POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION MEDIUM BANDWIDTH
Edge Node Vibration Sensing
Enhanced Digital Functions

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

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<td>Parts Guide</td>
<td>Power Requirements</td>
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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.

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<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
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<tr>
<td>LT3471</td>
<td>Dual 1.3A, 1.2MHz Boost/Inverter in 3mm × 3mm DFN</td>
</tr>
<tr>
<td>LT8604</td>
<td>High Efficiency 42V/120mA Synchronous Buck</td>
</tr>
<tr>
<td>LT8570-1</td>
<td>Boost/SEPIC/Inverting DC/DC Converter with 65V Switch, Soft-Start and Sync.</td>
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For the individual pages:

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

Non-isolated

1-Channel

Left-click the specific signal chain to go through its respective block diagram or power tree.

PARAMETER

Supply Voltage
Supply Current
PSRR
Non-isolated

Single-channel

APPENDIX

Parts Guide

Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

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## Precision Medium Bandwidth

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<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT8604</td>
<td>High Efficiency 42V/120mA Synchronous Buck</td>
</tr>
<tr>
<td>ADP7118</td>
<td>20V, 200mA, Low Noise, CMOS LDO Linear Regulator</td>
</tr>
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</table>

- Non-isolated
- Single-channel

**Edge Node Vibration Sensing**

**Enhanced Digital Functions**
## Power Requirements

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>STAGES</th>
<th>MEMS Accelerometer</th>
<th>ADC Driver</th>
<th>ADC</th>
<th>Ref. Buffer</th>
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</thead>
<tbody>
<tr>
<td>Part # Pin</td>
<td>ADXL1001</td>
<td>ADXL1002</td>
<td>ADA4805-2</td>
<td>AD7768-1</td>
<td></td>
</tr>
<tr>
<td>V&lt;sub&gt;DD&lt;/sub&gt;</td>
<td>+V&lt;sub&gt;S&lt;/sub&gt;</td>
<td>AV&lt;sub&gt;DD1&lt;/sub&gt;</td>
<td>AV&lt;sub&gt;DD2&lt;/sub&gt;</td>
<td>IOV&lt;sub&gt;DD&lt;/sub&gt;</td>
<td>-</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>V</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3.3</td>
</tr>
<tr>
<td>Supply Current</td>
<td>mA</td>
<td>1.15</td>
<td>0.52 (per amp)</td>
<td>26</td>
<td>11.5</td>
</tr>
<tr>
<td>PSRR</td>
<td>dB</td>
<td>-</td>
<td>70 (1MHz)</td>
<td>110 (1MHz)</td>
<td>-</td>
</tr>
</tbody>
</table>

**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.