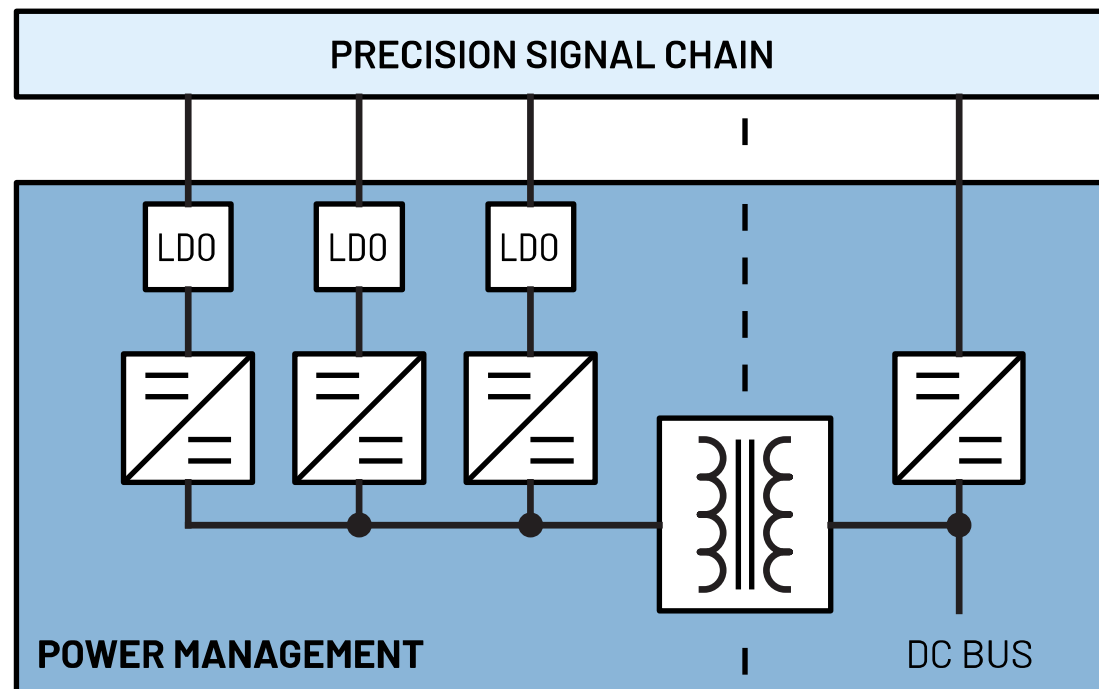


POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION NARROW BANDWIDTH
Fully Integrated Voltage and Current Measurement
Multiplexed, Accuracy Optimized Sensor Ready

Rev. 0 | Jan. 2022



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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	POWER RE
<u>1-Channel</u>	
	PARAMETER
	Supply Voltage
	Supply Current
	PSRR

APPENDIX

Parts Guide

Power Requirements

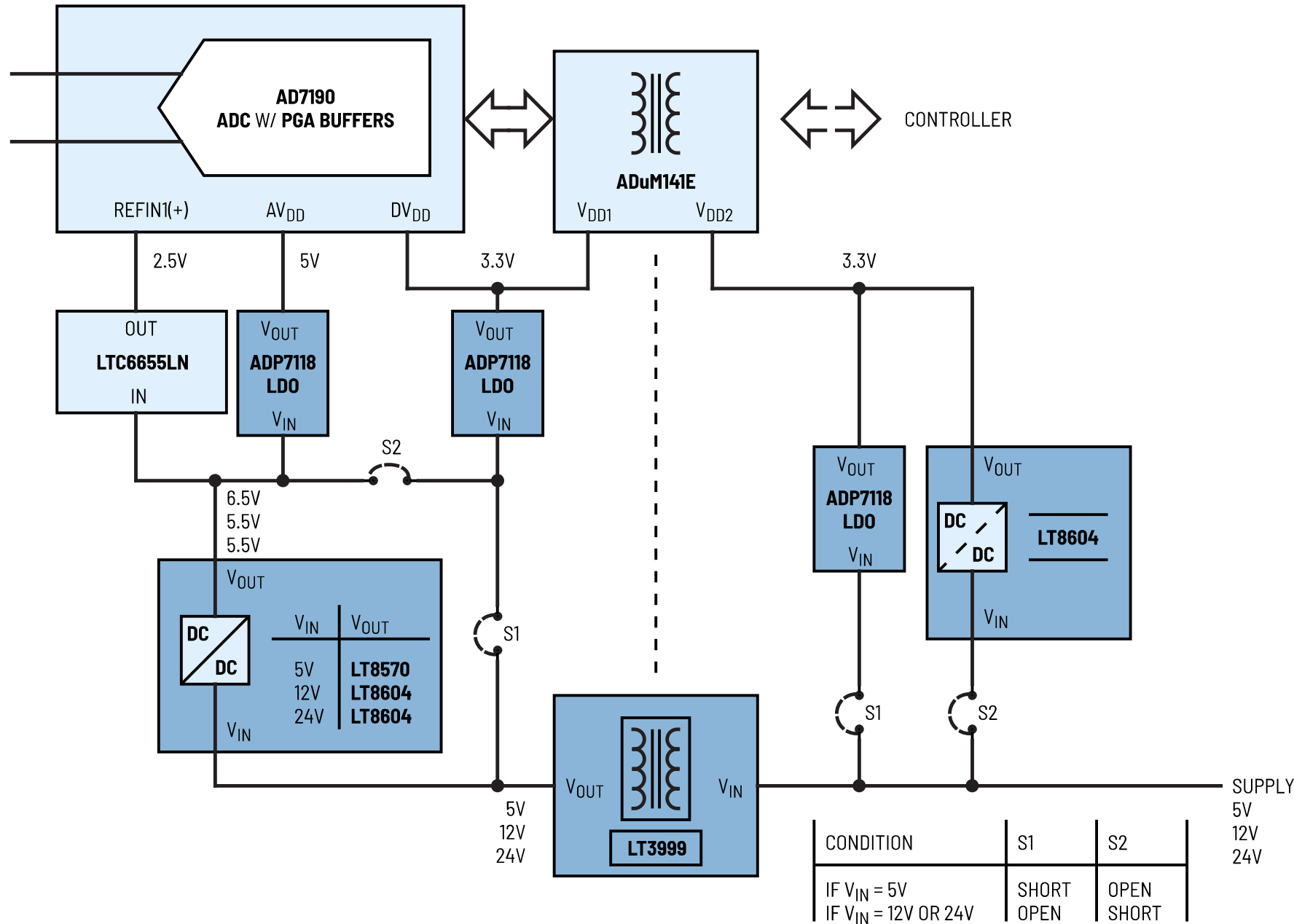
USER GUIDE

Fully Integrated Voltage and Current Measurement

Multiplexed, Accuracy Optimized Sensor Ready

Isolated

Multichannel



Precision Narrow Bandwidth

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Isolated

Multichannel

PART #	DESCRIPTION
<u>LT8604</u>	High Efficiency 42V/120mA Synchronous Buck
<u>LT8570</u>	Boost/SEPIC/Inverting DC/DC Converter with 65V Switch, Soft-Start and Sync.
<u>LT3999</u>	Low Noise, 1A, 1MHz Push-Pull DC/DC Driver with Duty Cycle Control
<u>ADP7118</u>	20V, 200mA, Low Noise, CMOS LDO Linear Regulator



Isolated

Multichannel

POWER REQUIREMENTS

PARAMETER	ADC		Reference	Isolation	
	AD7190		LTC6655LN	ADuM141E	
	AV _{DD}	DV _{DD}	IN	V _{DD1}	V _{DD2}
Supply Voltage	5	3.3	5	3.3	3.3
Supply Current	7.4	1.5	1.8	14.9	12.8
PSRR	95 (G=1, V _{IN} =1V)		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.