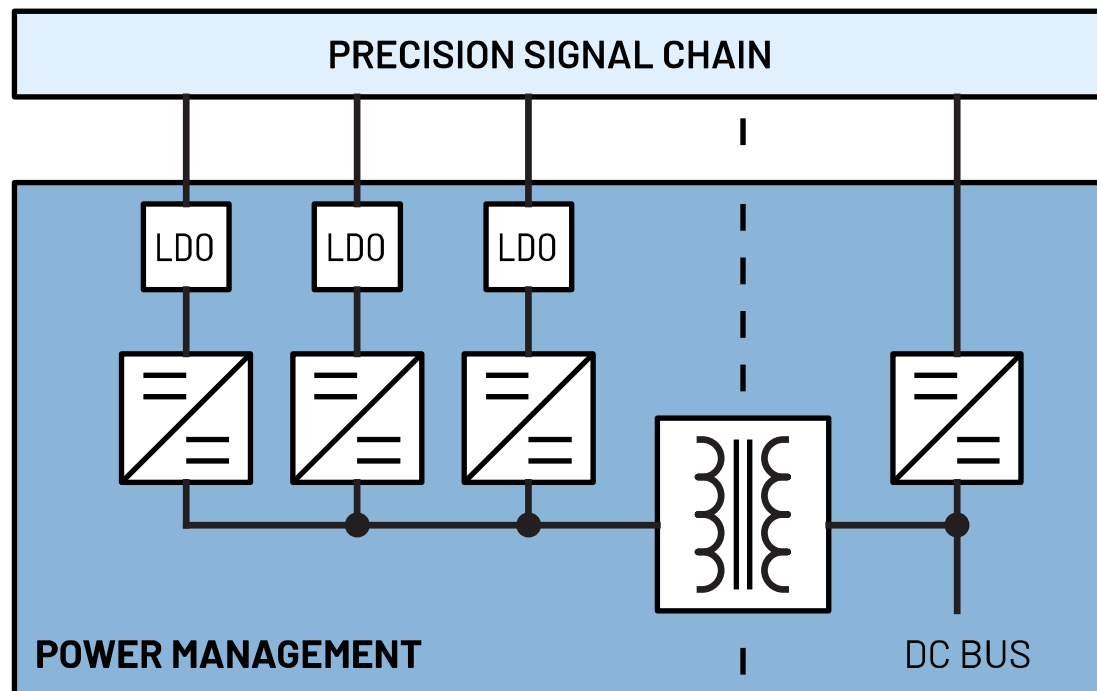


# POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

## PRECISION HIGH VOLTAGE Density Optimized Voltage Drive

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

APPENDIX

[Parts Guide](#)

[USER GUIDE](#)

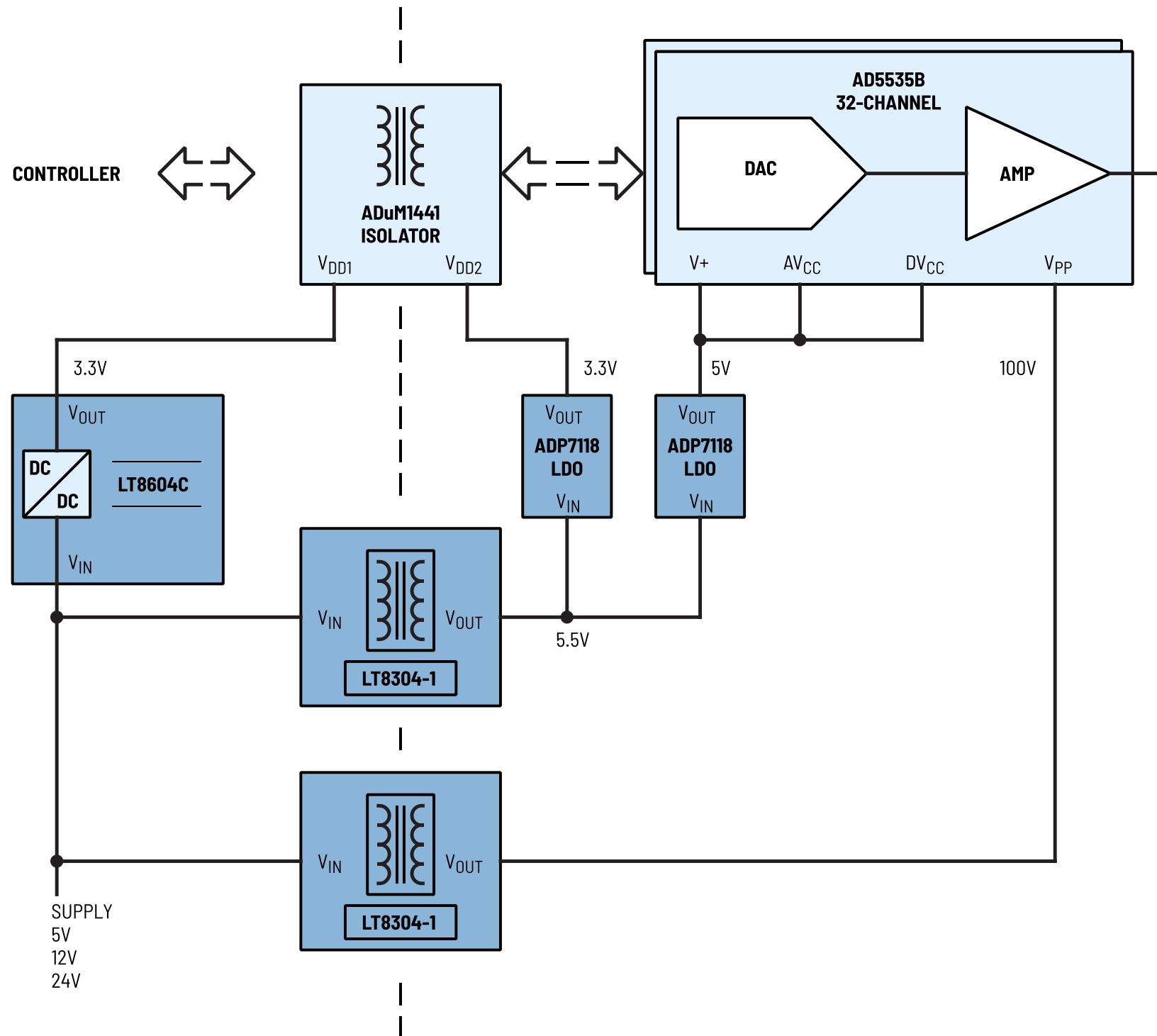
Density Optimized Voltage Drive

[Power Requirements](#)

Isolated; Multichannel

With AD5535B DAC & Driver

With AD5504 DAC & Driver



APPENDIX

Parts Guide

USER GUIDE

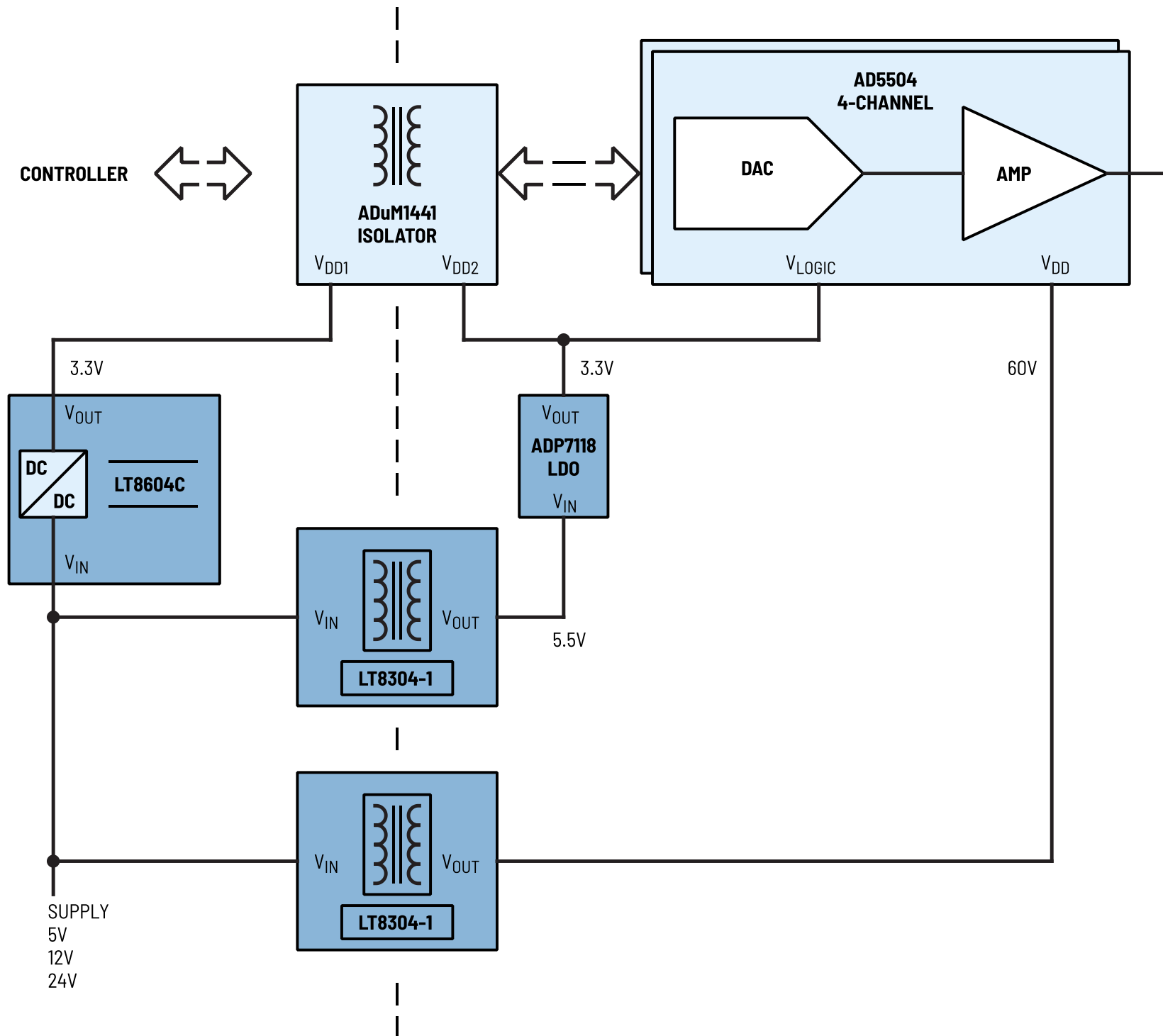
Density Optimized Voltage Drive

Power Requirements

Isolated; Multichannel

With AD5535B DAC & Driver

With AD5504 DAC & Driver



Density Optimized Voltage Drive

Isolated; Multichannel  
With AD5535B DAC & Driver  
With AD5504 DAC & Driver

PART #	DESCRIPTION
<b>LT8304-1</b>	100VIN Micropower No-Opto Isolated Flyback Converter with 150V/2A Switch
<b>LT8604</b>	High Efficiency 42V/120mA Synchronous Buck
<b>ADP7118</b>	20V, 200mA, Low Noise, CMOS LDO Linear Regulator

Isolated; Multichannel  
 With AD5535B DAC & Driver  
 With AD5504 DAC & Driver

# POWER REQUIREMENTS

PARAMETER	STAGES	DAC & DRIVER					ISOLATOR	
	Part #	[1] <a href="#">AD5535B</a>					<a href="#">ADuM1441</a>	
	Pin	[2] <a href="#">AD5504</a>	V+	AV <sub>CC</sub>	V <sub>LOGIC</sub> /DV <sub>CC</sub>	V <sub>PP</sub> /V <sub>DD</sub>	V <sub>DD1</sub>	V <sub>DD2</sub>
Supply Voltage	V	[1] 5 [2] -	5 -	5 -	5 3.3	100 60	3.3	3.3
Supply Current	mA	[1] 1.7 [2] -	20 -	0.6 0.002	0.06 (per ch) 3	0.9	0.9	
PSRR	dB	[1] - [2] -	- -	- -	- -	-	-	

**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.