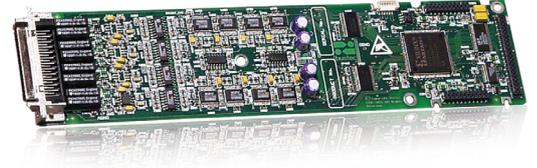


ProDAQ Data Acquisition Function Cards

ProDAQ 3511 8-Channel, 200 kS/s, 16-Bit DAC Function Card



OVERVIEW

The ProDAQ 3511 DAC function card is a high-density card that fits into ProDAQ VXIbus motherboards and LXI function card carriers. This high-density card contains eight independent 16-bit DAC channels. Each channel is equipped with its own DAC. Users can update the output of each DAC with up to 200 kS per second either directly via software command or from an onboard FIFO.

The analog bandwidth of each channel is 20 kHz.

There are different standard versions of the ProDAQ 3511 available, ranging from 0 to +5 V to ± 20 V output. Other output ranges are available on request. All voltage outputs have continuous short-circuit protection. If high currents are used on multiple channels, the number of DAC cards that users can install into one motherboard module may be restricted, due to supply limitations of the VXIbus power specification. Versions with custom output ranges are available on request.

The ProDAQ 3511 DAC Function Card is supplied with VXIplug&play drivers for Windows. Drivers for Linux and VxWorks are available on request.

All **ProDAQ function cards** can be used in both ProDAQ VXIbus motherboards and LXI function card carriers, providing users with the highest channel density and functionality available today.

Features & Benefits

- ▶ **8 independent DACs**
- ▶ **16-bit resolution, 200 kS/s**
- ▶ **20 kHz analog bandwidth**
- ▶ **256 kWords** onboard **FIFO** for continuous update
- ▶ **Gain/offset calibration**
- ▶ **Up to 64 DAC channels** in 1U (LXI) or 1 slot (VXI)
- ▶ Three **different output ranges** available
- ▶ **Flexible triggering**

For more information, visit www.bustec.com.

Learn more about the **ProDAQ 3511** on our website by scanning the code below.



SPECIFICATIONS

SAMPLING

Resolution	16-bit
FIFO	256 kWords onboard memory

OUTPUT CHARACTERISTICS

Number of Channels	8
Output Range	0-10 V, ± 10 V, ± 20 V
Output Current	20 mA per channel (maximum) (Current available per channel depends on the number of function cards fitted to one module)
Output Coupling	DC
Output Filter	Type 2-pole Bessel
Cut-off Frequency	200 Hz, 2 kHz, 20 kHz (software prog.)
Output Impedance	< 0.15 Ω max.
Offset	< 1 mV typical (calibrated)
Accuracy	< \pm (0.05 % Setting + 1.5 LSB)
Update Rate (with internal clock)	100, 200, 500 Hz; 1, 2, 5, 10, 20, 50, 100, 200 kHz

FRONT PANEL I/O

Trigger Input	TTL, falling edge activation
Trigger Output	TTL open collector (1 kOhm pull-up), active low-level
CLK Input	TTL, 0 - 200 kHz, active edge software selectable
CLK Output	TTL, active low-level
Connectors	50-pin SCSI female

PHYSICAL CHARACTERISTICS

Dimensions	230 x 53 mm
Weight	90 g

POWER REQUIREMENTS

Current Consumption	Voltage (V)	Current (mA)
	+24	*
	+12	*
	+5	160
	-12	*
	-24	*

(* Current consumption depends on version and output load)

ENVIRONMENTAL

Temperature	0 °C to +50 °C (operational) -40 °C to +70 °C (storage only)
Humidity	10 % - 90 % (non-condensing)

SOFTWARE SUPPORT

Driver support for Microsoft Windows, VxWorks, and Linux
(Contact Bustec Ltd. for more information)

WARRANTY PERIOD

12 months (extended periods available at additional cost)

Ordering Information

- ▶ **3511-AA** 8-ch., 200 kS/s, 16-bit DAC, 0-10 V output
- ▶ **3511-BB** 8-ch., 200 kS/s, 16-bit DAC, ± 10 V output
- ▶ **3511-BC** 8-ch., 200 kS/s, 16-bit DAC, ± 20 V output
- ▶ **Other ranges available**

Related Products

- ▶ **ProDAQ 6100** LXI function card carrier
- ▶ **ProDAQ 3180** Ultra-performance motherboard module
- ▶ **ProDAQ 8010** data I/O cable, 50-pin SCSI to 50-pin SCSI connectors
- ▶ **ProDAQ 8011** data I/O cable, 50-pin SCSI to unterminated

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