

Analog Output Converter Cards

Concurrent's CP-DA3218 is a 32-channel or 8-channel, 18-bit digital-to-analog converter card with a PCI express interface. The card is implemented using Linear Technology LTC2758 dual channel DACs. All output ranges are selectable on a per channel basis. The synchronous conversion clock source is generated by a low jitter PLL. Differential or single-ended outputs are supported via build options. Multi-board synchronization is supported with simple RJ-style cabling. NIST traceable calibration is included with all boards. A RedHawk™ Linux® driver with extensive API including DMA and interrupts is available for both 32-bit and 64-bit architectures.

In addition, an optional wave generation package is available that provides an easy, yet powerful mechanism for users to generate continuous and unique user-supplied waveforms on any specified channels of the card.

FEATURES:

- 32-channel or 8-channel 18-bit Digital-to-Analog Conversion
- Differential or Single-ended Output (Build Option)
- 0 to +5V, 0 to +10V, +/-2.5V, +/-5V or +/-10V Output Range Selection
- 10 Milliamp Output Drive
- 400K Updates Per Second
- Linear Technology LT2758 DACs
- Industry Standard SCSI 68-pin Connector for Outputs
- RJ-12 (6-pin phone style) Connectors for Multi-board Synchronization
- PCI Express x1 Revision 1.0a
- MSI Interrupts
- Low Jitter Phase Lock Loop (PLL) Clock Generators
- Directly Addressable Conversion Data Registers
- 128K Word Conversion Data FIFO with DMA
- Low Noise Analog Power Generation
- On-Board Calibration ADC
- Gain/Offset Calibration DACs Per Channel
- Gain/Offset Calibration Values Accessible
- NIST Traceable Calibration Standard

SPECIFICATIONS:

PACKAGING

Full Height PCI Express Short plus
3.0" (9.5" long x 3.8" high)

POWER REQUIREMENTS

Approximately 25 watts (3.3VDC @ 2 Amp, 12VDC @ 1.5 Amp)

ENVIRONMENTAL

Operating: 10° to 40° C
Storage: -40° to 65° C

Relative Humidity: 10 to 80% non-condensing

Cooling: Forced Air @ Maximum Load

ROHS Compliant

ORDERING INFORMATION:

- CP-DA3218-D/CP-DA0818-D**
32/8-channel, 18-bit D-to-A PCIe card, Differential Outputs
- CP-DA3218-S/CP-DA0818-S**
32/8-channel, 18-bit D-to-A PCIe card, Single-ended Outputs
- WC-DA3218**
Driver for RedHawk™ Linux®
- WC-DA3218-WAVE**
Wave Generation Package
- ICS-SWB-1248**
Simulation Workbench™ I/O License
- CX-CBL-HSI-68-nn = 03, 06 or 10**
3/6/10-foot 68-pin Host Interface Cable
- CX-ALOG-SYNC-nn = 01, 10 or 30**
1/10/30-foot Analog I/O Sync Cable
- CX-CBL-AIO-BRKOUT**
Analog I/O Terminal Breakout Module



CP-DA3218

More Information:

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