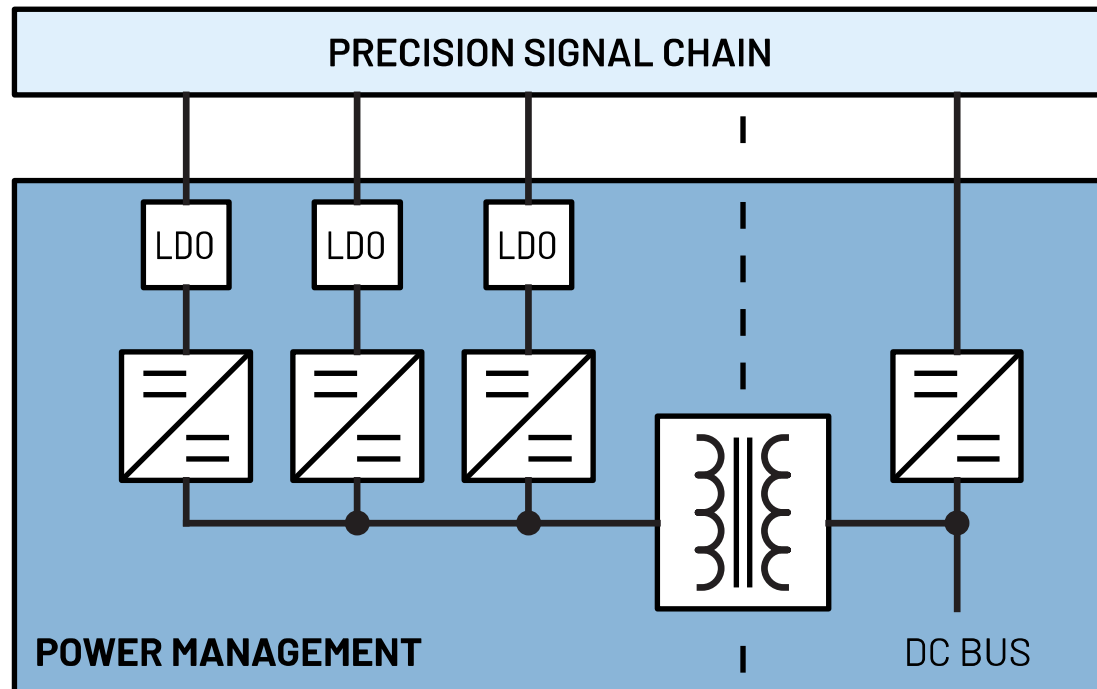


# POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION NARROW BANDWIDTH  
Sine Wave Voltage Generation  
Performance Optimized

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This document is interactive. You can click on any underlined text to navigate through the document.

For the resources:

APPENDIX	<u>Parts Guide</u>
	<u>Power Requirements</u>

Left-click the Parts Guide and Power Requirements to go through the list of power devices and other references.

The Power Components are listed on the Appendix, and you may click on the part to go through its product page online.

PART #	DESCRIPTION
<u>LT3471</u>	Dual 1.3A, 1.2MHz Boost/Inverter in 3mm × 3mm DFN
<u>LT8604</u>	High Efficiency 42V/120mA Synchronous Buck
<u>LT8570-1</u>	Boost/SEPIC/Inverting DC/DC Converter with 65V Switch, Soft-Start and Sync.

For the individual pages:

Left-click the specific signal chain to go through its respective block diagram or power tree.

Non-isolated
<u>1-Channel</u>

POWER RE	
PARAMETER	
Supply Voltage	
Supply Current	
PSRR	

**APPENDIX**

Parts Guide

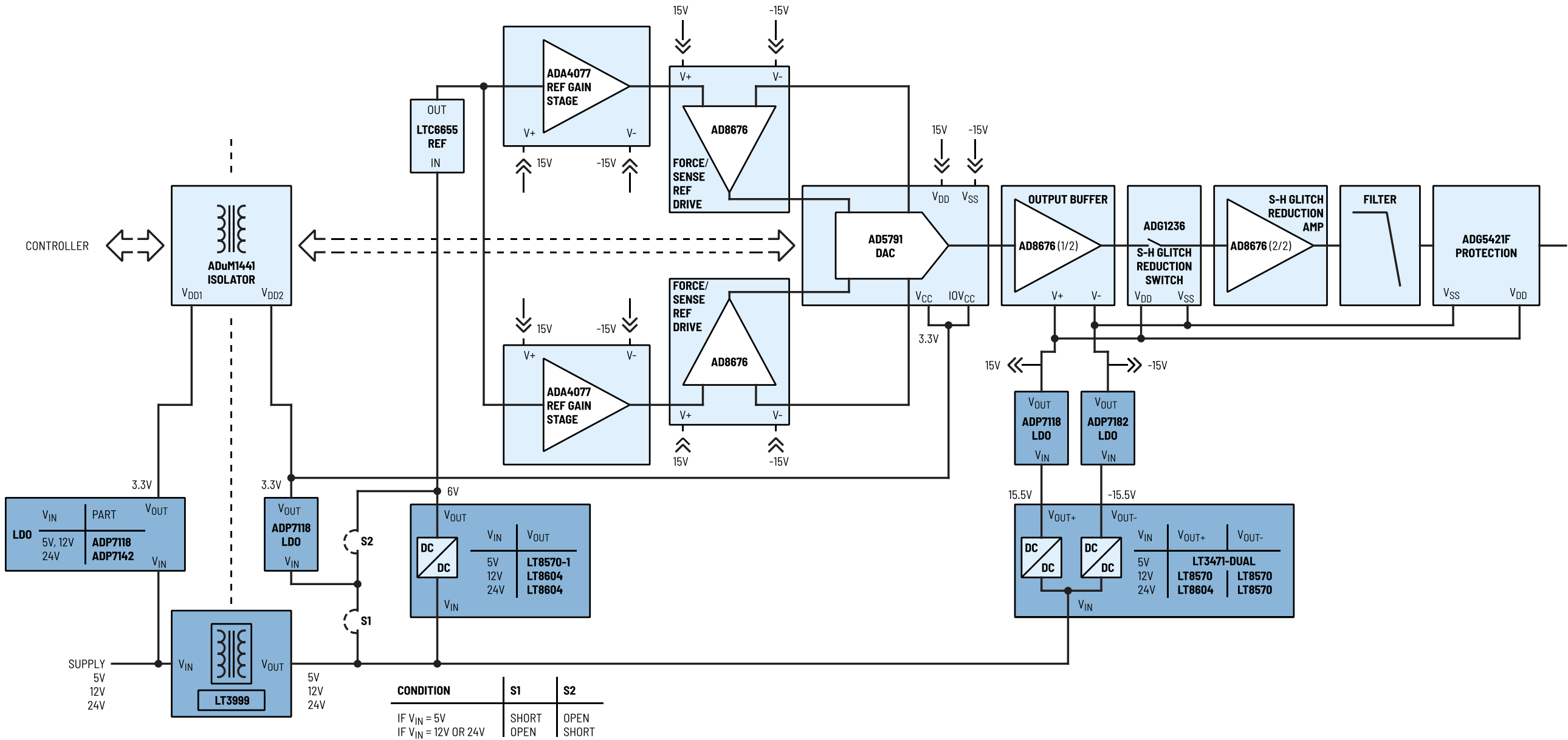
USER GUIDE

Power Requirements

Sine Wave Voltage Generation

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Isolated  
1-Channel



## Precision Narrow Bandwidth

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PART #	DESCRIPTION
<b><u>LT3471</u></b>	Dual 1.3A, 1.2MHz Boost/Inverter in 3mm × 3mm DFN
<b><u>LT8604</u></b>	High Efficiency 42V/120mA Synchronous Buck
<b><u>LT8570</u></b>	Boost/SEPIC/Inverting DC/DC Converter with 65V Switch, Soft-Start and Sync.
<b><u>LT8570-1</u></b>	Boost/SEPIC/Inverting DC/DC Converter with 65V Switch, Soft-Start and Sync.
<b><u>LT3999</u></b>	Low Noise, 1A, 1MHz Push-Pull DC/DC Driver with Duty Cycle Control
<b><u>ADP7118</u></b>	20V, 200mA, Low Noise, CMOS LDO Linear Regulator
<b><u>ADP7142</u></b>	40V, 200 mA, Low Noise, CMOS LDO Linear Regulator
<b><u>ADP7182</u></b>	-28V, -200mA, Low Noise, Linear Regulator

Sine Wave Voltage Generation

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1-Channel

# POWER REQUIREMENTS

PARAMETER	STAGES	Ref.	Buffer		Buffer		Isolation		DAC				S/H Switch		Protection	
	Part #	<u>LTC6655</u>	<u>ADA4077</u>		<u>AD8676</u>		<u>ADuM1441</u>		<u>AD5791</u>				<u>ADG1236</u>		<u>ADG5421F</u>	
	Pin	IN	V+	V-	V+	V-	V <sub>DD1</sub>	V <sub>DD2</sub>	V <sub>CC</sub>	I <sub>O</sub> V <sub>CC</sub>	V <sub>DD</sub>	V <sub>SS</sub>	V+	V-	V <sub>DD</sub>	V <sub>SS</sub>
Supply Voltage	V	5	15	-15	15	-15	3.3	3.3	3.3	3.3	15	-15	15	-15	15	-15
Supply Current	mA	1.8	0.65	-0.65	4.2	-4.2	0.9	-0.75	0.9	0.14	5.2	-4.9	0.23	-0.001	0.205	-0.115
PSRR	dB	40 (10kHz)	12 (1MHz)	24 (1MHz)	22 (1MHz)	68 (1MHz)	-		-				-		90 (1MHz)	

**Note 1:** The supply currents indicated are the maximum quiescent current of the supply rails. For overall full load or short circuit current specifications, refer to the datasheets of the signal chain components.

**Note 2:** The supply voltages indicated are the values for typical applications.

**Note 3:** Consult the corresponding datasheets for details on power dissipation if needed.

**Note 4:** The actual supply current requirement shall be multiplied depending on the number of channels on the signal chain.