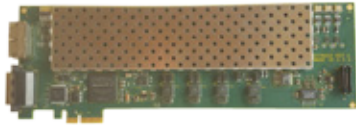


## 64-Channel Analog Input PCIe Card

Concurrent's CP-ADS6418 is a 64-channel, 18-bit, FPGA-based analog-to-digital converter card with a PCI Express interface. The CP-ADS6418 converts up to 500K samples/second per channel when using 64 channels. The card can also be used as a 32-channel card supporting up to 700K samples/second per channel. In addition, two channels can be combined to sample as a single channel providing up to 32 channels converting up to 1 Mega sample per second.

The card is implemented using Analog Devices LTC2353 converters. Each converter group has an independently selectable clock source generated by a low jitter clock generator. The card can be configured for single-ended input or differential input for low noise and accurate measurements. Multi-board clocking and synchronization is supported. A RedHawk™ Linux® driver with an extensive software API that includes DMA and interrupt support is available.



### More Information:

concurrent-rt.com  
 wiki.simwb.com  
 info@concurrent-rt.com  
 800.666.4544  
 954.974.1700

### Features:

- Input Voltage Range: 0-5V, 0-10V, +/-5V, +/-10V
- 64-channel 18-bit SAR Analog-to-Digital Conversion
- Differential or Single Ended Input
- 1 Meg Ohm Input Impedance
- +/- 50V Input Over Voltage Protection
- Maximum Sampling Rates:
  - 64-channels: 500K samples/second
  - 32-channels: 700K samples/second
  - 32-channels Dual Mode: 1000K samples/second
- PCI Express Gen 1 x4 Lane
- Breakout Cables and Boards Available
- NIST Traceable Calibration Standard
- Extensive Software API
- In System Calibration
- Industry Standard High Density SCSI 68-pin connectors
- Multi-board Synchronization
- RJ-45 Synchronization Connectors

### Specifications:

#### PACKAGING

- Full Height, Full Length PCI Express 3.8" high, 12.3" long

#### POWER REQUIREMENTS

- Less than 25 watts (3.3VDC @ 2Amp, 12VDC @ 1.2 Amp)

#### ENVIRONMENTAL

- Operating: 10° to 40° C
- Storage: -40° to 65° C
- Relative Humidity: 10 to 80% non-condensing
- ROHS Compliant

### Ordering Information:

- CP-ADS6418  
64-channel, 18-bit +/-10 Volt A/D PCIe card
- WC-ADS6418  
Driver for RedHawk Linux with API
- ICS-SWB-1242  
SIMulation Workbench I/O License

#### CABLING OPTIONS

(two cables are recommended):

- CX-CBL-HSI-F-01 - 1-meter cable
- CX-CBL-HSI-F-02 - 2-meter cable
- CX-CBL-HSI-F-03 - 3-meter cable
- CX-CBL-AIO-BRKF Breakout Module