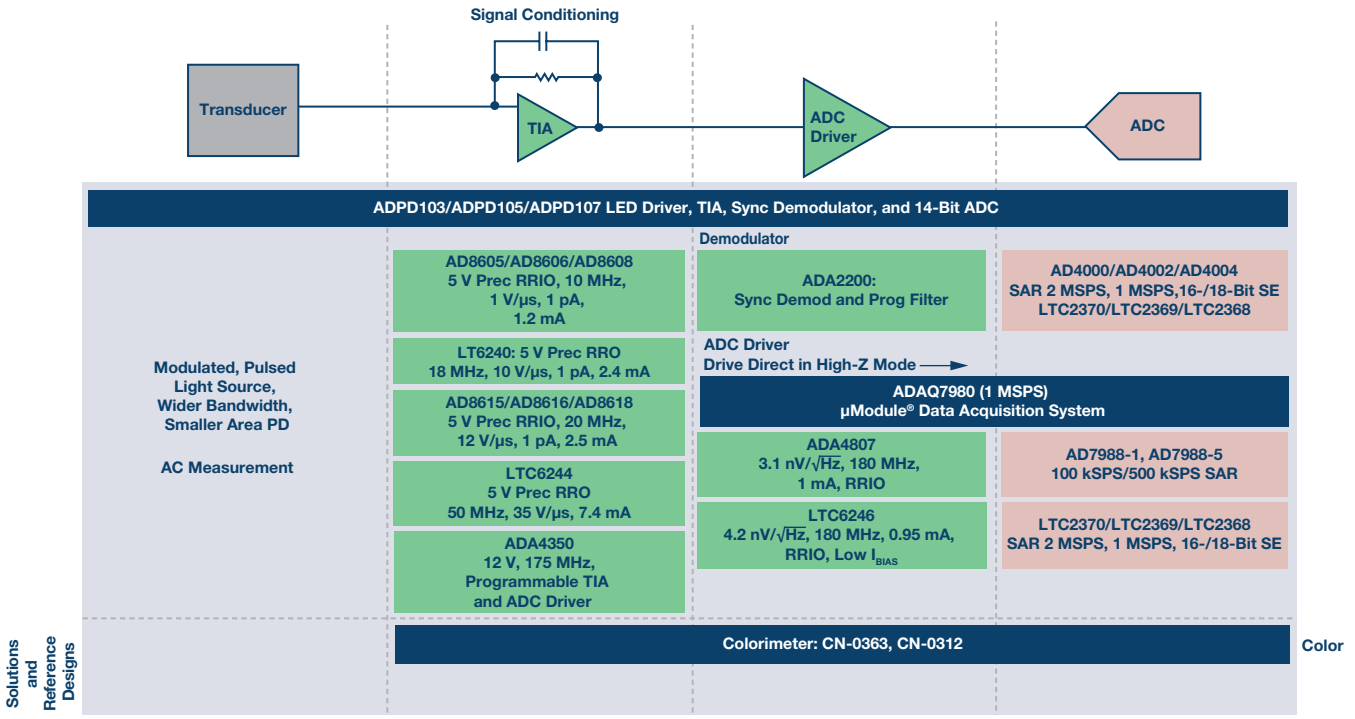


センサー・インターフェース・シグナル・チェーン・ソリューション

温度検出—シリコン・センサー

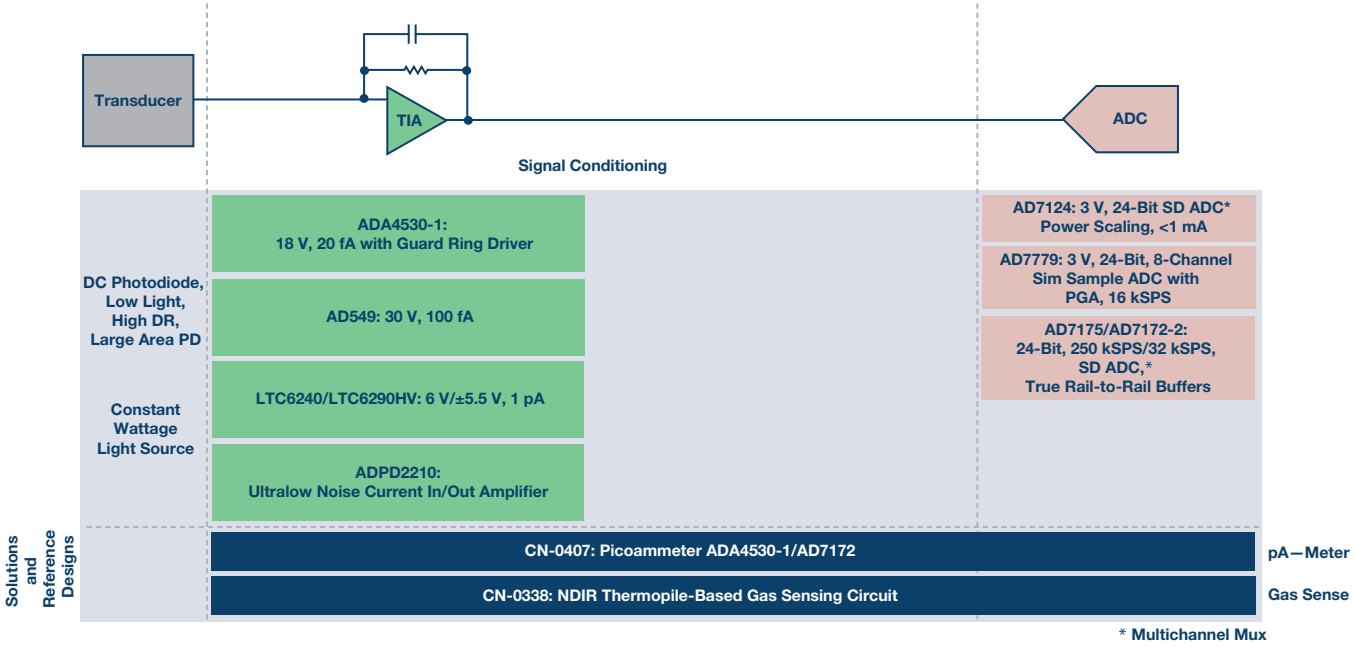


化学解析—分光1:変調、パルス光源、広帯域幅、小面積PD

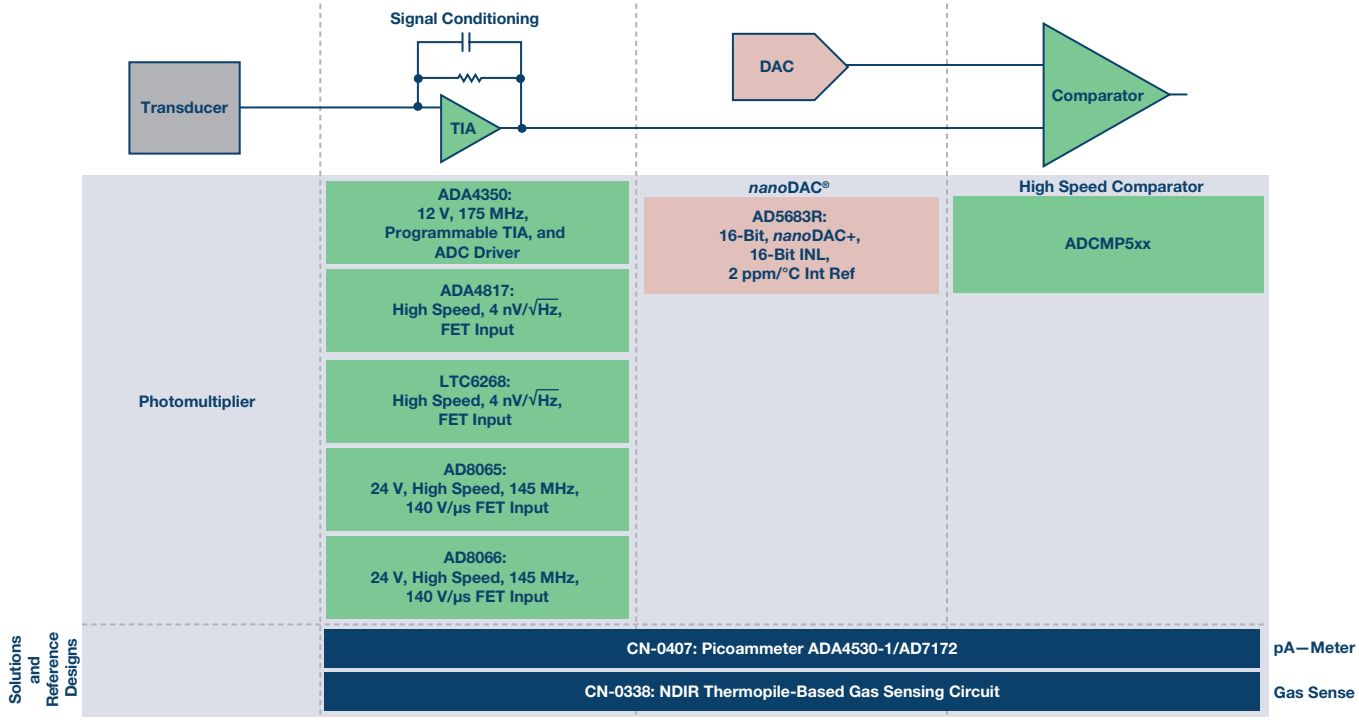


センサー・インターフェース・シグナル・チェーン・ソリューション

化学解析—分光2:DCフォトダイオード、低照度、高ダイナミックレンジ、大面積PD

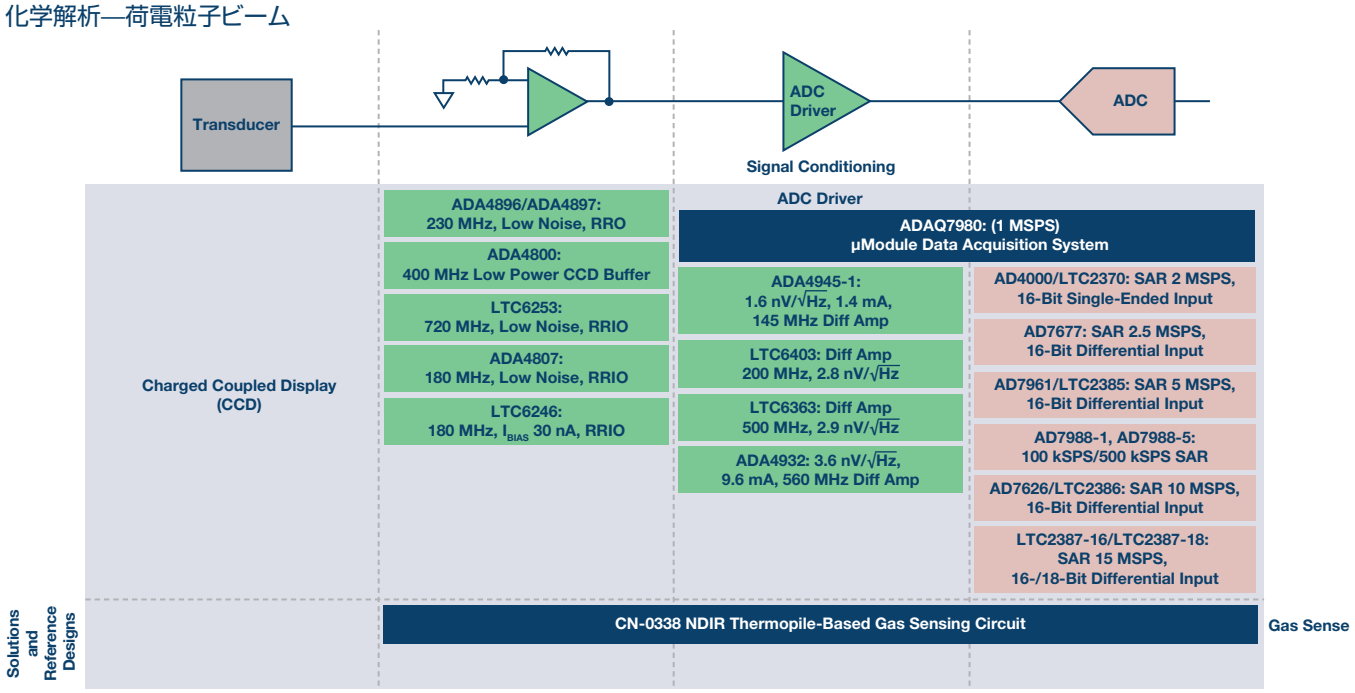


化学解析—分光2:光電子増倍管

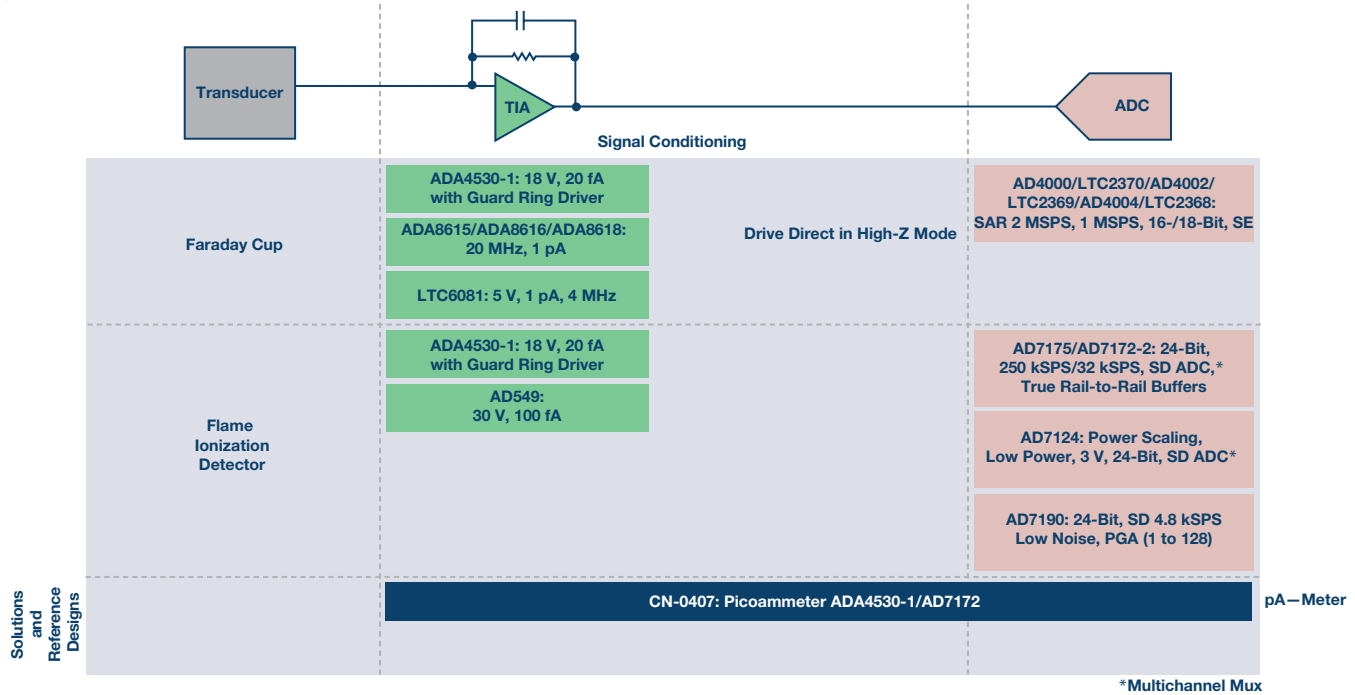


センサー・インターフェース・シグナル・チェーン・ソリューション

化学解析—荷電粒子ビーム

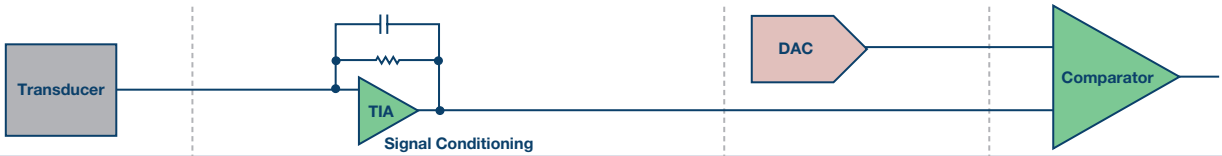


化学解析—荷電粒子ビーム



センサー・インターフェース・シグナル・チェーン・ソリューション

化学解析—荷電粒子ビーム:電子増倍管



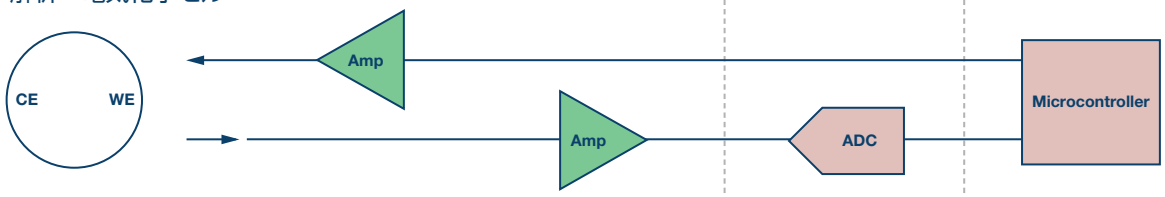
Electron Multiplier

Signal Conditioning
- ADA4350: 12 V, 175 MHz, Programmable TIA, and ADC Driver
- ADA4817: High Speed, 4 nV/√Hz, FET Input
- LTC6268: High Speed, 4 nV/√Hz, FET Input
- ADA9066: 24 V, High Speed, 1 GHz, 140 V/µs FET Input
- AD8065: 24 V, High Speed, 145 MHz, 140 V/µs FET Input

nanoDAC
- AD5683R: 16-Bit, *nano*DAC+, 16-Bit INL, 2 ppm/°C Int Ref

High Speed Comparator
- ADCMP5xx
- LTC6752: 280 MHz, 2.9 ns, RRIO

化学解析—電気化学セル



Electrochemical Cell Interface

EC Cell Health: Impedance Diagnostic
- AD5933: 1 MSPS Impedance Network Analyzer
- AD5541A: Low Noise, 16-Bit DAC

Low Power Reference
- ADR291: 12 µA V_{REF}
- REF19x: Low Tempco, 45 µA V_{REF}
- ADR34xx/ADR35xx: 85 µA V_{REF}
- LT6656: 1 µA V_{REF}

- AD8500/AD8502/AD8504: 1.8 V to 5 V, RRIO 1 µA, 10 pA
- ADA4505: 1.8 V to 5 V, ZCO, RRIO 10 µA, 2 pA
- AD8603/AD8607/AD8609: 1.8 V to 5 V, Prec RRIO, 50 µA, 1 pA
- ADA4691-2/ADA4692: 5 V, 16 nV/√Hz SD pin, 200 µA, 5 pA
- LTC6081 5V, 13 nV/√Hz, RRIO, 400 µA, 1 pA

Low Power
- ADA4051: 1.8 V to 5 V, ZD, 17 µA, RRIO
- LTC2063 1.7 V to 5 V, ZD, 2 µA, RRIO
- LTC2066 1.7 V to 5 V, ZD, 10 µA, RRIO

Low Noise
- ADA4528: ZD, RRIO, 5.6 nV/√Hz

- AD7170/AD7171: 12-/16-Bit SD Low Power, 135 µA
- AD7790: 16-Bit, SD Low Power, 75 µA
- AD7798: 16-Bit, SD with PGA 380 µA
- AD7124-4/AD7124-8: 3 V, 24-Bit SD 255 µA Low Power Mode

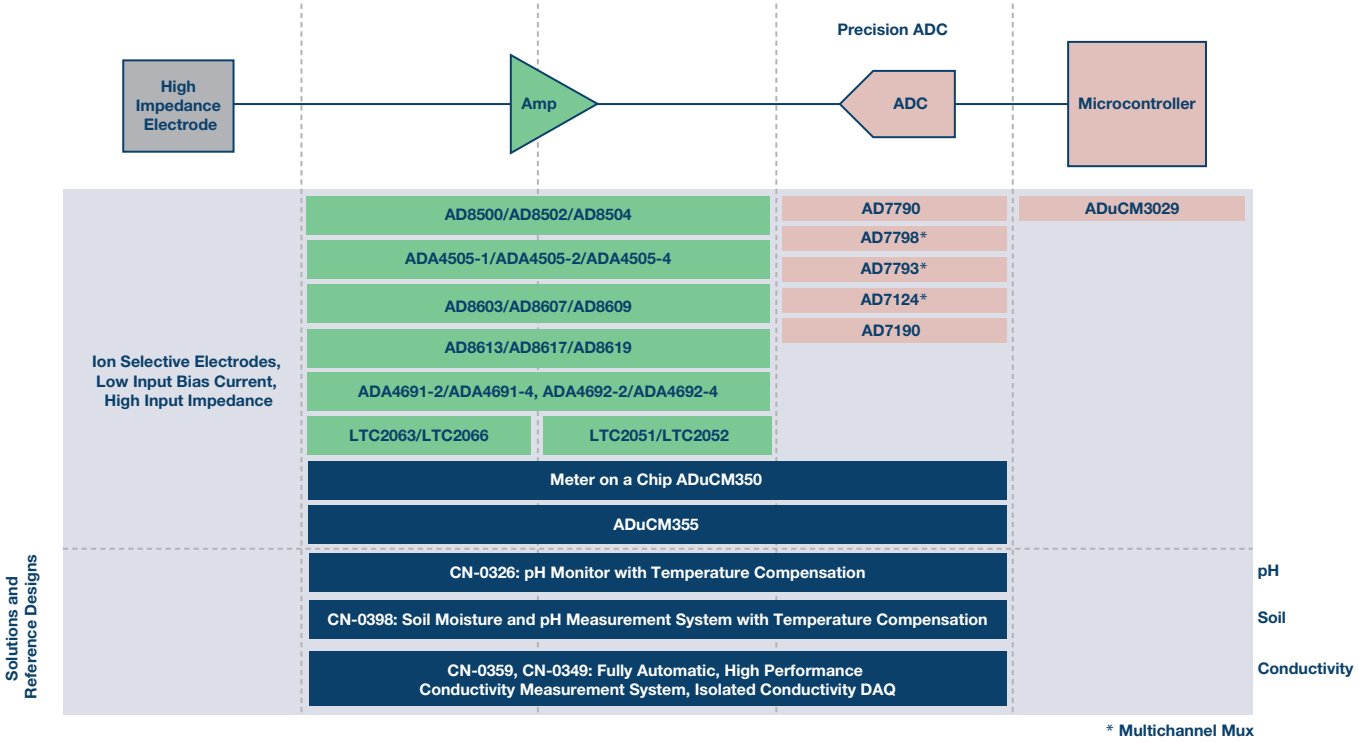
- ADuCM3029: ULP 30 µA/MHz ARM® Cortex®–M3 MCU

Low Power with Highest Integration of Functionality
- AD5940
- ADuCM355

Solutions and Reference Designs
- CN-0359, CN-0349: Fully Automatic, High Performance Conductivity Measurement System, Isolated Conductivity DAQ — Conductivity
- CN-0324, CN-0357: Toxic Gas Monitors, CN-0338: C02 Gas Sensor, CN-0396: Dual EC Cell Gas Sensor with Temp Compensation — Gas Sense
- CN-0346: Relative Humidity Measurement System — RH

センサー・インターフェース・シグナル・チェーン・ソリューション

化学解析—イオン選択電極（pH）



アンプおよび高精度コンバータのデザイン・ツール

LTspice

LTspice® は、スイッチング・レギュレータのシミュレーションを容易にする拡張機能とモデルを備えた、高性能なSPICEシミュレータ、回路図入力、波形ビューアです。SPICEの機能強化により、通常のSPICEシミュレータと比較して、スイッチング・レギュレータのシミュレーションが大幅に高速化され、ほとんどのスイッチング・レギュレータの波形をわずか数分で表示することができます。このダウンロードには、LTspice、アナログ・デバイセズのほとんどのスイッチング・レギュレータに対応したマクロ・モデル、200種類を超えるオペアンプ・モデル、抵抗、トランジスタ、MOSFETモデルが含まれます。

analog.com/jp/design-center/design-tools-and-calculators/ltspice-simulator.html

高精度ADCドライバ・ツール - 新登場

- 高精度ADCドライバ・ツールは、選択したADCドライバとRCフィルタがADCシグナル・チェーンの全体的なシステム性能に対する影響をすばやく確認できる専用のシミュレーション環境を提供します。
- エンド・アプリケーションの条件に合わせて最適なADCドライバとRCフィルタを選択し、選択したADCドライバとRCフィルタのシステム全体のノイズおよび歪みに対する影響を評価できます。
- 選択したADCドライバとRCフィルタを使用し、さまざまな入力条件を想定してADC入力のセトリングをシミュレートできます。
- さまざまなADCとADCドライバ組み合わせの性能のトレードオフを短時間で確認できるため、複雑な計算とシミュレーションが不要になります。

beta-tools.analog.com/adcdriver/

アナログ・フィルタ・ウィザード

アナログ・フィルタ・ウィザードを使用すると、実在のオペアンプを利用して、ローパス・フィルタ、ハイパス・フィルタ、バンドパス・フィルタを数分で設計できます。設計プロセスでは、理想的な仕様から実際の回路の動作まで、フィルタ設計の特性を確認できます。ゲイン帯域幅、ノイズ、電源電流を含むオペアンプの仕様のトレードオフを短時間で評価し、条件に最適なフィルタ設計を見つけることができます。

analog.com/designtools/jp/filterwizard/

アナログ・フォトダイオード・ウィザード

フォトダイオード・ウィザードを使用して、フォトダイオードとインターフェースするトランスインピーダンス・アンプ回路を設計できます。ツールに含まれるライブラリからフォトダイオードを選択するか、フォトダイオードの仕様を個別に入力して、帯域幅、ピーキング(Q)、有効ビット数とS/N比のトレードオフを短時間で確認できます。回路のパラメータを変更すると、パルス応答、周波数応答、ノイズ・ゲインの図に結果がすぐに表示されます。

analog.com/designtools/jp/photodiode/

消費電力とダイ温度

このツールは、供給電圧、周囲温度、負荷特性、パッケージの熱データを元にして、ダイ温度と消費電力を見積もります。

analog.com/jp/design-center/interactive-design-tools/power-dissipation-vs-die-temp.html

計装アンプ・ダイヤモンド・プロット・ツール

ダイヤモンド・プロット・ツールは、アナログ・デバイセズの計装アンプ向けのWebアプリケーションです。計装アンプ回路の構成による固有の出力電圧範囲圧対入力コモンモード電圧のグラフ(ダイヤモンド・プロット)を生成します。このツールは、電源電圧、ゲイン、入力信号範囲などのユーザー入力を基にして、飽和点を検出し、入力信号が範囲内に収まりその構成の動作が有効になるような計装アンプを推奨します。飽和を回避し、設計に最適な計装アンプを見つけ、開発時間を短縮できます。

analog.com/designtools/jp/diamond/

ADI DiffAmpCalc

アナログ・デバイセズの新しいADI DiffAmpCalc™は、差動アンプ回路の設計のための計算ツールで、無料でダウンロードすることができます。このツールは容易に導入可能で、インタラクティブなユーザー・インターフェースを備え、すぐに動作させることができます。

analog.com/diffampcalc

ディファレンス・アンプ・ツール

アナログ・デバイセズのピン選択可能なゲイン・ディファレンス・アンプの各種ゲインで性能を計算するためのツールです。

- LT1991
- LT1997-2
- LT1997-3
- LT6375
- LT6376

SNR/THD/SINAD計算ツール

この計算ツールは、S/N比、THD、SINADを有効ビット数とノイズに変換します。また、S/N比、THD、SINADのいずれか2つデータから残りの1つを計算します。

analog.com/jp/design-center/interactive-design-tools/snr-thd-sinad-calculator.html

シグマ・デルタADCチュートリアル

インタラクティブな図解で、理想的なシグマ・デルタ（ΣΔ）A/Dコンバータ（ADC）の動作を示します。

analog.com/jp/design-center/interactive-design-tools/sigma-delta-ADC-tutorial.html

LinearLabTools

LinearLabToolsは、MATLABとPythonのプログラム集で、アナログ・デバイセズのデータ・コンバータの評価用ボードに直接アクセスできます。

一般的には、データ・コンバータの評価用ボードを付属のコントローラ・ボードに差し込み、ADC用のPScope、DAC用のLTDACgenなど、GUIプログラムを実行しているホスト・コンピュータに接続します。GUIでは基本的な性能測定を行うことができますが、お客様のアプリケーションで部品を評価する際に必要とされる、任意のテスト・シーケンスの実行や、他のハードウェアとの通信を行うようには設計されていません。LinearLabTools では、手持ちのソフトウェアを使用して、データ・コンバータのデモ・ボードを試験装置の他の部品と同じように制御できます。

また、LinearLabToolsのパッケージには、さまざまなアプリケーション例、シミュレーション、ミックスド・シグナルのコンセプトを実証する教育プログラムが含まれています。

analog.com/jp/design-center/evaluation-hardware-and-software/evaluation-platforms/linearlab-tools.html

分析、制御、評価用（ACE）ソフトウェア

アナログ・デバイセズの分析、制御、評価用（ACE）ソフトウェアは、アナログ・デバイセズの製品ポートフォリオに含まれる様々な評価用システムの評価と制御を行うことができるデスクトップ・ソフトウェア・アプリケーションです。このアプリケーションは、共通のフレームワークとコンポーネント別のプラグインで構成されています。

ACE評価用ボードのプラグイン

ACEソフトウェアには複数のプラグインがあり、オンラインでダウンロードできます。

analog.com/jp/design-center/evaluation-hardware-and-software/ace-software.html

Virtual Evalベータ版

仮想評価ボードのモデルは、視覚的でインタラクティブなWeb環境です。

- シリコンのパラメータ（フィルタ・タイプ、出力データ・レート、チャンネル数など）を変更できます。
- 範囲外の状態を通知し、選択／評価中の構成が許容される構成であることを保証します。
- ツールから提供される性能データ（複数のチャンネルのノイズ、タイミング、フィルタ応答、セトリング・タイムの影響）を表示します。

beta-tools.analog.com/virtualeval/

詳細については、*analog.com/jp/design-center/design-tools-and-calculators/amplifier-and-linear-tools.html* にアクセスしてください。

設計リソース

Circuits from the Labリファレンス・デザイン

Circuits from the Labリファレンス・デザイン集は、最新のアナログ回路、デジ・アナ混在回路、RF回路などの設計の困難さを解決する、技術的に評価、テストされたシステム・レベルの統合回路集です。これらの回路は、理解が容易なサブシステム・レベルのビルディング・ブロックで、評価時間を短縮し、設計統合化を簡単にしてくれます。個々のリファレンス回路には、回路解説の詳細な資料、多くの実測データ、設計・レイアウトのガイドライン、PC基板のレイアウト・データ、回路図、部品表、デバイス・ドライバー、評価用のハードウェア説明などのドキュメントが付属しています。

Circuits from the Lab® Reference Circuits 実用回路集

analog.com/jp/circuits **の RF 回路をご覧ください。**

EngineerZone

EngineerZoneは、アナログ・デバイセズの技術的オンライン・サポートのためのコミュニティです。製品に関する疑問・質問、共有したい情報のアップ、設計に関する不明点の解決策の検索などができます。

EngineerZone® ANALOG DEVICES SUPPORT COMMUNITY

ez.analog.com **をご覧ください。**

アナログ・デバイセズ株式会社

本　　社　〒105-6891 東京都港区海岸 1-16-1　ニューピア竹芝サウスタワービル 10F
大阪営業所　〒532-0003 大阪府大阪市淀川区宮原 3-5-36　新大阪トラストタワー 10F
名古屋営業所　〒451-6038 愛知県名古屋市西区牛島町 6-1　名古屋ルーセントタワー 38F

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