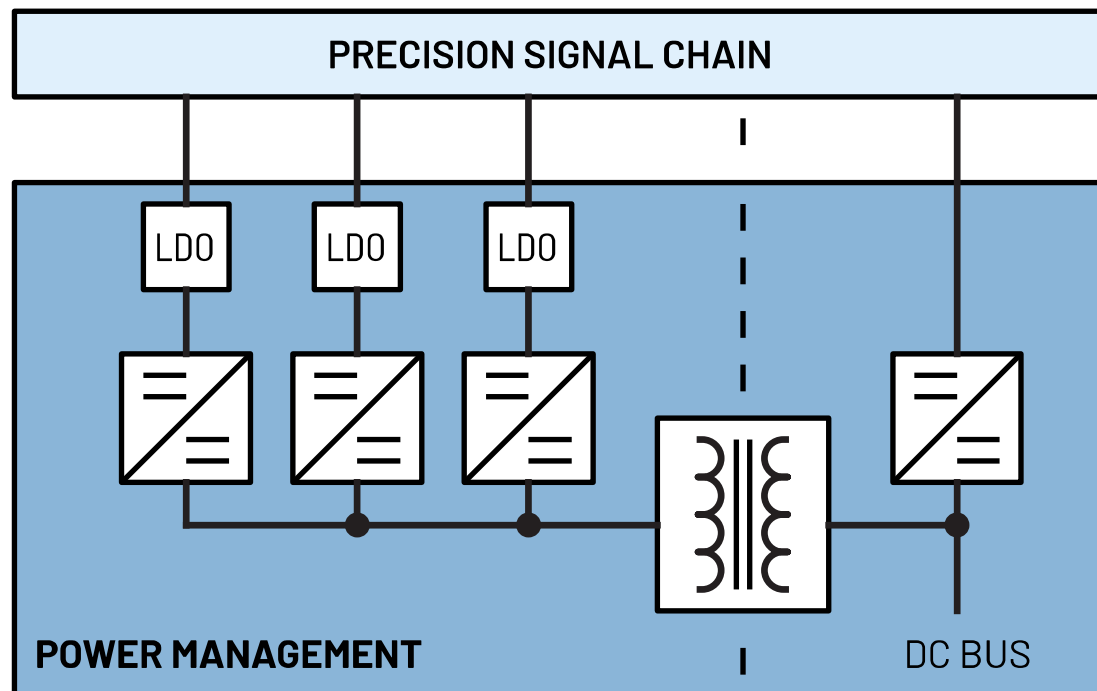


POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION NARROW BANDWIDTH
Adaptable Voltage and Current Measurement
Optimum Precision, Outstanding Stability

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 x 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 three rows: 'Supply Voltage', 'Supply Current', and 'PSRR'.

Precision Narrow Bandwidth

APPENDIX

Parts Guide

USER GUIDE

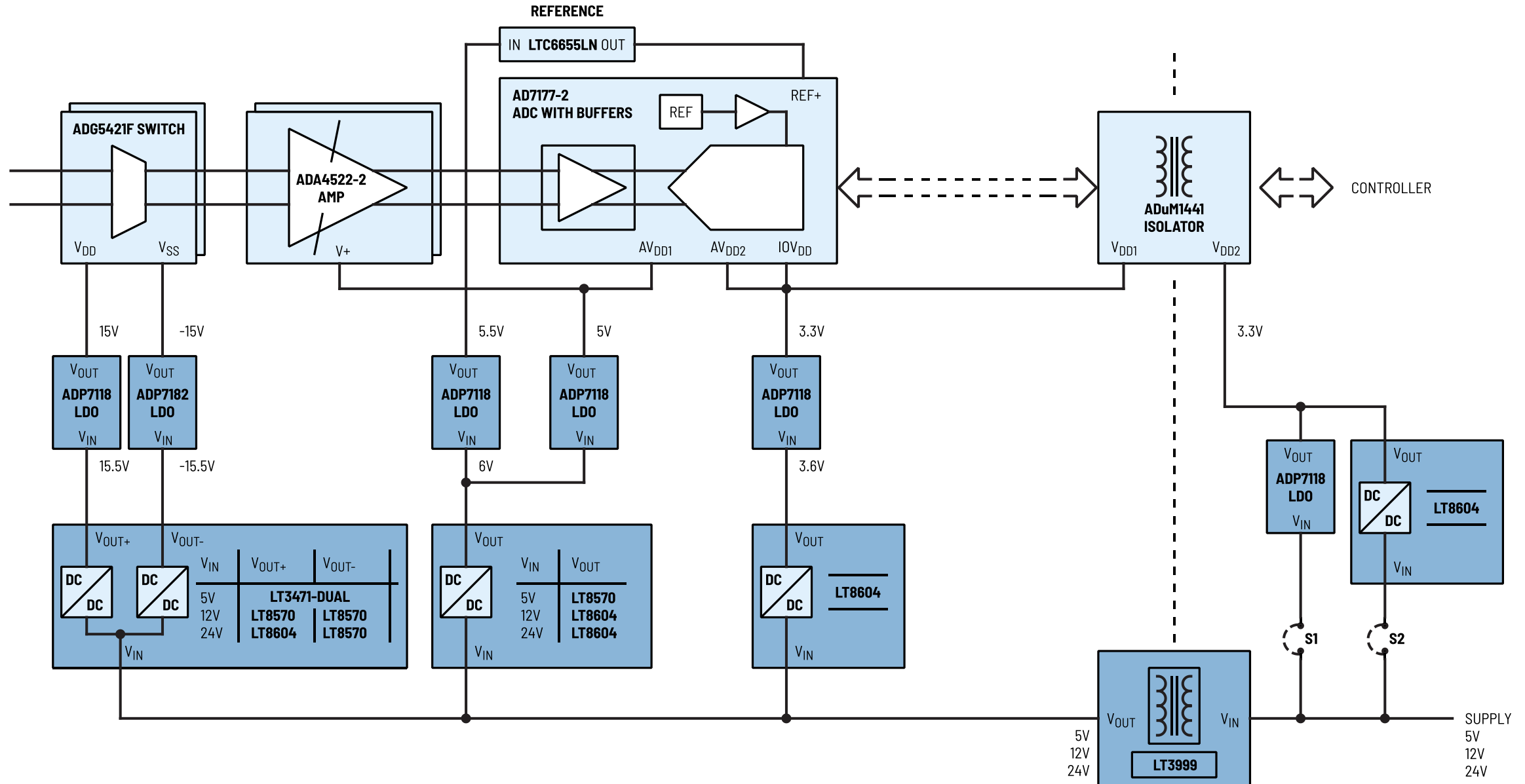
Power Requirements

Adaptable Voltage and Current Measurement

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Isolated

Multichannel



CONDITION	S1	S2
IF $V_{IN} = 5V$	SHORT	OPEN
IF $V_{IN} = 12V$ OR $24V$	OPEN	SHORT

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PART #	DESCRIPTION
LT8604	High Efficiency 42V/120mA Synchronous Buck
LT3471	Dual 1.3A, 1.2MHz Boost/Inverter in 3mm x3mm DFN
LT8570	Boost/SEPIC/Inverting DC/DC Converter with 65V Switch, Soft-Start and Sync.
LT3999	Low Noise, 1A, 1MHz Push-Pull DC/DC Driver with Duty Cycle Control
ADP7118	20V, 200mA, Low Noise, CMOS LDO Linear Regulator
ADP7182	-28V, -200mA, Low Noise, Linear Regulator

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POWER REQUIREMENTS

PARAMETER	STAGES	Protection		Gain	Filter	ADC			Reference	Isolation	
	Part #	ADG5421F		ADA4522-2	-	AD7177-2			LTC6655LN	ADuM1441	
	Pin	V _{DD}	V _{SS}	V+		AV _{DD1}	AV _{DD2}	IOV _{DD}	IN	V _{DD1}	V _{DD2}
Supply Voltage	V	15	-15	5	-	5	3.3	3.3	5.5	3.3	3.3
Supply Current	mA	0.190	-0.190	0.95	-	16	5.2	3.1	1.8	0.9	0.9
PSRR	dB	58 (1MHz)		145	-	70 (10kHz)			40 (10kHz)	-	

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.