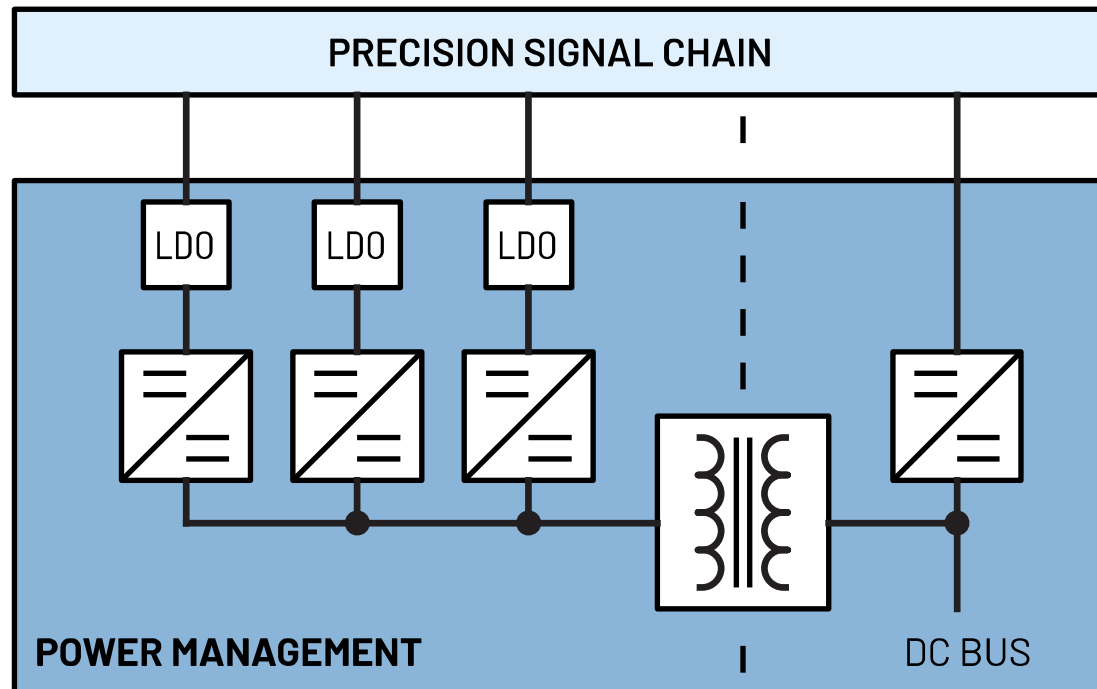


# POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION NARROW BANDWIDTH  
Adaptable Voltage Drive  
Cost Optimized

Rev. 0 | Jan. 2022



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.

The screenshot shows a navigation menu on the left with two items: 'Non-isolated' and '1-Channel'. The '1-Channel' item is highlighted with a blue box and a blue arrow points to it from the text above. To the right is a table titled 'POWER RE' with a header 'PARAMETER' and four rows: 'Supply Voltage', 'Supply Current', and 'PSRR'.

APPENDIX

Parts Guide

USER GUIDE

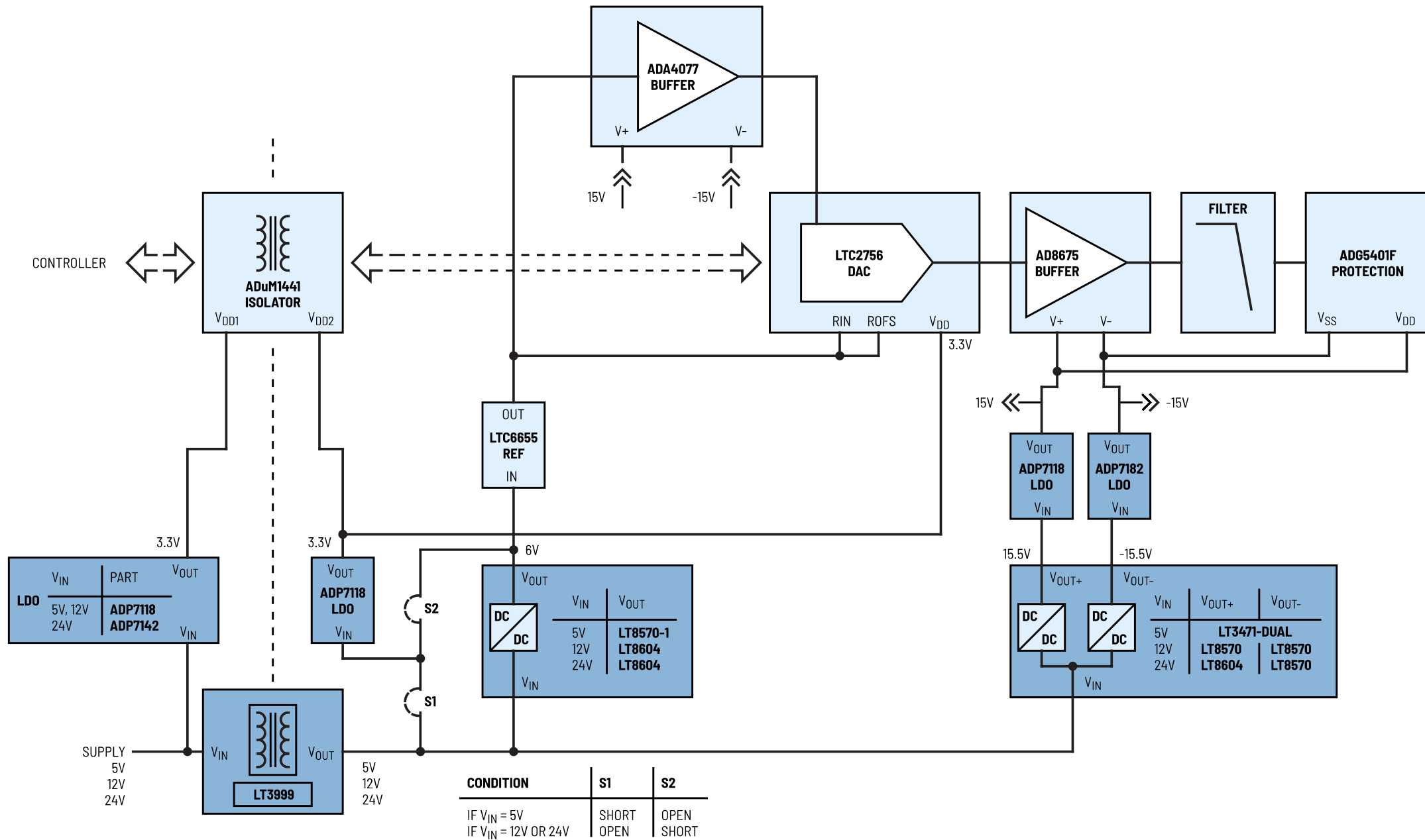
Power Requirements

Adaptable Voltage Drive

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Isolated

1-Channel



## Precision Narrow Bandwidth

Adaptable Voltage Drive

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Isolated

1-Channel

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

Adaptable Voltage Drive

Cost Optimized

Isolated

1-Channel

# POWER REQUIREMENTS

PARAMETER	STAGES	Ref.	Buffer		Isolation		DAC	Amp		Protection	
	Part #	<a href="#">LTC6655</a>	<a href="#">ADA4077</a>		<a href="#">ADuM1441</a>		<a href="#">LTC2756</a>	<a href="#">AD8675</a>		<a href="#">ADG5401F</a>	
	Pin	IN	V+	V-	V <sub>DD1</sub>	V <sub>DD2</sub>	V <sub>DD</sub>	V+	V-	V <sub>DD</sub>	V <sub>SS</sub>
Supply Voltage	V	5	15	-15	3.3	3.3	3.3	15	-15	15	-15
Supply Current	mA	1.8	0.65	-0.65	0.9	-0.75	10	3.8	-3.8	0.22	0.09
PSRR	dB	40 (10kHz)	12 (1MHz)	24 (1MHz)	-		-	48 (1MHz)	52 (1MHz)	82 (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.