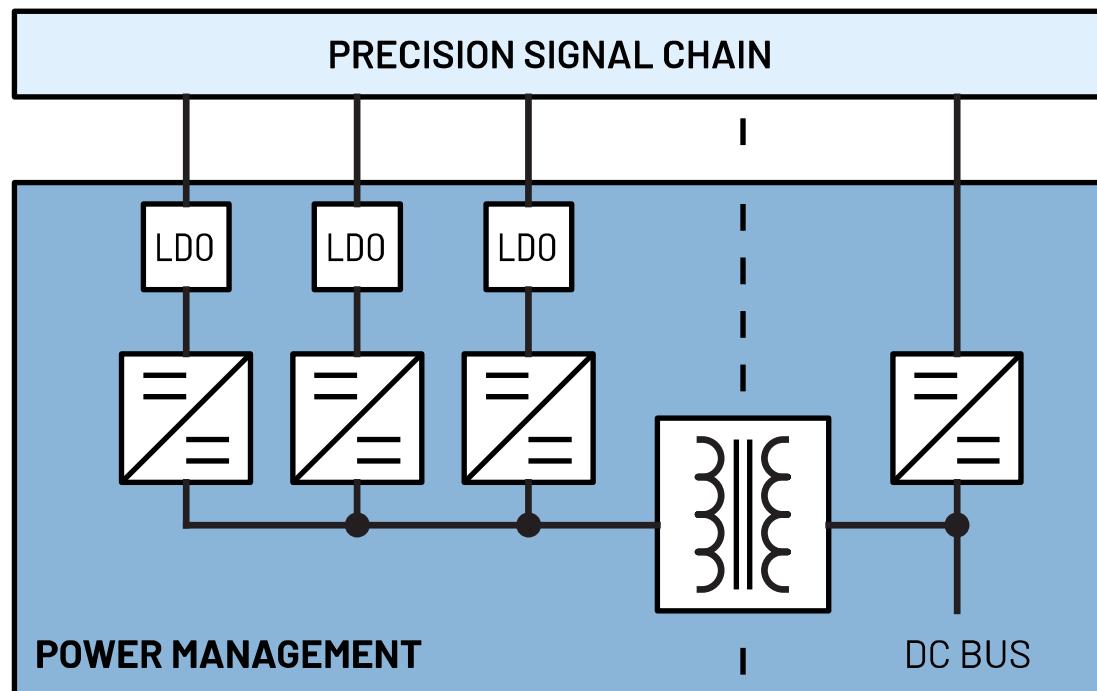


POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION WIDE BANDWIDTH
Light Measurement
Optimized for Noise

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
<u>1-Channel</u>

POWER RE	
PARAMETER	
Supply Voltage	
Supply Current	
PSRR	

APPENDIX

[Parts Guide](#)

[USER GUIDE](#)

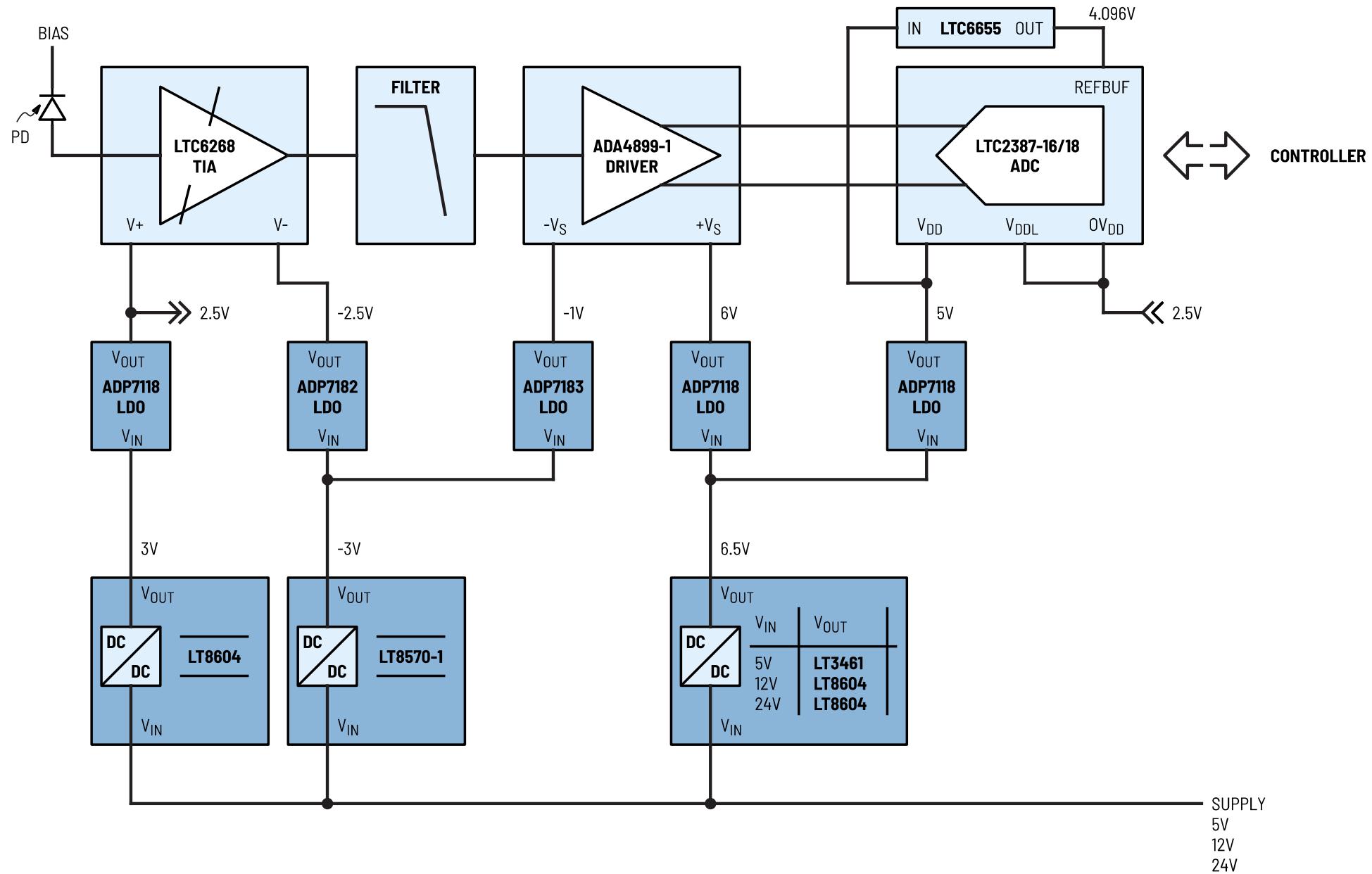
[Power Requirements](#)

Light Measurement

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Non-isolated

1-Channel



Precision Wide Bandwidth

Light Measurement

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Non-isolated

1-Channel

PART #	DESCRIPTION
<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.
<u>LT3461</u>	1.3MHz Step-Up DC/DC Converters with Integrated Schottky in ThinSOT
<u>ADP7118</u>	20V, 200mA, Low Noise, CMOS LDO Linear Regulator
<u>ADP7182</u>	-28V, -200mA, Low Noise, Linear Regulator
<u>ADP7183</u>	-300 mA, Ultralow Noise, High PSRR, Low Dropout Linear Regulator

Light Measurement

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Non-isolated

1-Channel

POWER REQUIREMENTS

PARAMETER	STAGES	TIA		Filter	ADC Driver		ADC			Reference
	Part #	LTC6268		-	ADA4899-1		LTC2387-16/18			LTC6655
	Pin	V+	V-		+V _S	-V _S	V _{DD}	V _{DDL}	OV _{DD}	IN
Supply Voltage	V	2.5	-2.5	-	6	-1	5	2.5	2.5	5
Supply Current	mA	23	23	-	16.2	-16.2	6	35	10.3	1.8
PSRR	dB	52 (1MHz)	63 (1MHz)	-	90		-			40 (10kHz)

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.