

SPACE QUALIFIED PARTS LIST

November 2018

For general information on Analog Devices Space Qualified products please visit the following address.

<http://www.analog.com/aerospace>

For technical inquiries on Aerospace Engineering Models please email us at aero@analog.com

For Sales and Distribution contacts please visit the following address.

<http://www.analog.com/en/about-adi/corporate-information/sales-distribution.html>

COMMITMENT TO THE SPACE MARKET

Analog Devices' entry into the space level market occurred in August 1990 when it acquired Precision Monolithics Inc. Analog Devices' certified facilities have been supplying products for military and space applications since 1972. With the addition of Linear Technology AND Hittite Microwave our combined product portfolio, technology base and specialist resources strengthen our capability to provide innovative analog, RF, power and mixed signal solutions for next generation spacecraft.

Analog Devices space level operations located in Greensboro, North Carolina coordinates all space level V (class S) activities, including business development, manufacturing and engineering. The addition of new products is derived from our customers' needs and the ability of these products to meet MIL-PRF-38535 QML level V requirements.

Visit our web site (<http://www.analog.com/aerospace>) or call our factory contacts for the latest Class S updates as well as for radiation information on these and other products.

Analog Devices, Inc. Aerospace Product Line standard product is available in one or more of the following processes:

- ▶ MIL-PRF-38535, QML LEVEL V
- ▶ MIL-PRF-38535, QML R (LEVEL V with Radiation Qualification)
- ▶ MIL-PRF-38535, JAN S
- ▶ MIL-PRF-38535, Analog Devices, Inc.'s Aerospace Product Line Standard Product

See <http://www.analog.com/aerospace>. (Standard Space Level Products Program)

The table beginning on page 3 lists the standard product offered by Analog Device's Aerospace Product Line.

Product is also available in accordance with source control drawings. Please call factory for further information.

For further information see contact list on cover.

ANALOG DEVICES SPACE LEVEL PRODUCTS

Manufacturing Locations

| Space Level Compliance | Wafer Fab | Assembly | Screening and Quality Conformance Inspection |
|--|---|-------------------------------------|--|
| MIL-PRF-38535 Class V Compliant QMLV Devices | <ul style="list-style-type: none"> • ADI Wilmington MA • ADI Limerick, Ireland • ADI Santa Clara Die Bank | ADI Phils, Inc. Cavite, Philippines | ADI Phils, Inc. Cavite, Philippines |
| Standard Space Products (non-QMLV) | <ul style="list-style-type: none"> • ADI Wilmington MA • ADI Limerick, Ireland • ADI Santa Clara Die Bank • TSMC Taiwan | ADI Phils, Inc. Cavite, Philippines | ADI Phils, Inc. Cavite, Philippines |
| Customer Specific Special Flows | <ul style="list-style-type: none"> • ADI Wilmington MA • ADI Limerick, Ireland • ADI Santa Clara Die Bank • TSMC Taiwan | ADI Phils, Inc. Cavite, Philippines | ADI Phils, Inc. Cavite, Philippines |
| Class K Die Qualification Hittite Microwave Products | <ul style="list-style-type: none"> • Various Foundries | Chelmsford, MA | Chelmsford, MA |
| Linear Technology Products | <ul style="list-style-type: none"> • Camas, Washington • Hillview, California | Milpitas, CA | Milpitas, CA |

The following table lists the standard product available from Analog Devices, Inc. Aerospace Product Line. Product is also available in accordance with source control drawings. Please call factory for further information.

ANALOG TO DIGITAL CONVERTERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| AD571S | 10-Bit Complete ADC | S | C, D-18 | |
| AD571SD/QMLV | 5962-8680203VVA | S | D | |
| Space Level Die | AD571-000C | S | C | 3 |
| AD574S | 12-Bit-ADC w/Microprocessor Interface | T, U | C, D-28, F-28 | |
| AD574AUD/QMLR | 5962R8512701VXA | U | D | |
| AD574AUF/QMLR | 5962R8512701VZA | U | F | |
| AD574ATD/QMLR | 5962R8512702VXA | T | D | |
| AD574ATF/QMLR | 5962R8512702VZA | T | F | |
| Space Level Die | AD574-000C | T | C | 3 |
| Space Level Die | AD574R000C | T | C | |
| AD670S | 8-Bit Signal Conditioning Single Supply ADC | S | C, D-20 | |
| | AD670-703D | S | D | 3 |
| Space Level Die | AD670-000C | S | C | 3 |
| AD1671S | 12-Bit 1.25 MSPS ADC | S | D-28, F-28 | |
| | AD1671-703D | S | D | 3 |
| | AD1671-703F | S | F | 3 |
| | AD1671-713F | S | F | 3 |
| AD1672S | 12-Bit 3 MSPS ADC | S | D-28, F-28 | |
| | AD1672-703F | S | F | |
| | AD1672-713D | S | D | |
| AD6645S | 14-Bit 80 MSPS ADC | A | QS-52 | |
| AD6645ASQ/QMLR | 5962R0423002VXC | A | QS-52 | |
| AD6645ASQ/QMLL | 5962L0423003VXC | A | QS-52 | |
| AD9042S | 12-Bit 41 MSPS ADC | S | D-28, F-28 | |
| AD9042SD/QMLR | 5962R0253801VXA | S | D | |
| AD9042SF/QMLR | 5962R0253801VZA | S | F | |
| AD9042SF/QMLL | 5962L0253802VZA | S | F | |
| AD9054S | 8-Bit 200MSPS ADC | S | J44 | |
| | AD9054-703J44 | S | J44 | 2, 3 |
| AD9246S | 14-Bit 125MSPS ADC | A | F-48 | |
| AD9246AF/QMLR | 5962R1422701VXC | A | F-48 | |
| AD9254S | 14-Bit 150 MSPS ADC | S | F-52 | |
| | AD9254R703F | S | F | 2, 4 |
| AD9283S | 8-Bit 100 MSPS 3.3V ADC | T | RC | |
| | AD9283-703RC | T | RC | 2, 3 |

ANALOG TO DIGITAL CONVERTERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|------------------------------|------------------|----------------------|------|
| LTC1604 | 16-Bit 333 KSPS SAMPLING ADC | A | G | |
| | LTC1604AIG#90117 | A | G | |
| RT2378-20 | 20-Bit 1MSPS SAR ADC | - | MS | |
| | RT2378IMS-20 | - | MS | |

COMPARATORS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note | |
|---------------------|---------------------------------------|------------------|----------------------|----------------|---|
| AD8561S | 7nS Single Comparator | A | Q-8, L | | |
| | AD8561AQ/QMLV | 5962-0051501VPA | A | Q | |
| | AD8561AL/QMLR | 5962R0051501VHA | A | L | |
| | AD8561AQ/QMLR | 5962R0051501VPA | A | Q | |
| | AD8561AL/QMLL | 5962L0051502VHA | A | L | |
| PM111S | Precision Voltage Comparator | X | J, Z | | |
| | PM111SJ6 | JM38510/10304SGA | X | J | |
| | PM111SZ7 | JM38510/10304SPA | X | Z | |
| PM139S | Quad Low-Power Voltage Comparator | A, X | C, Y, M, RC | | |
| | PM139AY/QMLR | 5962R8773901VCA | A | Y | |
| | PM139AM/QMLR | 5962R8773901VDA | A | M | |
| | PM139ARC/QMLR | 5962R8773901V2A | A | RC | |
| | PM139AM/QMLL | 5962L8773903VDA | A | M | |
| | Space Level Die | PM139-000C | X | C | 3 |
| | Space Level Die | PM139R000C | X | C | |
| RH1016 | 10nS Precision Comparator | - | DICE, W | | |
| | 05-08-5222 | RH1016MW | - | W | |
| | 05-08-5242 | RH1016DICE | - | DICE | |
| RH119 | 80nS Dual High Performance Comparator | - | DICE, H, J, W | | |
| | 05-08-5026 Option 1 | RH119H | - | H ² | |
| | 05-08-5026 Option 2 | RH119J | - | J ² | |
| | 05-08-5026 Option 3 | RH119W | - | W | |
| | 05-08-5145 | RH119DICE | - | DICE | |
| RH1011 | 150nS General Purpose Comparator | - | DICE, H, J8, W | | |
| | 05-08-5012 Option 1 | RH1011H | - | H ² | |
| | 05-08-5012 Option 2 | RH1011J8 | - | J8 | |
| | 05-08-5012 Option 3 | RH1011W | - | W | |
| | 05-08-5149 | RH1011DICE | - | DICE | |

DIGITAL TO ANALOG CONVERTERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|-----------------------|------|
| AD561S | 10-Bit, Current Output | S | C, D-16 | |
| | AD561-703D | S | D | 3 |
| Space Level Die | AD561-000C | S | C | 3 |
| AD565AS | 12-Bit, Current Output, Complete High Speed DAC | S, T | C, D-24 | |
| | AD565ASD/QMLV | S | D | |
| | AD565ATD/QMLV | T | D | |
| Space Level Die | AD565-000C | T | C | 3 |
| AD667S | 12-Bit Microprocessor Compatible DAC | S | C, D-28, F-28 | |
| | AD667-703D | S | D | 3 |
| | AD667-703F | S | F | 3 |
| | AD667-713F | S | F | 3 |
| Space Level Die | AD667-000C | S | C | 3 |
| AD768S | 16-Bit 30MSPS DAC | A | F-28 | |
| | AD768AF/QMLR | A | F-28 | |
| AD9731S | 10-Bit 170MSPS DAC | S | D-28, F-28 | |
| | AD9731-703D | S | D | 2, 3 |
| | AD9731-713D | S | D | 2, 3 |
| | AD9731-703F | S | F | 2, 3 |
| | AD9731-713F | S | F | 2, 3 |
| DAC08S | 8-Bit High Speed Multiplying DAC | A, X | C, F-16, Q, RC | |
| | DAC08SAQ7 | A | Q | |
| | DAC08AF/QMLR | A | F | |
| | DAC08AF/QMLL | A | F | |
| | DAC08AQ/QMLR | A | Q | |
| | DAC08ARC/QMLR | A | RC | |
| | DAC08XF/QMLR | X | F | |
| | DAC08XQ/QMLR | X | Q | |
| | DAC08XRC/QMLR | X | RC | |
| Space Level Die | DAC08-000C | X | C | |
| Space Level Die | DAC08R000C | X | C | |
| DAC100S | 10-Bit Current Output DAC | BC | Q | |
| | DAC100-703Q | BC | Q | 3 |
| | DAC100-713Q | BC | Q | 3 |

CURRENT SENSE AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| AD8210S | Bidirectional Current Shunt Monitor | A | F-10 | |
| AD8210AF/QMLR | 5962R1223301VXA | A | F | |
| AD8210AF/QMLL | 5962L1223302VXA | A | F | |
| AD8212S | High Voltage Current Shunt Monitor | A | L | |
| AD8212AL/QMLR | 5962R0924401VHA | A | L | |
| AD8212AL/QMLL | 5962L0924402VHA | A | L | |
| RH6105 | Micropower R-R Current Sense Amp | | DICE | |
| | RH6105MILDICE | A | DICE | |

LOGARITHMIC AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|-------------------------------------|------------------|----------------------|------|
| ADL5513S | 4 GHz Logarithmic Amplifier | A | F-16 | |
| ADL5513AF/QMLR | 5962R1120301VXA | A | F | |
| AD8306S | 400 MHz Demodulating Log Amp | A | F-16 | |
| AD8306AF/QMLR | 5962R9864602VXA | A | F | |
| AD8306AF/QMLL | 5962L9864603VXA | A | F | |

INSTRUMENTATION AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| AD524S | Instrumentation Amplifier | S | D-16, E-20 | |
| AD524SD/QMLR | 5962R8853901VEA | S | D | |
| AD524SE/QMLR | 5962R8853901V2A | S | E | |
| AMP01S | Low-Noise Precision Instrumentation Amp | A, X | C, N, D-18,TC | |
| AMP01AD/QMLV | 5962-8863001VVA | A | D | |
| AMP01ATC/QMLV | 5962-8863001V3A | A | TC | |
| AMP01D/QMLV | 5962-8863003VVA | X | D | |
| AMP01N/QMLV | 5962-8863003VKA | X | N | |
| AMP01TC/QMLV | 5962-8863003V3A | X | TC | |
| Space Level Die | AMP01-000C | X | C | 3 |
| AD8229S | Low-Noise Instrumentation Amplifier | S | F-14 | |
| AD8229AF/QMLR | 5962R1420501VXA | S | F | |
| AD8229AF/QMLL | 5962L1420502VXA | S | F | |

MULTIPLIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|---|------------------|----------------------|------|
| AD534S | Internally Trimmed Precision IC Multiplier | T | C, D-14, H-10 | |
| AD534TD/QMLV | 5962-9053701VCA | T | D | |
| Space Level Die | AD534-000C | T | C | 3 |

VARIABLE GAIN AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|---|------------------|----------------------|------|
| AD8367S | 500 MHz, Variable Gain Amplifier | S | F-16 | |
| | AD8367R703F | S | F | |
| | AD8367L703F | S | F | |

OPERATIONAL AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| AD648S | Dual Precision, Low Power BiFET Op Amp | S, T | H-8, Q-8 | |
| AD648SH/QMLV | 5962-9753501VGA | S | H ¹ | |
| AD648SQ/QMLV | 5962-9753501VPA | S | Q | |
| AD648TH/QMLV | 5962-9753502VGA | T | H ¹ | |
| AD648TQ/QMLV | 5962-9753502VPA | T | Q | |
| AD844S | 60 MHz, 2000V/μs Op Amp | S | Q-8 | |
| AD844SQ/QMLR | 5962R8964401VPA | S | Q | |
| AD844SQ/QMLL | 5962L8964402VPA | S | Q | |
| AD847S | High Speed, Low Power Op Amp | S | Q-8 | |
| | AD847-703Q | S | Q | |
| AD8001S | 800 MHz, 50mW Current Feedback Amplifier | S | Q-8, L | |
| AD8001SQ/QMLR | 5962R9459301VPA | S | Q | |
| AD8001SL/QMLR | 5962R9459301VHA | S | L | |
| AD8001SL/QMLL | 5962L9459302VHA | S | L | |
| AD8041S | 160 MHz Rail-to-Rail Amplifier with Disable | S | C, Q-8, L | |
| AD8041SQ/QMLR | 5962R9683902VPA | S | Q | |
| AD8041SL/QMLR | 5962R9683902VHA | S | L | |
| AD8041SL/QMLL | 5962L9683903VHA | S | L | |
| AD8041-000C | Space Level Die | S | C | |
| AD8138S | 320 MHz Low Distortion Differential Amplifier | A | L | |
| AD8138AL/QMLR | 5962R0922001VHA | A | L | |
| AD8138AL/QMLL | 5962L0922002VHA | A | L | |

OPERATIONAL AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| AD8351S | Low Distortion Fully Differential Amplifier | A | RC | |
| AD8351ARC/QMLR | 5962R0821801V2A | A | RC | |
| AD8351ARC/QMLL | 5962L0821802V2A | A | RC | |
| AD8629S | Dual Low Offset Precision Amplifier | S | L | |
| | AD8629D703L | S | L | 2, 4 |
| AD8671S | Low Noise, Low Input Bias Current, Low Offset | A | L | |
| AD8671AL/QMLL | 5962L0922301VHA | A | L | |
| ADA4077-2S | Dual Low Offset and Drift, High Precision Amp | A | F-10 | |
| ADA4077-2AF/QMLR | 5962R1423301VXA | A | F | |
| ADA4077-2AF/QMLL | 5962L1423302VXA | A | F | |
| ADA4084-2S | Dual Low Noise, R-R I/O, Low Power Amp | A | F-10 | |
| ADA4084-2AF/QMLR | 5962R1324501VXA | A | F | |
| ADA4084-2AF/QMLL | 5962L1324502VXA | A | F | |
| ADA4084-4S | Quad Low Noise, R-R I/O, Low Power Amp | A | F-14 | |
| ADA4084-4AF/QMLR | 5962R1523601VXA | A | F | |
| ADA4096-2S | Dual Micropower Op Amplifier | S | F-10 | |
| ADA4096-2AF/QMLR | 5962R1420601VXA | S | F | |
| ADA4610-2S | Dual Low Input Bias Op Amplifier | S | F-10 | |
| ADA4610-2BF/QMLR | 5962R1420701VXA | S | F | |
| ADA4610-2BF/QMLL | 5962L1420702VXA | S | F | |
| OP07S | Ultra Low Offset Voltage Op Amplifier | A, X | C, J, L, Z | |
| OP07SAJ6 | JM38510/13501SGA | A | J ¹ | |
| OP07SAZ7 | JM38510/13501SPA | A | Z | |
| OP07SZ7 | JM38510/13502SPA | X | Z | |
| OP07AJ/QMLR | 5962R9863901VGA | A | J ¹ | |
| OP07AL/QMLR | 5962R9863901VHA | A | L | |
| OP07AZ/QMLR | 5962R9863901VPA | A | Z | |
| Space Level Die | OP07-000C | A | C | 3 |
| Space Level Die | OP07R000C | A | C | |
| OP11S | Quad Matched 741-Type Op Amplifier | A | C, M, Y | |
| OP11AM/QMLV | 5962-8980101VDA | A | M | |
| Space Level Die | OP11-000C | A | C | 3 |
| OP12S | Precision Low Input Current Op Amplifier | A | C | |
| Space Level Die | OP12-000C | A | C | 3 |

OPERATIONAL AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|---|------------------|-----------------------|------|
| OP15S | Precision JFET-Input Op Amplifier | A | J, L, Z | |
| OP15AJ/QMLR | 5962R8954203VGA | A | J ¹ | |
| OP15AL/QMLR | 5962R8954203VHA | A | L | |
| OP15AZ/QMLR | 5962R8954203VPA | A | Z | |
| OP16S | Precision JFET-Input Op Amplifier | A | J, Z | |
| OP16AJ/QMLR | 5962R8954304VGA | A | J ¹ | |
| OP16AZ/QMLR | 5962R8954304VPA | A | Z | |
| OP22S | Programmable Micro Power Op Amplifier | A | J | |
| | OP22-903J | A | J ¹ | 3 |
| OP27S | Low Noise Precision Op Amplifier | A | C, J, L, RC, Z | |
| OP27SAJ6 | JM38510/13503SGA | A | J ¹ | |
| OP27SAZ7 | JM38510/13503SPA | A | Z | |
| OP27AJ/QMLR | 5962R9468002VGA | A | J ¹ | |
| OP27AL/QMLR | 5962R9468002VHA | A | L | |
| OP27ARC/QMLR | 5962R9468002V2A | A | RC | |
| OP27AZ/QMLR | 5962R9468002VPA | A | Z | |
| OP27AL/QMLL | 5962L9468003VHA | A | L | |
| Space Level Die | OP27-000C | A | C | 3 |
| Space Level Die | OP27R000C | A | C | |
| OP37S | Low Noise Precision High Speed Op Amp | A | J, Z | |
| OP37AJ/QMLV | 5962-8853701VGA | A | J ¹ | |
| OP37AZ/QMLV | 5962-8853701VPA | A | Z | |
| OP42S | Hi Speed, Fast Settling Precision JFET-Input | A | J, Z | |
| OP42AJ/QMLV | 5962-8851301VGA | A | J ¹ | |
| OP42AZ/QMLV | 5962-8851301VPA | A | Z | |
| OP77S | Next Generation OP07 | A | J, L, RC, Z | |
| OP77AJ/QMLV | 5962-8773802VGA | A | J ¹ | |
| OP77AL/QMLV | 5962-8773802VHA | A | L | |
| OP77ARC/QMLV | 5962-8773802V2A | A | RC | |
| OP77AZ/QMLV | 5962-8773802VPA | A | Z | |
| OP200S | Dual Low-Offset, Low Power Op Amplifier | A | RC, Z | |
| OP200ARC/QMLV | 5962-8859301V2A | A | RC | |
| OP200AZ/QMLV | 5962-8859301VPA | A | Z | |

OPERATIONAL AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|---|------------------|----------------------|------|
| OP215S | Dual Precision JFET Input Op Amplifier | A | C, J, RC, Z | |
| OP215AJ/QMLR | 5962R8853801VGA | A | J ¹ | |
| OP215AZ/QMLR | 5962R8853801VPA | A | Z | |
| OP215ARC/QMLR | 5962R8853804V2A | A | RC | |
| Space Level Die | OP215-000C | A | C | 3 |
| Space Level Die | OP215R000C | A | C | |
| OP227S | Dual Low Noise Low Offset Inst. Op Amp | A | Y, M | |
| | OP227R903Y | A | Y | |
| | OP227R903M | A | M | |
| OP270S | Dual Very Low Noise Precision Op Amplifier | A | C, RC, Z, M | |
| OP270AZ/QMLV | 5962-8872101VPA | A | Z | |
| OP270ARC/QMLV | 5962-8872101V2A | A | RC | |
| OP270AZ/QMLR | 5962R8872101VPA | A | Z | |
| OP270AM/QMLR | 5962R8872101VDA | A | M | |
| OP270ARC/QMLR | 5962R8872101V2A | A | RC | |
| OP270AM/QMLL | 5962L8872103VDA | A | M | |
| Space Level Die | OP270-000C | A | C | 3 |
| Space Level Die | OP270R000C | A | C | |
| OP400S | Quad Low-Offset, Low-Power Op Amplifier | A | C, N, TC, Y | |
| OP400AN/QMLV | 5962-8777101VKA | A | N | |
| OP400ATC/QMLV | 5962-8777101V3A | A | TC | |
| OP400AY/QMLV | 5962-8777101VCA | A | Y | |
| OP400AY/QMLR | 5962R8777101VCA | A | Y | |
| OP400AN/QMLR | 5962R8777101VKA | A | N | |
| OP400AN/QMLL | 5962L8777102VKA | A | N | |
| Space Level Die | OP400-000C | A | C | 3 |
| OP467S | Quad High-Speed Precision Op Amplifier | A | RC, Y, M | |
| OP467ARC/QMLV | 5962-9325801V2A | A | RC | |
| OP467AM/QMLR | 5962R9325801VDA | A | M | |
| OP467AY/QMLR | 5962R9325801VCA | A | Y | |

OPERATIONAL AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|---|------------------|----------------------|------|
| OP470S | Very Low-Noise Quad Op Amplifier | A | C, N,RC,TC,Y | |
| OP470ARC/QMLV | 5962-8856501V2A | A | RC | |
| OP470ARC/QMLR | 5962R8856501V2A | A | RC | |
| OP470AN/QMLR | 5962R8856501VKA | A | N | |
| OP470AY/QMLR | 5962R8856501VCA | A | Y | |
| OP470AY/QMLL | 5962L8856503VCA | A | Y | |
| OP470-903TC | OP470-903TC | A | TC | 3 |
| Space Level Die | OP470-000C | A | C | 3 |
| Space Level Die | OP470R000C | A | C | |
| OP471S | High Speed Low Noise Quad Op Amplifier | A | M, N, Y | |
| OP471AM/QMLR | 5962R8856502VDA | A | M | |
| OP471AN/QMLR | 5962R8856502VKA | A | N | |
| OP471AY/QMLR | 5962R8856502VCA | A | Y | |
| OP471AM/QMLL | 5962L8856504VDA | A | M | |
| OP484S | Precision, Rail to Rail IP/OP Op Amplifier | A | C, Y, M | |
| OP484AY/QMLV | 5962-0051701VCA | A | Y | |
| OP484AM/QMLV | 5962-0051701VDA | A | M | |
| OP484AY/QMLR | 5962R0051701VCA | A | Y | |
| OP484AM/QMLR | 5962R0051701VDA | A | M | |
| OP484AM/QMLL | 5962L0051702VDA | A | M | |
| Space Level Die | OP484-000C | A | C | 3 |
| Space Level Die | OP484R000C | A | C | |
| PM108S | Low Input Current Op Amplifier | A | C, J, L, Z | |
| PM108SAJ6 | JM38510/10104SGA | A | J ¹ | |
| PM108AJ/QMLR | 5962R9863701VGA | A | J ¹ | |
| PM108AL/QMLR | 5962R9863701VHA | A | L | |
| PM108AZ/QMLR | 5962R9863701VPA | A | Z | |
| Space Level Die | PM108-000C | A | C | 3 |
| Space Level Die | PM108R000C | A | C | |
| PM155S | Monolithic JFET Input Op Amplifier | A, X | J, Z | |
| PM155SAJ6 | JM38510/11404SGA | A | J ¹ | |
| PM155SAZ7 | JM38510/11404SPA | A | Z | |
| PM155AJ/QMLR | 5962R9863601VGA | A | J ¹ | |
| PM155AZ/QMLR | 5962R9863601VPA | A | Z | |

OPERATIONAL AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|-----------------------------------|---|------------------|------------------------|------|
| PM156S | Monolithic JFET Input Op Amplifier | A, X | J, Z | |
| PM156SJ6 | JM38510/11402SGA | X | J ¹ | |
| PM156SAJ6 | JM38510/11405SGA | A | J ¹ | |
| PM156AJ/QMLR | 5962R9863602VGA | A | J ¹ | |
| RH07 | Precision Op Amplifier | - | DICE, H, W, J8 | |
| 05-08-5010 Option 1 | RH07H | - | H ² | |
| 05-08-5010 Option 2 | RH07J8 | - | J8 | |
| 05-08-5010 Option 3 | RH07W | - | W | |
| 05-08-5254 | RH07DICE | - | DICE | |
| RH1013 | Dual Precision Op Amplifier | - | DICE, H, W, J8 | |
| 05-08-5013 Option 1 | RH1013MH | - | H ² | |
| 05-08-5013 Option 2 | RH1013MJ8 | - | J8 | |
| RH1013MW (05-08-5013 Option 3) | 5962R8876003VHA | - | W | 9 |
| RH1013DICE (05-08-5112) | 5962R8876003V9A | - | DICE | 9 |
| RH1014 | Quad Precision Op Amplifier | - | J, W | |
| 05-08-5014 Option 1 | RH1014MJ | - | J ² | |
| RH1014MW (05-08-5014 Option 2) | 5962R8967703VDA | - | W | 9 |
| RH101A | Operational Amplifier | A | DICE, H, W, J8 | |
| 05-08-5015 Option 1 | RH101AH | A | H ² | |
| 05-08-5015 Option 2 | RH101AJ8 | A | J8 | |
| 05-08-5015 Option 3 | RH101AW | A | W | |
| 05-08-5154 | RH101ADICE | A | DICE | |
| RH1028 | Ultralow Noise Precision Op Amplifier | - | DICE, W | |
| 05-08-5217 | RH1028MW | - | W | |
| 05-08-5238 | RH1028MDICE | - | DICE | |
| RH1056 | Precision High Speed JFET Input Op Amplifier | A | DICE, H, W | |
| 05-08-5019 Option 1 | RH1056AMH | A | H ² | |
| 05-08-5019 Option 2 | RH1056AMW | A | W | |
| 05-08-5212 | RH1056ADICE | A | DICE | |
| RH1078 | Dual Micropower Precision Op Amplifier | - | DICE, H, MJ8, W | |
| 05-08-5020 Option 1 | RH1078MH | - | H | |
| 05-08-5020 Option 2 | RH1078MJ8 | - | J8 | |
| 05-08-5020 Option 3 | RH1078MW | - | W | |
| 05-08-5209 | RH1078MDICE | - | DICE | |

OPERATIONAL AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|----------------------------|---|------------------|------------------------|------|
| RH108A | General Purpose Op Amplifier | A | DICE, H, MJ8, W | |
| 05-08-5022 Option 1 | RH108AH | A | H ² | |
| 05-08-5022 Option 2 | RH108AJ8 | A | J8 | |
| 05-08-5022 Option 3 | RH108AW | A | W | |
| 05-08-5111 | RH108ADICE | A | DICE | |
| RH1128 | Ultralow Noise Precision Op Amplifier | - | DICE, W | |
| 05-08-5218 | RH1128MW | - | W | |
| 05-08-5238 | RH1128MDICE | - | DICE | |
| RH118 | Precision High Speed Op Amplifier | - | H, J8, W | |
| 05-08-5025 Option 1 | RH118H | - | H ² | |
| 05-08-5025 Option 2 | RH118J8 | - | J8 | |
| 05-08-5025 Option 3 | RH118W | - | W | |
| RH1498 | Dual R-R Precision C-Load Op Amplifier | - | DICE, W | |
| RH1498MW (05-08-5201) | 5962R1325001VHA | - | W | 9 |
| RH1498DICE (05-08-5208) | 5962R1325001V9A | - | DICE | 9 |
| RH1499 | Quad R-R Precision C-Load Op Amplifier | - | W | |
| RH1499MW (05-08-5208) | 5962R1325001V9A | - | W | 9 |
| RH1814 | Quad High Speed, High Slew Rate Op Amplifier | - | DICE, W | |
| 05-08-5204 | RH1814MW | - | W | |
| 05-08-5220 | RH1814MDICE | - | DICE | 8 |
| RH27 | Precision Low Offset Op Amplifier | AE, E, C | DICE, H, J8, W | |
| 05-08-5029 Option 1 | RH27CH | C | H ² | |
| 05-08-5029 Option 2 | RH27CJ8 | C | J8 | |
| 05-08-5029 Option 3 | RH27CW | C | W | |
| 05-08-5029 Option 4 | RH27EW | E | W | |
| 05-08-5029 Option 5 | RH27EH | E | H ² | |
| 05-08-5029 Option 6 | RH27AEW | AE | W | |
| 05-08-5114 | RH27CDICE | C | DICE | |
| RH37 | Precision High Speed Op Amplifier | C | H, J8, W | |
| 05-08-5030 Option 1 | RH37CH | C | H ² | |
| 05-08-5030 Option 2 | RH37CJ8 | C | J8 | |
| 05-08-5030 Option 3 | RH37CW | C | W | |
| RH6200 | High Speed R-R Low Noise Op Amplifier | - | DICE, W | |
| 05-08-5249 | RH6200MW | - | W | |
| 05-08-5250 | RH6200MDICE | - | DICE | |

VOLTAGE REFERENCES

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|---|------------------|-----------------------|------|
| AD584S | Pin Programmable Precision Voltage Ref | S, T | H-8 | |
| AD584SH/QMLV | 5962-3812801VGA | S | H ¹ | |
| AD584TH/QMLV | 5962-3812802VGA | T | H ¹ | |
| AD584SH/QMLR | 5962R3812801VGA | S | H ¹ | |
| AD584TH/QMLR | 5962R3812802VGA | T | H ¹ | |
| AD584TH/QMLL | 5962L3812805VGA | T | H ¹ | |
| AD589S | Precision 1.2 Volt IC Reference | T | H-2 | |
| AD589TH/QMLV | 5962-8992901VXA | T | H ¹ | |
| REF01S | +10V Precision Voltage Reference | A | J, L, RC, Z | |
| REF01AJ/QMLR | 5962R8958101VGA | A | J ¹ | |
| REF01AL/QMLR | 5962R8958101VHA | A | L | |
| REF01ARC/QMLR | 5962R8958101V2A | A | RC | |
| REF01AL/QMLL | 5962L8958105VHA | A | L | |
| Space Level Die | REF01-000C | A | C | 3 |
| Space Level Die | REF01R000C | A | C | |
| REF02S | +5V Precision Volt Ref./Temp. Transducer | A | C, J, L, RC, Z | |
| REF02AJ/QMLR | 5962R8551401VGA | A | J ¹ | |
| REF02AL/QMLR | 5962R8551401VHA | A | L | |
| REF02ARC/QMLR | 5962R85514 01V2A | A | RC | |
| REF02AZ/QMLR | 5962R8551401VPA | A | Z | |
| REF02AL/QMLL | 5962L8551405VHA | A | L | |
| Space Level Die | REF02-000C | A | C | 3 |
| Space Level Die | REF02R000C | A | C | |
| REF05S | +5V Precision Voltage Reference | A | J, L, Z | |
| REF05AJ/QMLR | 5962R0051601VGA | A | J ¹ | |
| REF05AL/QMLR | 5962R0051601VHA | A | L | |
| REF05AZ/QMLR | 5962R0051601VPA | A | Z | |
| REF05AL/QMLL | 5962L0051602VHA | A | L | |
| REF10S | +10V Precision Voltage Reference | A | J, L | |
| REF10AJ/QMLR | 5962R8947901VGA | A | J ¹ | |
| REF10AL/QMLR | 5962R8947901VHA | A | L | |
| REF10AL/QMLL | 5962L8947903VHA | A | L | |

VOLTAGE REFERENCES

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------------------------|---|------------------|----------------------|------|
| REF43S | +2.5V Low-Power Precision Voltage Ref | B | J, L, RC, Z | |
| REF43AZ/QMLR | 5962R9060302VPA | B | Z | |
| REF43AL/QMLR | 5962R9060303VHA | B | L | |
| REF43AL/QMLL | 5962L9060304VHA | B | L | |
| | REF43-803J | B | J ¹ | 3 |
| | REF43-803L | B | L | 3 |
| | REF43-803RC | B | RC | 3 |
| | REF43-803Z | B | Z | 3 |
| | REF43R803J | B | J ¹ | |
| | REF43R803RC | B | RC | |
| RH1009 | +2.5V Precision Voltage Reference | - | H, W, DICE | |
| RH1009MH (05-08-5011 Option 1) | 5962R8961002VXC | - | H ² | 9 |
| RH1009MW (05-08-5011 Option 2) | 5962R8961002VHA | - | W | 9 |
| RH1009MDICE (05-08-5115) | 5962R8961002V9A | - | DICE | 9 |
| RH1021 | +5V, +7V, +10V Precision Voltage Reference | B, C, D | H, W, DICE | |
| RH1021BMH-5 (05-08-5016 Option 1) | 5962R8876201VGA | B | H ² | 9 |
| RH1021CMH-5 (05-08-5016 Option 2) | 5962R8876202VGA, | C | H ² | 9 |
| 05-08-5016 Option 3 | RH1021DMH-5 | D | H ² | |
| RH1021CMW-5 (05-08-5016 Option 4) | 5962R8876202VHA | C | W | 9 |
| RH1021C-5DICE (05-08-5117) | 5962R8876202V9A | C | DICE | 9 |
| 05-08-5017 Option 1 | RH1021BMH-7 | B | H ² | |
| 05-08-5017 Option 2 | RH1021DMH-7 | D | H ² | |
| RH1021BMH-10 (05-08-5018 Option 1) | 5962R8860001VGA | B | H ² | 9 |
| RH1021CMH-10 (05-08-5018 Option 2) | 5962R8860002VGA, | C | H ² | 9 |
| 05-08-5018 Option 3 | RH1021DMH-10 | D | H ² | |

VOLTAGE REFERENCES

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|------------------------------------|---|------------------|----------------------|------|
| RH1021 Cont | +5V, +7V, +10V Precision Voltage Reference | B, C, D | H, W, DICE | |
| RH1021CMW-10 (05-08-5018 Opt 4) | 5962R8860002VHA | C | W | 9 |
| RH1021C-10DICE (05-08-5118) | 5962R8860002V9A | C | DICE | 9 |
| RH1034-1.2 | +1.2V Voltage Reference (+7V Aux) | - | H, W | |
| 05-08-5229 Option 1 | RH1034MW-1.2 | - | W | |
| 05-08-5229 Option 2 | RH1034MH-1.2 | - | H ² | |
| RH129A | +6.9V Voltage Reference | A | H | |
| 05-08-5027 | RH129AH | A | H ² | |

SWITCHES AND MULTIPLEXERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| AD8182S | Dual 2:1 Buffered Mux | A | M | |
| AD8182AM/QMLR | 5962R1021101VDA | A | M | |
| AD8182AM/QMLL | 5962L1021102VDA | A | M | |
| ADG201S | LCMOS Hi-speed QUAD SPST Switches | T | Q-16 | |
| | ADG201-803Q | T | Q | 2, 3 |
| SW201S | Quad SPST JFET Analog Switch | B | Q | |
| | SW201-803Q | B | Q | 3 |

SAMPLE-AND-HOLD AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| AD585S | Hi Speed, Precision Sample-and-Hold Amp | S | M | |
| | AD585-703M | S | M | 3 |
| | AD585-713M | S | M | 3 |
| SMP11S | Low Droop Rate/Accurate Sample/Hold Amp | B | Y | |
| | SMP11-803Y | B | Y | 3 |

RF/IF ICs

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| ADL5501S | Tru Pwr RMS Detector 50MHz - 6GHz | A | L | |
| ADL5501AL/QMLR | 5962R1123901VHA | A | L | |
| ADL5501AL/QMLL | 5962L1123902VHA | A | L | |

RF/IF ICs

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| ADL5513S | 4 GHz Log Amp | A | F-16 | |
| ADL5513AF/QMLR | 5962R1120301VXA | A | F | |
| AD8346S | 2.5 GHz Modulator | A | F-16 | |
| AD8346AF/QMLR | 5962R0922701VXA | A | F | |
| AD8346AF/QMLL | 5962L0922702VXA | A | F | |
| ADF4108S | 7 GHz PLL Frequency Synthesizer | A,B | F-16 | |
| ADF4108L703F | 5962L1420401VXA | A | F | |
| ADF4108L803F | 5962L1420402VXA | B | F | |

CLOCK GENERATION AND DISTRIBUTION

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| ADCLK925S | ECL Clock/Data Fanout Buffer 7GHz | A | F-16 | |
| ADCLK925AF/QMLR | 5962R1320501VXA | A | F | |
| ADCLK925AF/QMLL | 5962L1320502VXA | A | F | |

ISOLATORS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| ADuM7442S | 25 MBPS Quad Channel Digital Isolator | S | F-16 | |
| | ADUM7442R703F | S | F | |
| ADuM3190S | High Stability Isolated Error Amplifier | S | F-16 | |
| | ADUM3190P703F | S | F | |
| ADuM141ES | 150 MBPS Quad-Channel Digital Isolator | S | F-16 | |
| | ADUM141E1L703F | S | F | |

LINEAR REGULATORS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--------------------------|------------------|----------------------|------|
| RH1085 | 3A LDO Regulator | - | DICE, K | |
| 05-08-5105 | RH1085MK | - | K | |
| 05-08-5140 | RH1085MKDICE | - | DICE | |

LINEAR REGULATORS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|---|------------------|----------------------|------|
| RH1086 | 0.5A & 1.5A LDO Regulator | - | DICE, H, K | |
| 05-08-5021 | RH1086MH | - | H ² | |
| 05-08-5021 | RH1086MK | - | K | |
| 05-08-5134 | RH1086BHKDICE | - | DICE | |
| 05-08-5134 | RH1086BKDICE | - | DICE | |
| RH117 | 0.5A & 1.5A Regulator | - | DICE, H, K | |
| 05-08-5024 | RH117H | - | H ² | |
| 05-08-5024 | RH117K | - | K | |
| 05-08-5116 | RH117DICE | - | DICE | |
| 05-08-5116 | RH117KDICE | - | DICE | |
| RH1185 | 3A Negative LDO Regulator | A | DICE, K | |
| 05-08-5206 | RH1185AMK | A | K | |
| 05-08-5232 | RH1185AMKDICE | A | DICE | |
| RH137 | 0.5A & 1.5A Negative Regulator | - | DICE, H, K | |
| 05-08-5028 | RH137H | - | H ² | |
| 05-08-5028 | RH137K | - | K | |
| 05-08-5113 | RH137DICE | - | DICE | |
| 05-08-5113 | RH137KDICE | - | DICE | |
| RH1573 | LDO PNP Regulator Driver | - | DICE | |
| 05-08-5223 | RH1573MKDICE | - | DICE | |
| RH1965 | 0.9A Low Noise, LDO Regulator | - | DICE | |
| 05-08-5273 | RH1965MKDICE | - | DICE | |
| RH3080 | 0.9A Single Resistor LDO Regulator | - | DICE | |
| 05-08-5246 | RH3080MKDICE | - | DICE | |
| RH3083 | 2.8A Single Resistor LDO Regulator | - | DICE | |
| 05-08-5744 | RH3083MKDICE | - | DICE | |

SWITCHING REGULATORS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|---|------------------|----------------------|------|
| RH1959 | 4.5A Switching Regulator | | DICE | |
| | RH1959MILDICE | | DICE | |
| RH3845 | 60Vin Synchronous Switching Controller | | DICE | |
| | RH3845MKDICE | | DICE | |

SWITCHING REGULATORS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| RHK3845 | 60Vin Synchronous Switching Controller Kit Including 1 x RH3845 & 2 x RH411 | - | DICE | |
| | RHK3845MKDICE | - | DICE | |

RF & MICROWAVE

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--|------------------|----------------------|------|
| ADH232S | DC - 15GHz, High Isolation, Non Reflective SPDT Switch | | C | |
| Space Level Die | HMC8800 | | C | |
| ADH346S | DC - 20GHz, Voltage Variable Attenuator, | | C | |
| Space Level Die | HMC8801 | | C | |
| ADH424S | DC - 13GHz, 0.5dB LSB 6-Bit Digital Attenuator | | C | |
| Space Level Die | HMC8802 | | C | |
| ADH463S | 2 - 20GHz, Low Noise Amplifier with Adjustable Gain Control | | C | |
| Space Level Die | HMC8803 | | C | |
| ADH141S | 6 - 18GHz, Double Balanced Mixer RF & LO=6-18GHz, IF=DC-6GHz | | C | |
| Space Level Die | HMC8804 | | C | |
| ADH1015S | 26 - 32GHz, Triple Balanced Mixer RF=26-32GHz, LO=7-11GHz & IF=16-22GHz | | C | |
| Space Level Die | HMC8805 | | C | |

OTHER FUNCTIONS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|---|------------------|----------------------|------|
| AD537S | Voltage to Frequency Converter, +/-30V to 150kHz | S | D-14 | |
| | AD537-703D | S | D | 2, 3 |
| AD590S | 2 Terminal Temperature Transducer, 1uA/°K | L, M | H-3, F-2 | |
| AD590MF/QMLR | 5962R8757104VXA | M | F | |
| AD590MH/QMLR | 5962R8757104VYA | M | H ¹ | |
| AD590LF/QMLR | 5962R8757103VXA | L | F | |
| AD590LH/QMLR | 5962R8757103VYA | L | H ¹ | |
| AD590MH/QMLL | 5962L8757105VYA | M | H ¹ | |
| AD652S | Synchronous Voltage to Frequency Conv | S | Q-16 | |
| AD652SQ/QMLV | 5962-9322201VEA | S | Q-16 | |

OTHER FUNCTIONS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|---|------------------|----------------------|------|
| AD9814S | 14-Bit, 3-Channel CCD Signal Processor | | F-28 | |
| | AD9814-703F | | F-28 | 2, 3 |
| MAT02S | Low Noise, Matched Dual NPN Transistor | A | C, H | |
| | MAT02-903H | A | H ¹ | 3 |
| Space Level Die | MAT02-000C | A | C | 3 |
| MAT03S | Low Noise, Matched Dual PNP Transistor | A | C, L | |
| | MAT03-903L | A | L | 3 |
| Space Level Die | MAT03-000C | A | C | 3 |

Partner products :

Partner products are built using LTC RHDICE and sold by ANAREN INC. formerly MS KENNEDY CORP. (MSK prefix) and COBHAM plc formerly AEROFLEX MICROELECTRONIC SOLUTIONS (VRG and RAD prefix).

LTC RH DICE part numbers are shown for each partner product, please contact the partner company for the latest status or visit the following web pages to access the SMDs and data sheets.

Websites:

http://www.linear.com/products/Space_Qualified_Products

<http://mskennedy.com/products/Rad-Hard-Products>

<http://ams.aeroflex.com/pagesproduct/prods-hirel-voltage.cfm>

ANALOG TO DIGITAL CONVERTERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------|--------------------------|------------------|----------------------|------|
| RAD1419 (R1419DICE) | 14-Bit 800KSPS ADC | A | FP | |
| | RAD-1419ADC-01 | A | FP | 5 |

OPERATIONAL AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|----------------------|--------------------------|------------------|----------------------|------|
| MSK0041 (RH101ADICE) | 0.5A Power Op Amplifier | - | TO-8 | |
| | MSK0041KRH | - | TO-8 | 6 |
| MSK106 (RH101ADICE) | 2A Power Op Amplifier | - | FP | |
| | MSK106KRH | - | FP | 6 |
| | MSK106KRHG | - | FP | 6 |

CURRENT SENSE AMPLIFIERS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|-------------------------|---------------------------------------|------------------|----------------------|------|
| MSK196 (RH6105DICE) | Micropower R-R Current Sense Amp | - | FP | |
| | MSK196VRH | - | FP | 6 |
| | MSK196VRHG | - | FP | 6 |
| MSK496 (4 x RH6105DICE) | Quad Micropower R-R Current Sense Amp | - | FP | |
| | MSK496KRH | - | FP | 6 |

LINEAR REGULATORS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---------------------------------|---|------------------|----------------------|------|
| MSK5800 (RH1573DICE) | 4A ULDO Regulator | - | FP-12 | |
| MSK5800KRH | 5962F09216 | - | FP-12 | 6 |
| MSK5805 (RH1573DICE) | 1A ULDO Regulator | - | FP-16 | |
| MSK5805KRHx | | - | FP-16 | 6, 7 |
| MSK5810 (RH1573DICE) | 5A ULDO Regulator | - | FP-20 | |
| MSK5810KRHx | 5962F09216 | - | FP-20 | 6, 7 |
| MSK5820 (RH1573DICE) | 5A ULDO Regulator (1.5, 1.8, 1.9, 2.5, 2.8, 3.3 & 5V Fixed Voltages) | - | TAB-PP | |
| MSK5820-x.xKRHx | 5962F09216 | - | TAB-PP | 6, 7 |
| MSK5821 (RH1573DICE) | 5A ULDO Regulator | - | TAB-PP | |
| MSK5821KRHx | 5962F09216 | - | TAB-PP | 6, 7 |
| MSK5822 (RH1573DICE) | 5A ULDO Regulator Split Bias (1.5, 1.9, 2.5, 2.8, 3.3 & 5V Fixed Voltages) | - | TAB-PP | |
| MSK5822-x.xKRHx | 5962F09236 | - | TAB-PP | 6, 7 |
| MSK5823 (RH1573DICE) | 3A ULDO Regulator (1.8 & 2.5V Fixed Voltages) | - | FP-8 | |
| MSK5823-x.xKRHx | 5962F08246 | - | FP-8 | 6, 7 |
| MSK5824 (RH1573DICE) | 3A ULDO Regulator | - | FP-8 | |
| MSK5824KRHx | 5962F09208 | - | FP-8 | 6, 7 |
| MSK5825 (RH1573DICE) | 3A ULDO Regulator (2.5 & 3.3V Fixed Voltages) | - | FP-8 | |
| MSK5825KRHx | 5962F09209 | - | FP-8 | 6, 7 |
| MSK5826 (RH1573DICE) | 3A ULDO Regulator | - | FP-8 | |
| MSK5826KRHx | 5962F09210 | - | FP-8 | 6, 7 |
| MSK5940 (RH1185ADICE) | 3A Negative LDO Regulator (-5, -5.2, -10, -12, -15V Fixed Voltages) | A | TO-257 | |
| MSK5940-x.xKRHx | | A | TO-257 | 6, 7 |
| MSK5953 (2 x RH3080DICE) | Dual 1A Single Resistor LDO Regulator | - | FP-12 | |
| MSK5953KRH | | - | FP-12 | 6 |
| MSK5965 (RH1965DICE) | 0.9A Low Noise LDO Regulator | - | FP-10 | |
| MSK5965KRHx | | - | FP-10 | 6, 7 |

LINEAR REGULATORS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---|---|------------------|----------------------|------|
| MSK5970 (RH1086DICE) | 1.5A LDO Regulator | - | SMD-1, TO-257 | |
| MSK5970KRHx | 5962R09211 | - | TO-257 | 6, 7 |
| MSK5970KRHL | 5962R09211 | - | SMD-1 | 6 |
| MSK5971 (RH1085DICE) | 3A LDO Regulator | - | SMD-1, TO-257 | |
| MSK5971KRHx | 5962R09212 | - | TO-257 | 6, 7 |
| MSK5971KRHL | 5962R09212 | - | SMD-1 | 6 |
| MSK5972 (RH117DICE) | 1.5A LDO Regulator | - | SMD-1, TO-257 | |
| MSK5972KRHx | 5962R09213 | - | TO-257 | 6, 7 |
| MSK5972KRHL | 5962R09213 | - | SMD-1 | 6 |
| MSK5973 (RH137DICE) | 1.5A Negative LDO Regulator | - | SMD-1, TO-257 | |
| MSK5973KRHx | 5962R09214 | - | TO-257 | 6, 7 |
| MSK5973KRHL | 5962R09214 | - | SMD-1 | 6 |
| MSK5978 (RH3080DICE) | 0.7A Single Resistor LDO Regulator | - | FP-10 | |
| MSK5978VRHx | | - | FP-10 | 6, 7 |
| MSK5979 (RH3080DICE) | 0.9A Single Resistor LDO Regulator | - | TO-257 | |
| MSK5979VRHx | | - | TO-257 | 6, 7 |
| MSK5983 (RH3083DICE) | 2.25A Single Resistor LDO Regulator | - | FP-16 | |
| MSK5983KRHx | | - | FP-16 | 6, 7 |
| MSK5984 (RH3083DICE) | 2.8A Single Resistor LDO Regulator | - | TO-257 | |
| MSK5984KRHx | | - | TO-257 | 6, 7 |
| MSK5985 (RH3083DICE) | 1.9A Single Resistor LDO Regulator | - | TAB-PP | |
| MSK5985KRHx | | - | TAB-PP | 6, 7 |
| VRG8601 / VRG8602 (RH117DICE + RH137DICE) | Dual 1.5A (Positive) & 1.5A (Negative) Regulator | - | TAB-PP | |
| VRG8601 / VRG8602 | 5962R05219 | - | TAB-PP | 5, 7 |
| VRG8607 / VRG8608 (2 x RH117DICE) | Dual 1.5A Regulator | - | TAB-PP | |
| VRG8601 / VRG8602 | 5962R05219 | - | TAB-PP | 5, 7 |
| VRG8651 / VRG8652 (RH1086DICE + RH1185ADICE) | Dual 1A (Positive) & 3A (Negative) LDO Regulator | -/A | TAB-PP | |
| VRG8651 / VRG8652 | 5962R09201 | -/A | TAB-PP | 5, 7 |
| VRG8657 / VRG8658 (2 x RH1086DICE) | Dual 1A LDO Regulator | - | TAB-PP | |
| VRG8657 / VRG8658 | 5962R09201 | - | TAB-PP | 5, 7 |

LINEAR REGULATORS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|---|---|------------------|----------------------|------|
| VRG8660 (RH117DICE) | 1A LDO Regulator | - | SMD-0.5 | |
| VRG8660 | 5962R09206 | - | SMD-0.5 | |
| VRG8662 (RH1086DICE) | 1A LDO Regulator | - | SMD-0.5 | |
| VRG8662 | 5962R09207 | - | SMD-0.5 | 5 |
| VRG8663 (RH1185ADICE) | 3A Negative LDO Regulator | A | SMD | |
| VRG8663 | 5962R09207 | A | SMD-0.5 | 5 |
| VRG8666 (RH3080DICE) | 1A Single Resistor LDO Regulator | - | SMD | |
| VRG8666 | 5962R11205 | - | SMD | 5 |
| VRG8667 / VRG8668 (2 x RH3080DICE) | Dual 1A Single Resistor LDO Regulator | - | TAB-PP | |
| VRG8667 / VRG8668 | 5962R13203 | - | TAB-PP | 5, 7 |
| VRG8669 (RH3083DICE) | 2.5A Single Resistor LDO Regulator | - | SMD | |
| VRG8669 | 5962R14201 | - | SMD | 5 |
| VRG8697 / VRG8698 (2 x RH3080DICE) | Dual 2.5A Single Resistor LDO Regulators | - | TAB-PP | |
| VRG8697 / VRG8698 | 5962R14202 | - | TAB-PP | 5, 7 |

SWITCHING REGULATORS

| Product/Description | Part Number ³ | Electrical Grade | Package ¹ | Note |
|----------------------------------|---|------------------|----------------------|------|
| MSK5044 (RH1959DICE) | 3.5A Switching Regulator (Isolated Case) | - | TAB-PP | |
| MSK5044KRHx | 5962R11231 | - | TAB-PP | 6, 7 |
| MSK5048 (RH1959DICE) | 3.5A Switching Regulator (Grounded Case) | - | TAB-PP | |
| MSK5048KRHx | 5962R11232 | - | TAB-PP | 6, 7 |
| MSK5055 (RH3845DICE) | 60Vin Synchronous Switching Controller | - | FP-16 | |
| MSK5055-xKRHx | 5962F14223 | - | FP-16 | 6, 7 |
| MSK5059 (RH1959DICE) | 4.5A Switching Regulator | - | FP-16 | |
| MSK5059KRHx | 5962R11234 | - | FP-16 | 6, 7 |
| MSK5063 (RHK3845DICE) | 10A 60Vin Synchronous Switching Regulator Module (External Inductor) | - | FP-46 | |
| | MSK5063KRHx | - | FP-46 | 6, 7 |

Notes

¹ See package descriptions on last page.

- ² Not available with wafer lot acceptance. Available as MIL-STD 883 Class B Dice plus SEM and Test Method 2010 Condition A Visual only.
- ³ Part Numbers in this column containing “-“may utilize a “-“or “0” in product documentation, shipping and/or purchasing documents.
- ⁴ Not available with wafer lot acceptance. SEM inspection per MIL-STD-883, Test Method 2018 is not applicable to this product as the wafer fabrication is manufactured using planarized metallization process.
- ⁵ Cobham (Aeroflex) product built using LTC space qualified DICE
- ⁶ Anaren (MSK) product built using LTC space qualified DICE
- ⁷ For lead form options please refer to SMD or data sheet
- ⁸ RH1814MDICE is a dual op amp (2 per RH1814MW packaged part)
- ⁹ LTC control drawing alternative to SMD in parenthesis

Product Prefix Guide

| | |
|-------|--|
| AD | Analog Devices |
| ADCLK | Analog Devices Clock Generation / Distribution |
| ADA | Analog Devices Amplifiers |
| ADH | Hittite Microwave |
| ADF | Analog Devices Frequency Synthesis |
| ADL | Analog Devices RF |
| ADuM | Analog Devices Micro-machined |
| AMP | Analog Devices Instrumentation Amplifier |
| DAC | Analog Devices Digital to Analog Converter |
| LTC | Linear Technology |
| MAT | Analog Devices Matched Transistor |
| MSK | Anaran-MSK (built with Linear Technology die) |
| MUX | Analog Devices Multiplexer |
| OP | Analog Devices Proprietary Operational Amplifier |
| PM | Analog Devices Second Source |
| RAD | Cobham-Aeroflex (built with Linear Technology die) |
| REF | Analog Devices Voltage Reference |
| RH | Linear Technology (Radiation Hardened) |
| RT | Linear Technology (Radiation Tolerant) |
| SMP | Analog Devices Sample and Hold Amplifier |
| SW | Analog Devices Switch |
| VRG | Cobham-Aeroflex (built with Linear Technology die) |

Space Products Package Information

PRODUCT PACKAGE OPTION KEY*

| | ADI Package Description | LTC Package Description |
|----------------|---|---|
| C | Dice | |
| D-xx | Side Brazed Hermetic DIP | |
| DICE | | Dice |
| E-xx | Ceramic Leadless Chip Carrier | |
| F-xx | Bottom Brazed Ceramic Dual Flat Pack (2, 10, 14, 16, & 28 Lead) | |
| F-xx | Ceramic Quad Flat Pack (48, 52 Lead) | |
| FP | | Hermetic Flatpack |
| G | | SSOP Plastic Package |
| H ¹ | 6 lead TO-99 Can (Santa Clara Based Product) | |
| H ² | | TO-5, TO-39 Can (refer to SCD/SMD for details) |
| H-xx | Hermetic Metal Can (Other Analog Divisions) | |
| J ¹ | 8-Lead TO-99 Can | |
| J ² | | 14-Lead Ceramic Glass Seal DIP |
| J8 | | 8-Lead Ceramic Glass Seal DIP |
| K | | TO-3 Can |
| L | 10-Lead Glass Seal Ceramic Dual Flat Pack | |
| M | 14-Lead Glass Seal Ceramic Dual Flat Pack | |
| MS | | MSOP Plastic Package |
| N | 24-Lead Glass Seal Ceramic Dual Flat Pack | |
| Q | 16-Lead Cerdip (Santa Clara Based Product) | |
| Q-xx | Cerdip (Other Analog Divisions) | |
| QS-xx | Quad Flat Pack (48, 52-Lead) | |
| R | 20-Lead Ceramic Dip | |
| RC | 20-Lead Leadless Chip Carrier | |
| SMD | | SMD Format Ceramic Chip Carrier Surface Mount |
| T | 28-Lead Ceramic Glass Seal Dip | |
| TAB-PP | | Metal Tab Power Package |
| TC | 28-Lead Leadless Chip Carrier | |
| TO-8 | | Metal Can TO-8, 12 lead |
| W | | Glass Seal Flatpack (10 or 14-Lead, refer to SCD/SMD) |
| X | 18-Lead Ceramic Glass Seal Dip | |
| Y | 14 Lead Ceramic Glass Seal Dip | |
| Z | 8-Lead Ceramic Glass Seal Dip | |

*Call factory for availability of products / packages not in this parts list.