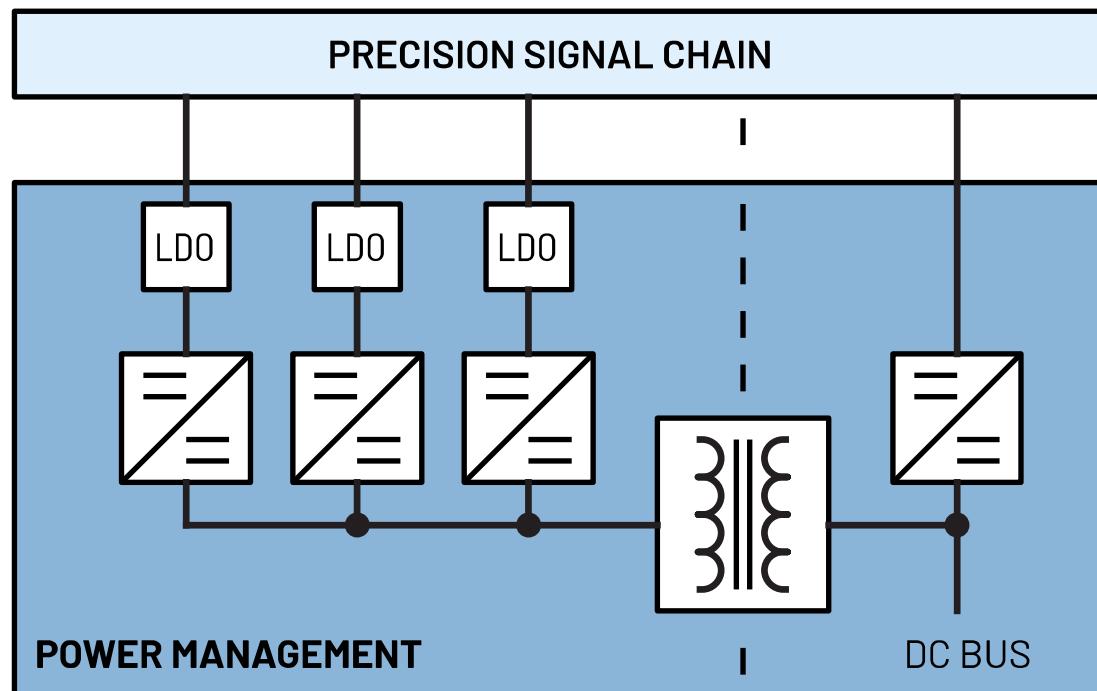


POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION HIGH VOLTAGE
High Common-Mode Current Measurement
Highest Accuracy after Calibration

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.

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

POWER RE	
PARAMETER	
Supply Voltage	
Supply Current	
PSRR	

APPENDIX

Parts Guide

USER GUIDE

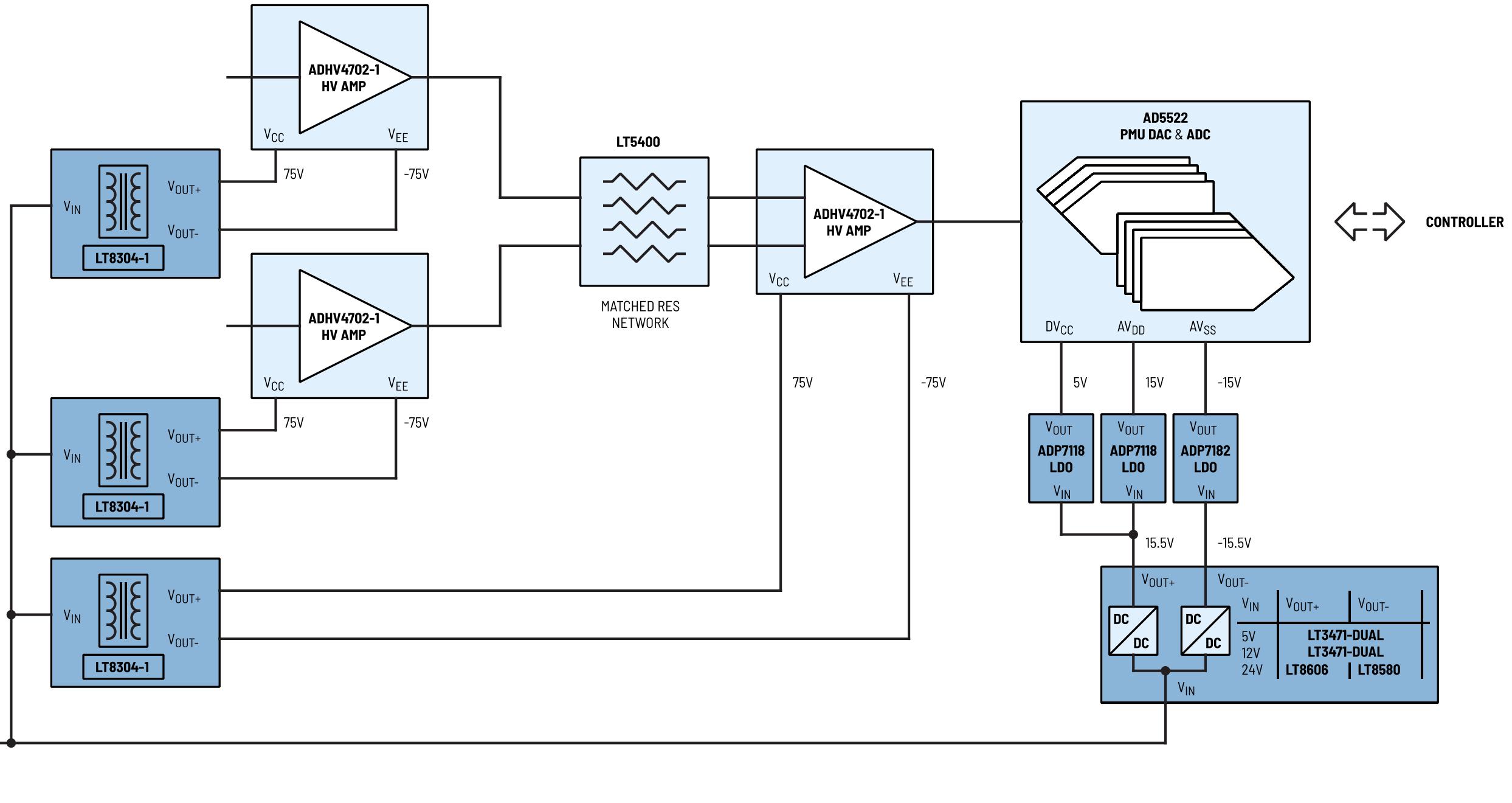
Power Requirements

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Non-isolated

Multichannel



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PART #	DESCRIPTION
<u>LT8304-1</u>	100VIN Micropower No-Opto Isolated Flyback Converter with 150V/2A Switch
<u>LT3471</u>	Dual 1.3A, 1.2MHz Boost/Inverter in 3mm x3mm DFN
<u>LT8580</u>	Boost/SEPIC/Inverting DC/DC Converter with 1A, 65V Switch, Soft-Start and Sync.
<u>LT8606</u>	42V, 350mA Synchronous Step-Down Regulator with 2.5µA Quiescent Current
<u>ADP7118</u>	20V, 200mA, Low Noise, CMOS LDO Linear Regulator
<u>ADP7182</u>	-28V, -200mA, Low Noise, Linear Regulator

High Common-Mode Current Measurement

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POWER REQUIREMENTS

PARAMETER	STAGES	PMU DAC & ADC			High-Voltage Amplifier	
	Part #	AD5522			ADHV4702-1	
	Pin	AV _{DD}	AV _{SS}	DV _{CC}	V _{CC}	V _{EE}
Supply Voltage	V	15	-15	5	75	-75
Supply Current	mA	36	-36	1.5	3.3	-3.3
PSRR	dB	45 (100kHz)	50 (100kHz)	80 (100kHz)	35 (100kHz)	83 (100kHz)

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.