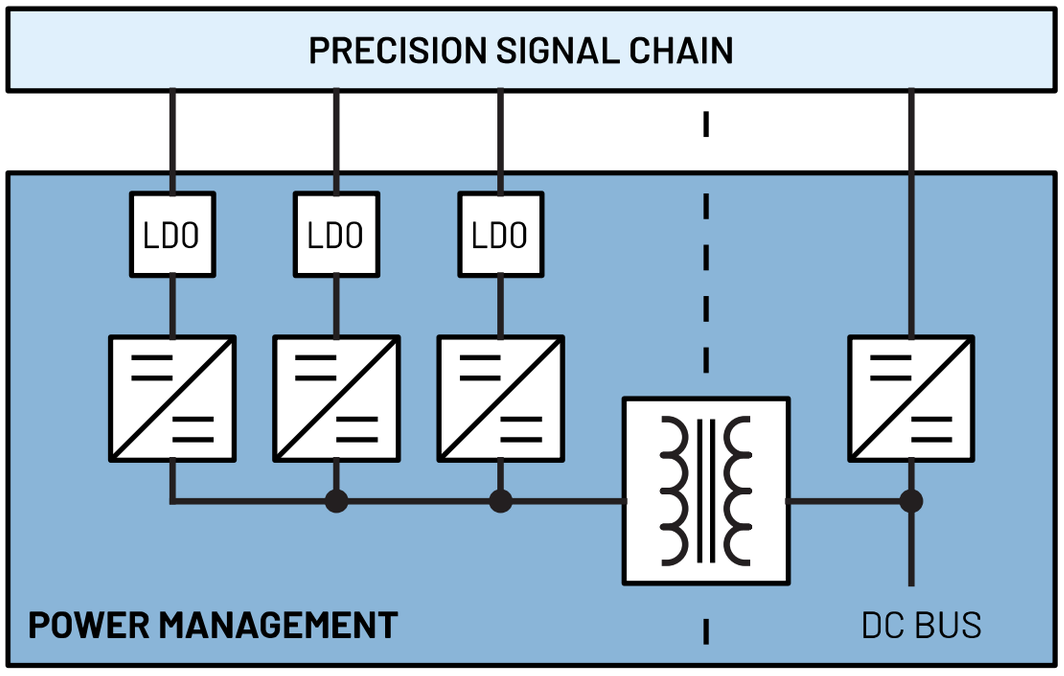
AHEAD OF WHAT'S POSSIBLE™

POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

ISOLATED GATE DRIVE & SENSE

Multichannel Monitoring for Power Conversion with Digital Isolation Density and Speed Optimized



Rev. 0 | Jan. 2022

This document is interactive. You can click on any underlined text to navigate through the document.

For the resources:

APPENDIX	Parts Guide
	Power Requirements

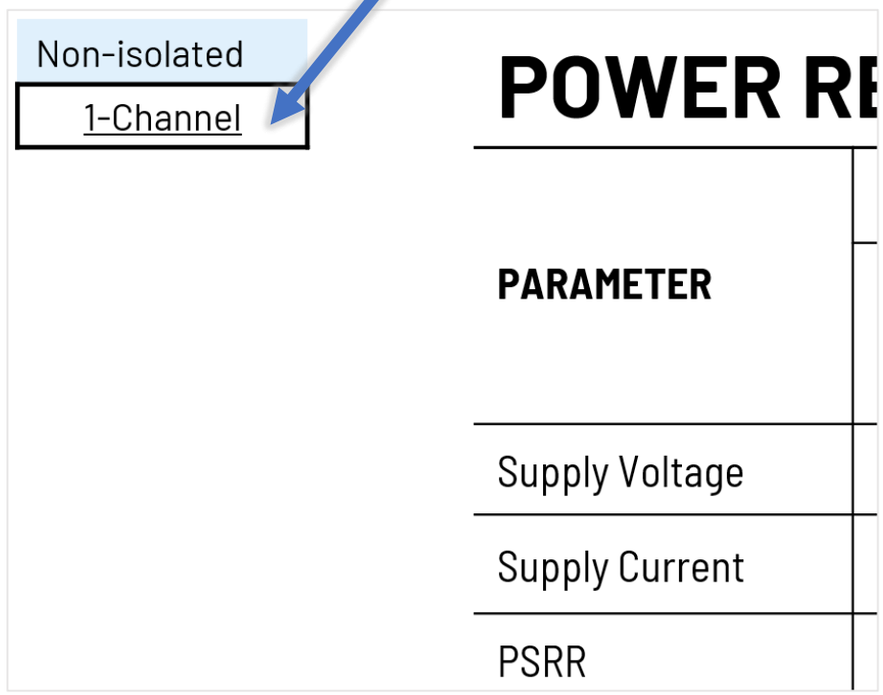
Left-click the Parts Guide and Power Requirements to go through the list of power devices and other references.

The Power Components are listed on the Appendix, and you may click on the part to go through its product page online.

PART #	DESCRIPTION
LT3471	Dual 1.3A, 1.2MHz Boost/Inverter in 3mm × 3mm DFN
LT8604	High Efficiency 42V/120mA Synchronous Buck
LT8570-1	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.



APPENDIX

Parts Guide

Power Requirements

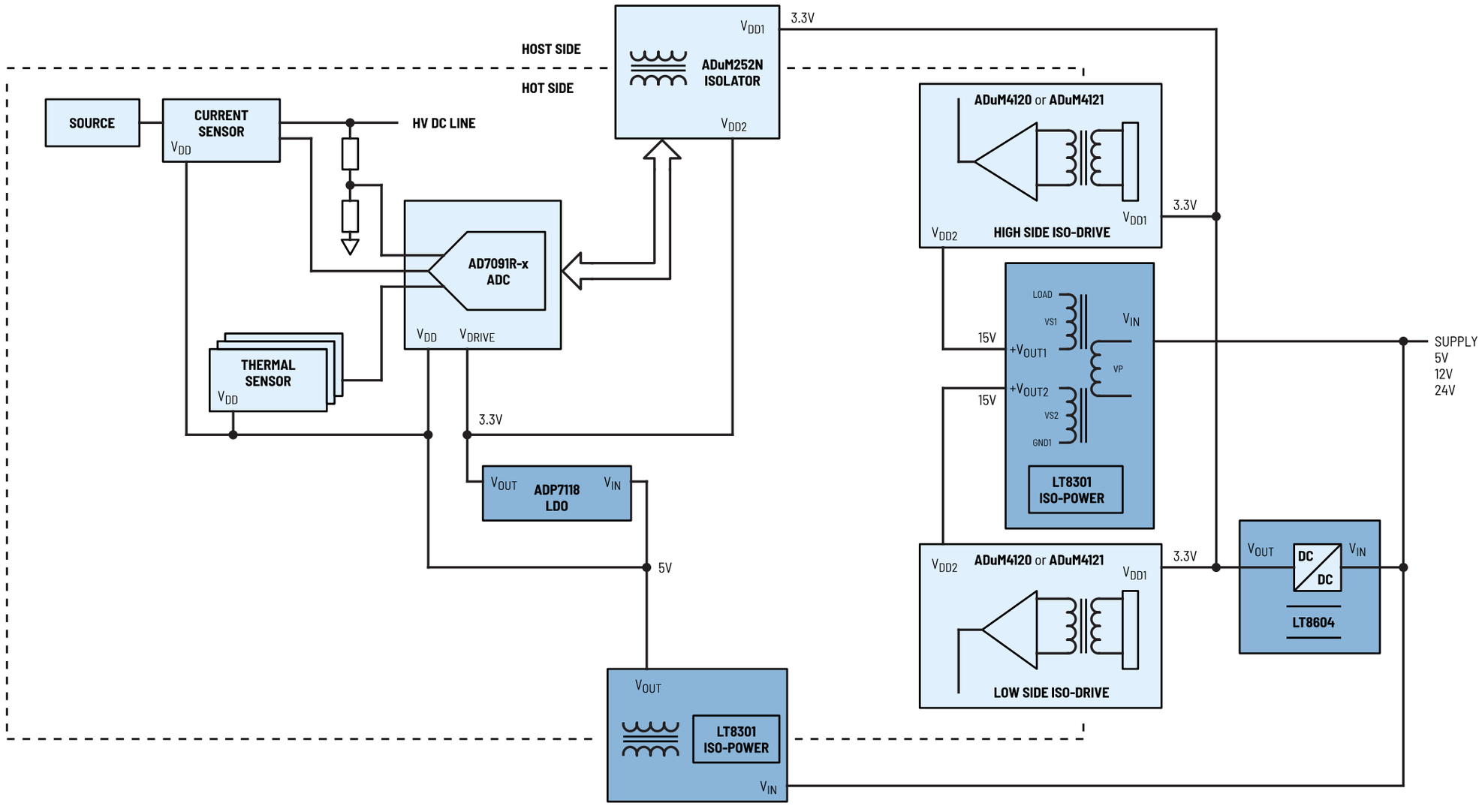
USER GUIDE

Multichannel Monitoring for Power Conversion with Digital Isolation

Density and Speed Optimized

Isolated

Multichannel



Isolated Gate Drive & Sense

Multichannel Monitoring for Power Conversion with Digital Isolation

Density and Speed Optimized

Isolated

Multichannel

PART #	DESCRIPTION
LT8604	High Efficiency 42V/120mA Synchronous Buck
LT8301	$42V_{IN}$ Micropower No-Opto Isolated Flyback Converter with 65V/1.2A Switch
ADP7118	20V, 200mA, Low Noise, CMOS LDO Linear Regulator

POWER REQUIREMENTS

PARAMETER	STAGES	Isolation		ADC		Isolated Gate Driver	
	Part #	ADuM252N		AD7091R-x		ADuM4120 ADuM4121	
	Pin	V_{DD1}	V_{DD2}	V_{DD}	V_{DRIVE}	V_{DD1}	V_{DD2}
Supply Voltage	V	3.3	3.3	5	3.3	3.3	15
Supply Current	mA	19.4	19.8	0.57	0.07	5	2.7
PSRR	dB	-		94 (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.