POWER SOLUTIONS FOR PRECISION TECHNOLOGY SIGNAL CHAINS

PRECISION WIDE BANDWIDTH
Current and Voltage Drive
Density Optimized

Rev. 0 | Jan. 2022

©2022 Analog Devices, Inc. All rights reserved. Trademarks and registered trademarks are the property of their respective owners.
This document is interactive. You can click on any underlined text to navigate through the document.

For the resources:

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>Parts Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Power Requirements</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT3471</td>
<td>Dual 1.3A, 1.2MHz Boost/Inverter in 3mm x 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>
</tr>
</tbody>
</table>

For the individual pages:

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

<table>
<thead>
<tr>
<th>PARAMETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
</tr>
<tr>
<td>Supply Current</td>
</tr>
<tr>
<td>PSRR</td>
</tr>
</tbody>
</table>
Current and Voltage Drive
Density Optimized

Non-isolated
1-Channel

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains

APPENDIX
Parts Guide
Power Requirements

USER GUIDE

Power Solutions for Precision Technology Signal Chains
### APPENDIX

**Power Solutions for Precision Technology Signal Chains**

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<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>
</tr>
<tr>
<td>ADP7118</td>
<td>20V, 200mA, Low Noise, CMOS LDO Linear Regulator</td>
</tr>
<tr>
<td>ADP7182</td>
<td>−28V, −200mA, Low Noise, Linear Regulator</td>
</tr>
</tbody>
</table>

**APPENDIX**

**Non-isolated**

1-Channel

**APPENDIX**

**Current and Voltage Drive**

**Density Optimized**

**APPENDIX**

**Precision Wide Bandwidth**
### POWER REQUIREMENTS

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>DAC Part #</th>
<th>Filter</th>
<th>Reference</th>
<th>Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stages</td>
<td>AD3542R</td>
<td></td>
<td>LTC6655</td>
<td>ADG5401F</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>V</td>
<td>1.8</td>
<td>1.8</td>
<td>5</td>
</tr>
<tr>
<td>Supply Current</td>
<td>mA</td>
<td>0.5</td>
<td>0.09</td>
<td>17.5</td>
</tr>
<tr>
<td>PSRR</td>
<td>dB</td>
<td>72</td>
<td>-</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 power dissipation if needed.

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