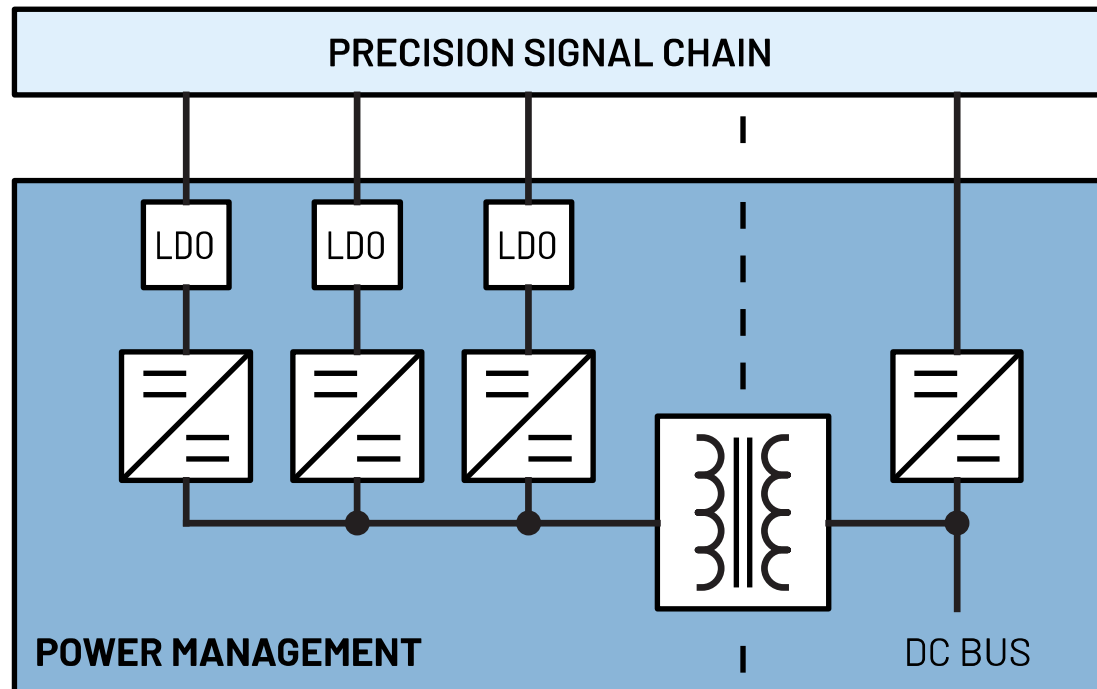


POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION HIGH VOLTAGE
High Common-Mode Current Measurement
Performance/Size Optimized

Rev. 0 | Mar. 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](#)

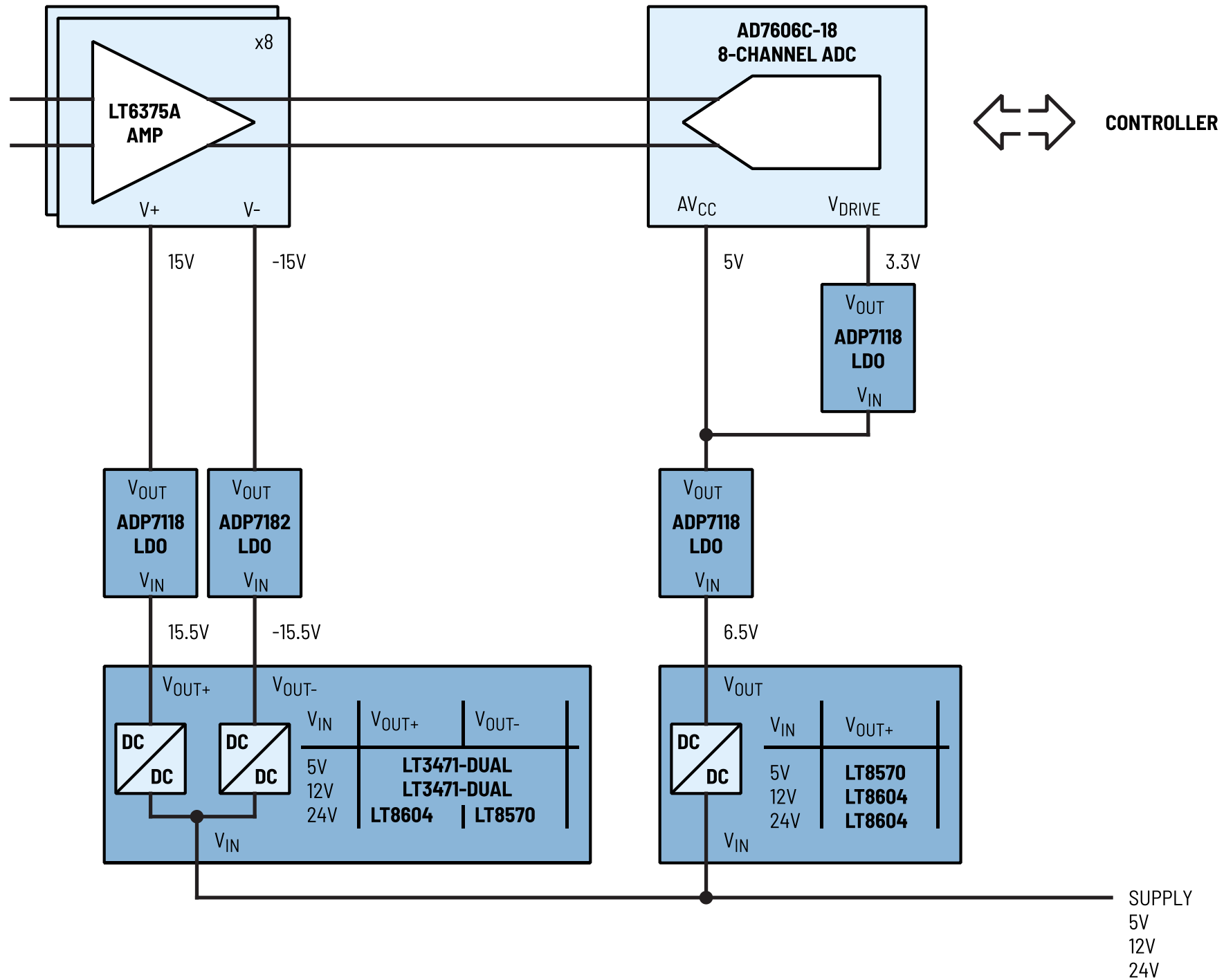
[Power Requirements](#)

High Common-Mode Current Measurement
Performance/Size Optimized

Non-isolated; Multichannel

With LT6375A Amplifier

With AD8479 Amplifier



APPENDIX

[Parts Guide](#)

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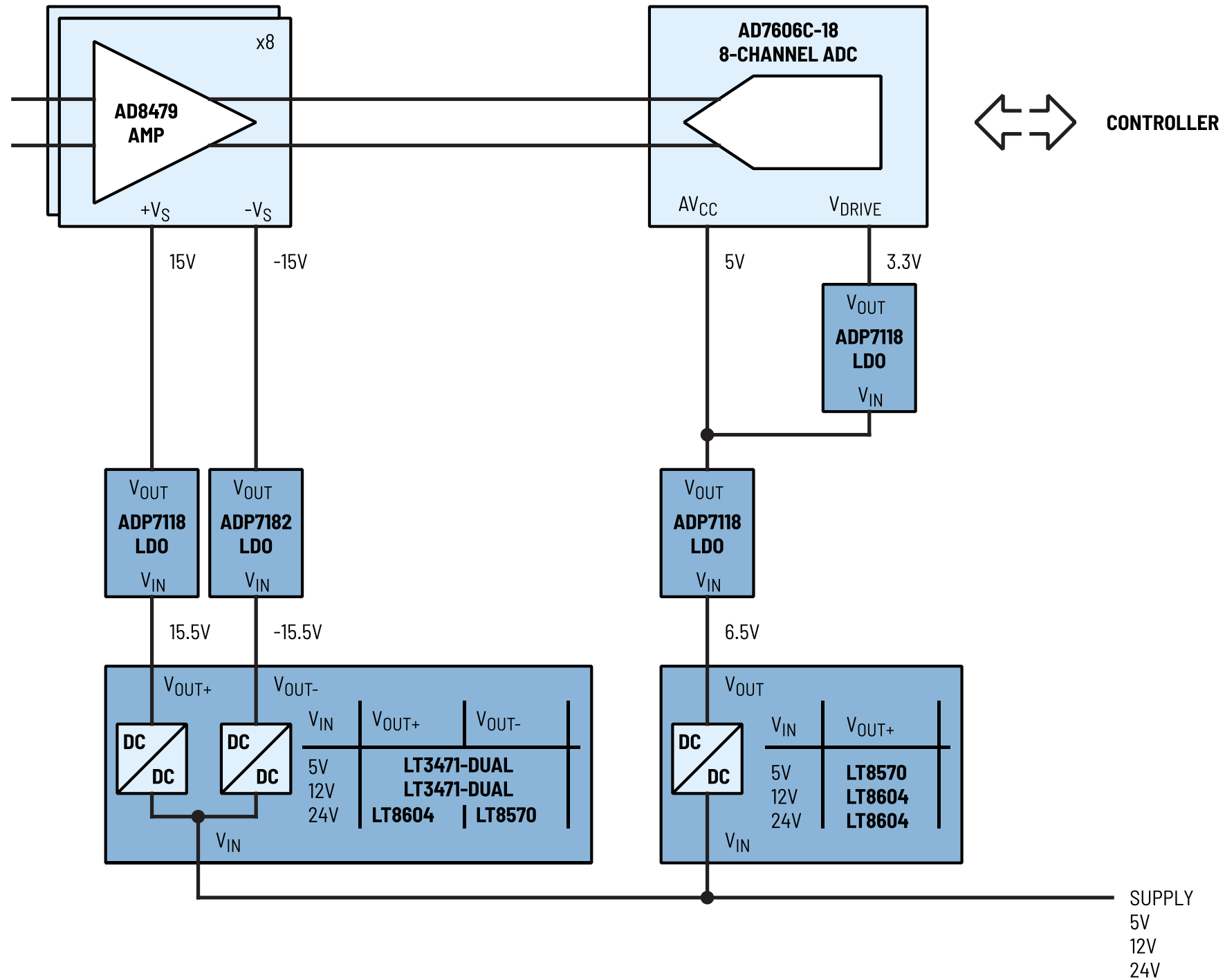
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PART #	DESCRIPTION
<u>LT3471</u>	Dual 1.3A, 1.2MHz Boost/Inverter in 3mm x3mm DFN
<u>LT8570</u>	Boost/SEPIC/Inverting DC/DC Converter with 65V Switch, Soft-Start and Sync.
<u>LT8604</u>	High Efficiency 42V/120mA Synchronous Buck
<u>ADP7118</u>	20V,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

High Common-Mode Current Measurement

Performance/Size Optimized

Non-isolated; Multichannel

With LT6375A Amplifier

With AD8479 Amplifier

POWER REQUIREMENTS

PARAMETER	STAGES	ADC		Amplifier	
	Part #	AD7606C-18		[1] LT6375A	[2] AD8479
	Pin	V_{CC}	V_{DRIVE}	$V+ / +V_S$	$V- / -V_S$
Supply Voltage	V	5	3.3	[1] 15 [2] 15	-15 -15
Supply Current	mA	50	1.9	[1] 0.6 [2] 0.85	-0.6 -0.85
PSRR	dB	60	-	[1] 30 (100kHz) [2] 33 (100kHz)	15 (100kHz) 13 (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.