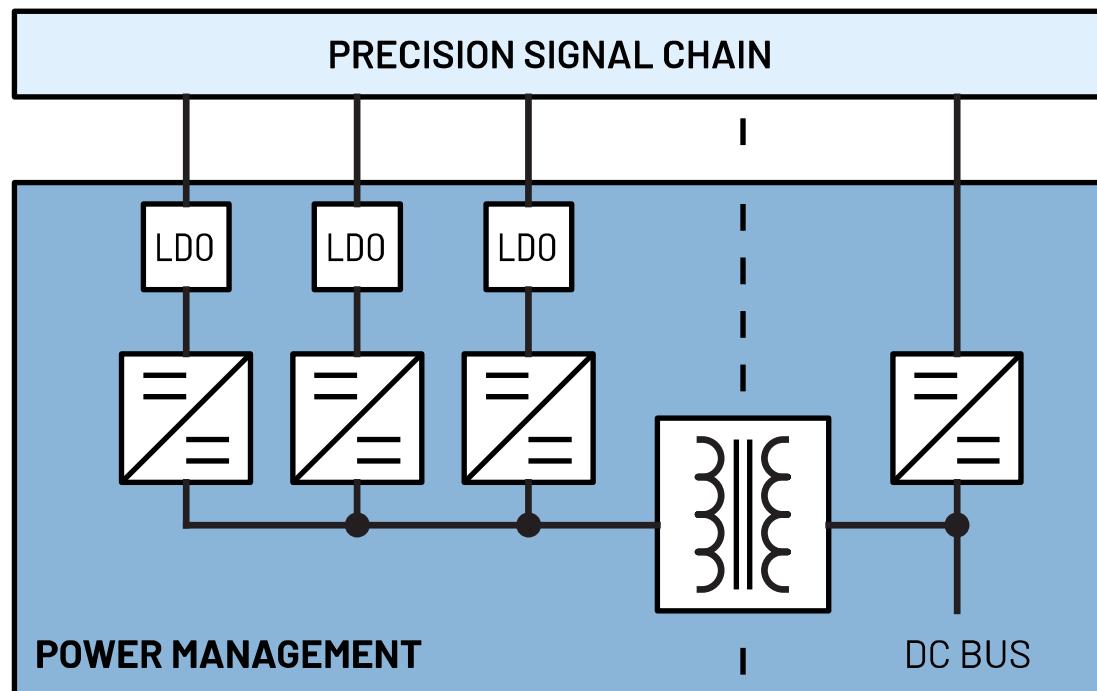


POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION HIGH VOLTAGE
High Common-Mode Current Measurement
Highest Initial Accuracy

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

APPENDIX

Parts Guide

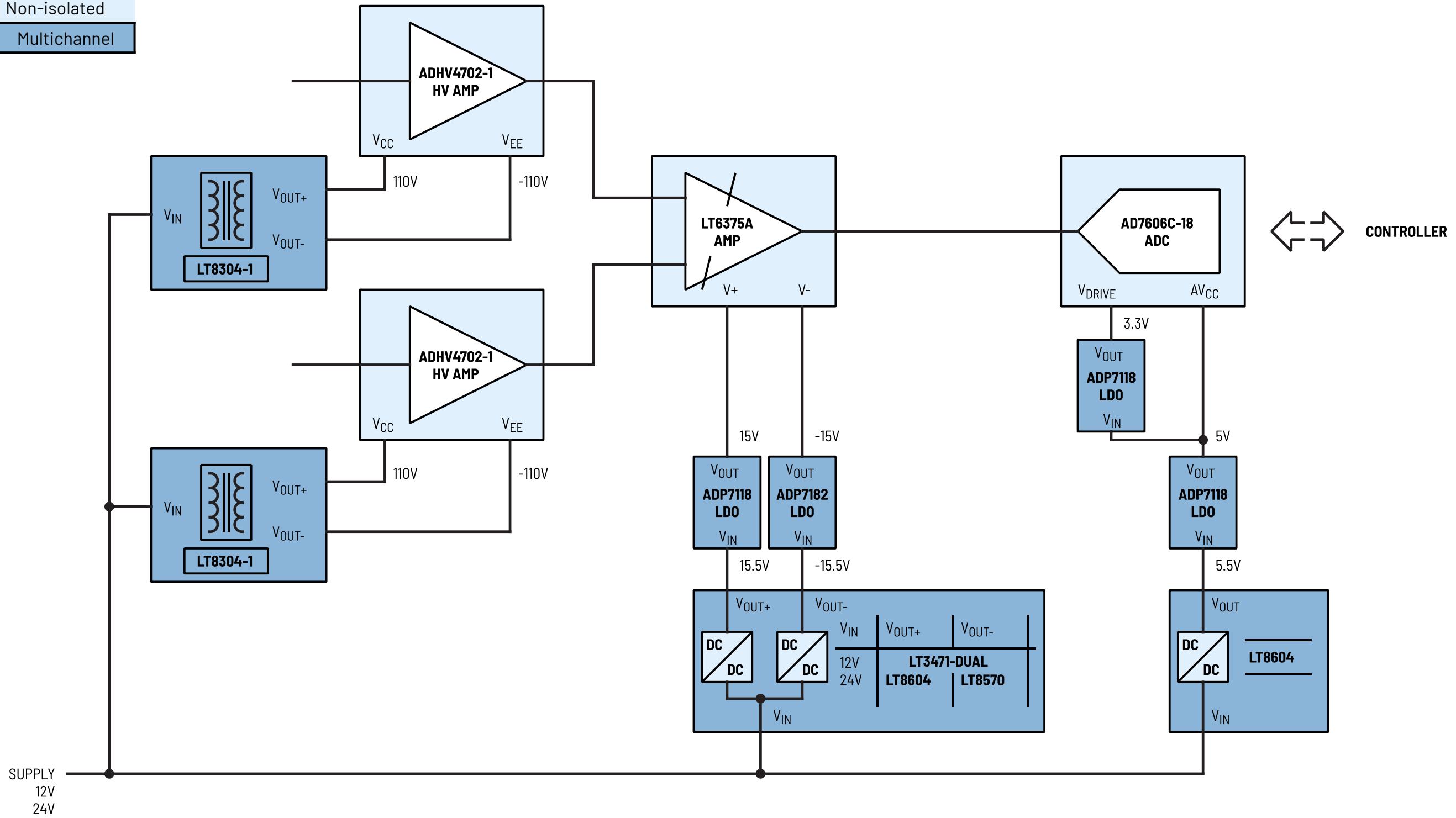
USER GUIDE

Power Requirements

High Common-Mode Current Measurement

Highest Initial Accuracy

Non-isolated
Multichannel



Precision High Voltage

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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>LT8570</u>	Boost/SEPIC/Inverting DC/DC Converter with 65V Switch, Soft-Start and Sync.
<u>LT8604</u>	High Efficiency 42V/120mA Synchronous Buck
<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		Difference Amplifier	
	Part #	AD7606C-18		ADHV4702-1		LT6375A	
	Pin	V _{DRIVE}	A _V _{CC}	V _{CC}	V _{EE}	V+	V-
Supply Voltage	V	3.3	5	110	-110	15	-15
Supply Current	mA	1.9	50	3.3	-3.3	0.6	-0.6
PSRR	dB	-	60	35 (100kHz)	83 (100kHz)	30 (100kHz)	15 (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.