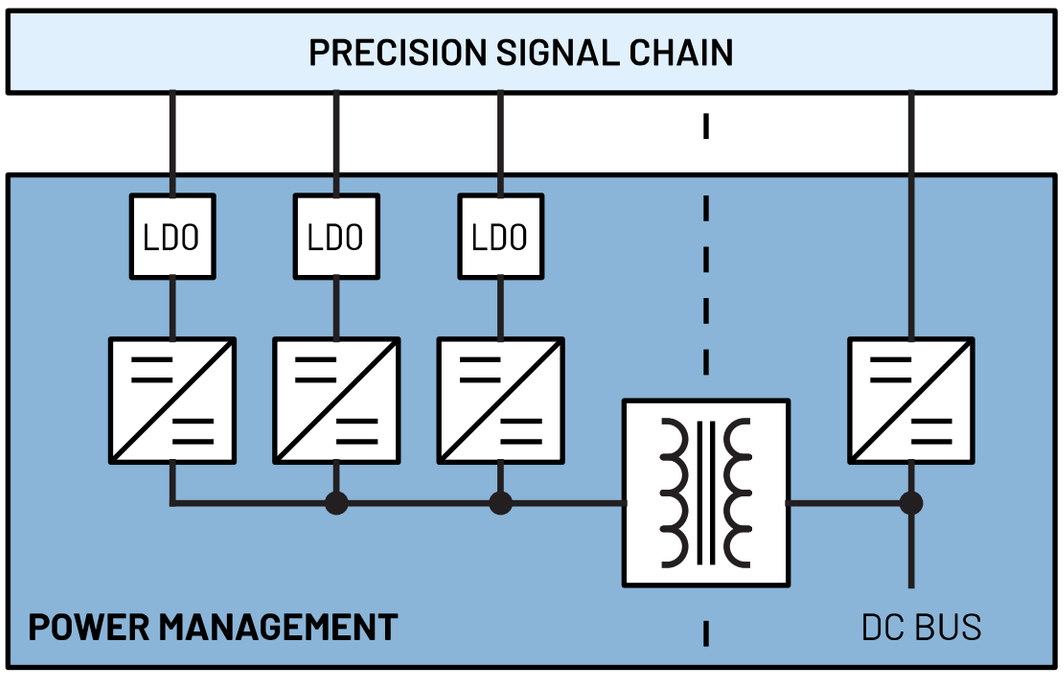
POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION CURRENT SENSING

Current Measurement – Motor Control Inverter High Power Current Transformer Sensor



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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.

Non-isolated

1-Channel

POWER RE

PARAMETER
Supply Voltage
Supply Current
PSRR

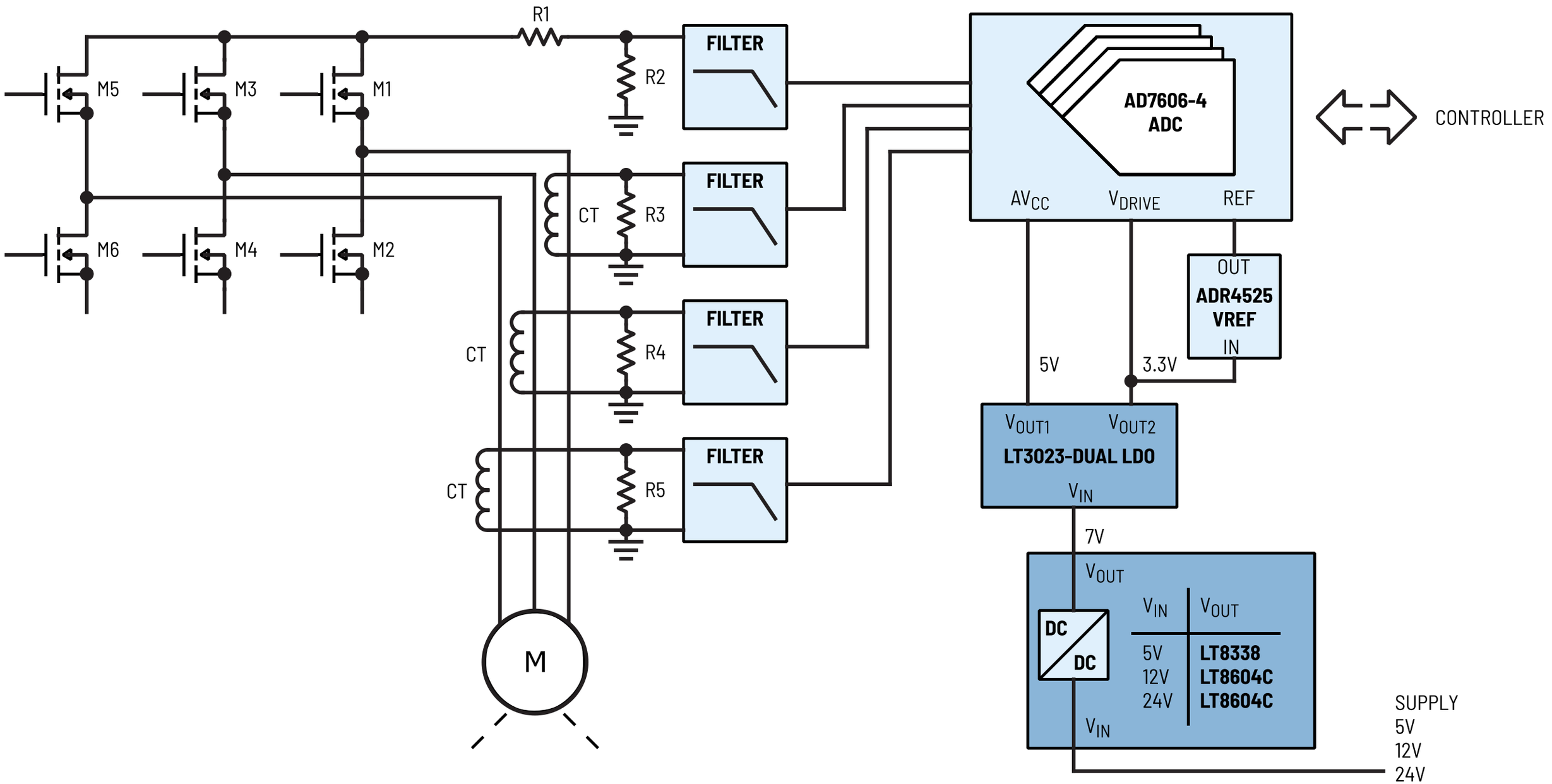
APPENDIX	Parts Guide	USER GUIDE
	Power Requirements	

Current Measurement – Motor Control Inverter

High Power Current Transformer Sensor

Non-isolated

Multichannel



Precision Current Sensing

Current Measurement – Motor Control Inverter

High Power Current Transformer Sensor

Non-isolated

Multichannel

PART #	DESCRIPTION
LT8604	High Efficiency 42V/120mA Synchronous Buck
LT8338	40V, 1.2A Micropower Synchronous Boost Converter with Pass-Thru
LT3023	Dual 100mA, Low Dropout, Low Noise, Micropower Regulator

POWER REQUIREMENTS

PARAMETER	STAGES	Filter	ADC		Reference
	Part #	-	AD7606-4		ADR4525
	Pin		AV_{CC}	V_{DRIVE}	IN
Supply Voltage	V	-	5	3.3	3.3
Supply Current	mA	-	21		0.95
PSRR	dB	-	130 (900kHz)		80 (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: (1) power supply rejection ratio (PSRR) and (2) power dissipation.

Note 4: The actual supply current requirement shall be multiplied depending on the number of channels on the signal chain.