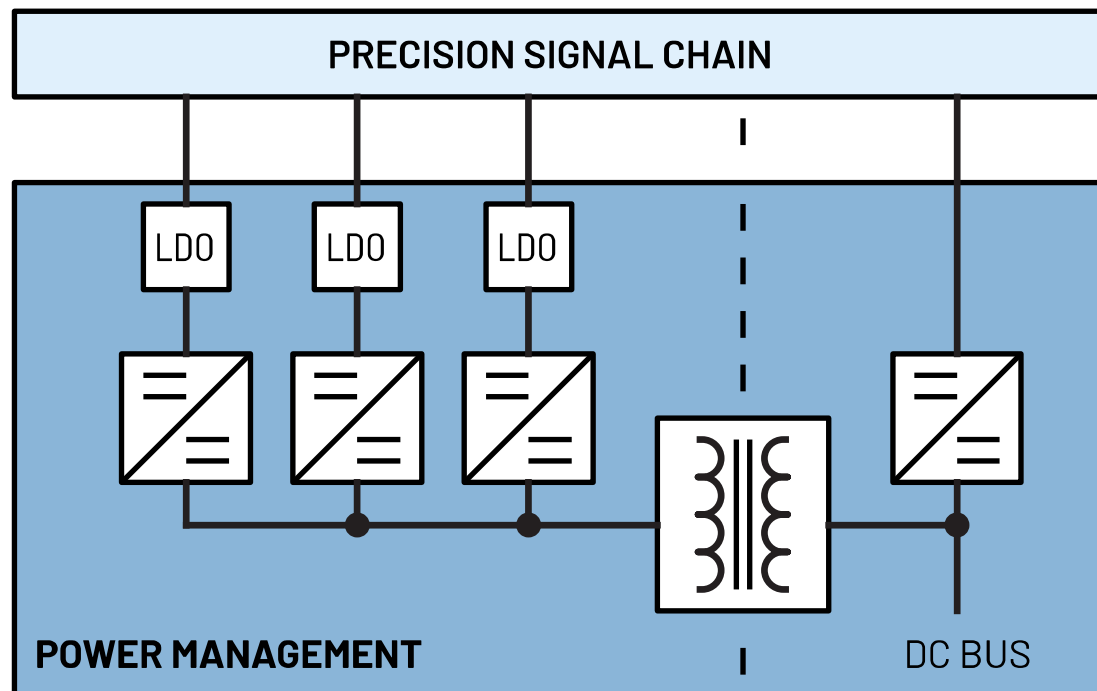


# POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

## PRECISION HIGH VOLTAGE Current Drive

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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 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.

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

POWER RE	
PARAMETER	
Supply Voltage	
Supply Current	
PSRR	

APPENDIX

Parts Guide

USER GUIDE

Current Drive

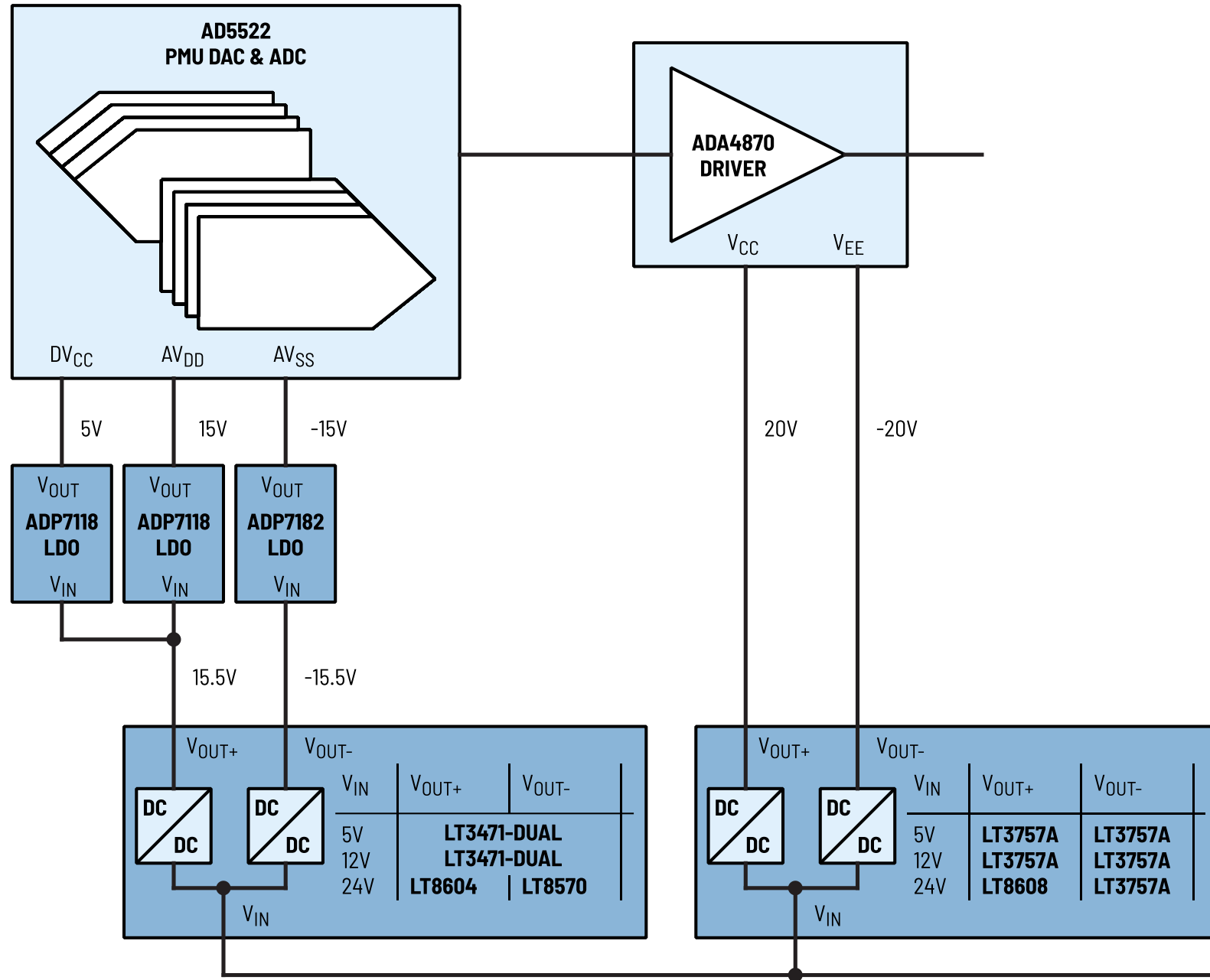
Power Requirements

Non-isolated; Multichannel

With ADA4870 Driver

With LT1210 Driver

CONTROLLER



SUPPLY  
5V  
12V  
24V

**APPENDIX**

[Parts Guide](#)

[USER GUIDE](#)

[Power Requirements](#)

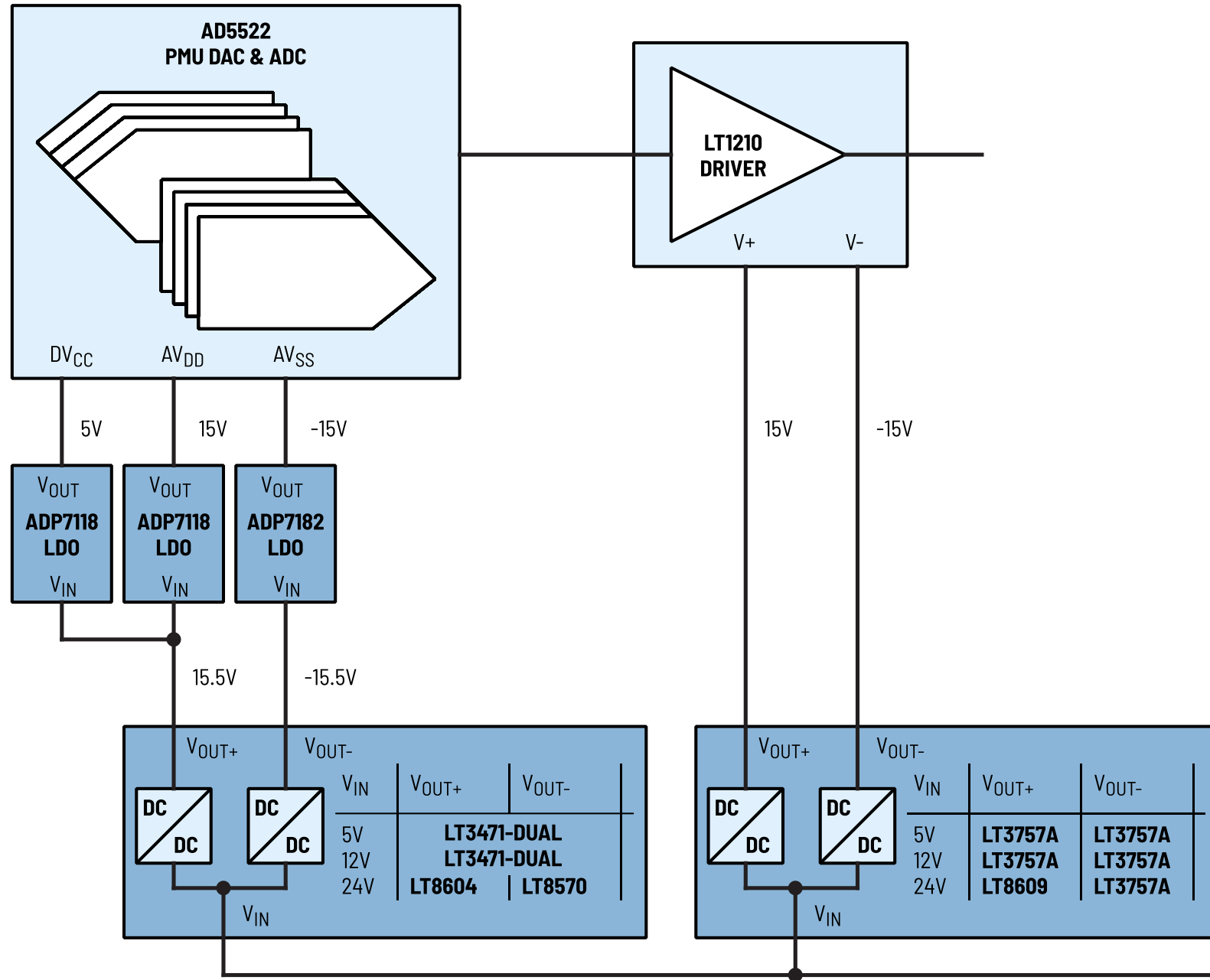
**Current Drive**

Non-isolated; Multichannel

With ADA4870 Driver

With LT1210 Driver

CONTROLLER



SUPPLY  
5V  
12V  
24V

Non-isolated; Multichannel

With ADA4870 Driver

With LT1210 Driver

PART #	DESCRIPTION
<b><u>LT3471</u></b>	Dual 1.3A, 1.2MHz Boost/Inverter in 3mm ×3mm DFN
<b><u>LT3757A</u></b>	Boost, Flyback, SEPIC and Inverting Controller
<b><u>LT8570</u></b>	Boost/SEPIC/Inverting DC/DC Converter with 65V Switch, Soft-Start and Sync.
<b><u>LT8604</u></b>	High Efficiency 42V/120mA Synchronous Buck
<b><u>LT8608</u></b>	42V, 1.5A Synchronous Step-Down Regulator with 2.5μA Quiescent Current
<b><u>LT8609</u></b>	42V, 3A Synchronous Step-Down Regulator with 2.5μA Quiescent Current
<b><u>ADP7118</u></b>	20V, 200mA, Low Noise, CMOS LDO Linear Regulator
<b><u>ADP7182</u></b>	-28V, -200mA, Low Noise, Linear Regulator

Non-isolated; Multichannel

- With ADA4870 Driver
- With LT1210 Driver

## POWER REQUIREMENTS

PARAMETER	STAGES		PMU DAC & ADC			Driver	
	Part #	Pin	AD5522			[1] ADA4870	[2] LT1210
			$AV_{DD}$	$AV_{SS}$	$DV_{CC}$	$V_{CC}/V+$	$V_{EE}/V-$
Supply Voltage	V		15	-15	5	[1] 20 [2] 15	-20 -15
Supply Current	mA		36	-36	1.5	[1] 33 [2] 65	-33 -65
PSRR	dB		45 (100kHz)	50 (100kHz)	80 (100kHz)	[1] 48 (1MHz) [2] 31 (1MHz)	60 (1MHz) 29 (1MHz)

**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.