

EXC-8000cPCI

The EXC-8000cPCI is part of Excalibur's 8000 family of multiprotocol carrier boards. This cPCI interface board supports up to six independent, removable modules and 10 onboard Discrete channels. Each module can be any of the 8000 family modules. The EXC-8000cPCI is standard 3U cPCI size.

General Features

- ◆ Supported protocols (up to 6 removable modules):
 - ARINC 429/575 (5 ch. per module)
 - ARINC 708/453 (2 ch. per module)
 - MIL-STD-1553 (1 ch., single or multifunction)
 - MIL-STD-1760 (1 ch., single or multifunction)
 - Discrete I/O (10 ch. per module)
 - Serial RS-232/485/422 (2 ch. per module)
 - ARINC 825 (CAN) (5 ch. per module)
 - ARINC 717 (2 ch. per module)
 - MMSI/AS5652 (5 ch. per module)
 - H009 (1 ch. per double-sized module)
 - A/D and D/A (5 differential ch. per module)
- ◆ 16-bit Count Down Timer
 - 1–65,635 μ s resolution
 - Interrupt or global reset upon count down
- ◆ Extended temperature option

IRIG B Time Code Input

- ◆ Standard IRIG B120 Serial Time Code
- ◆ Carrier wave:
 - 1KHz Amplitude modulated sine wave
- ◆ Rate Designation: 100 peaks per second
- ◆ Modulation ratio: 3:1
- ◆ Input Amplitude: 0.8–3.5 Vpp (3 Vpp Typ)
- ◆ Coded Expressions supported:
 - BCD time-of-year code word
 - Control functions
 - Straight Binary Seconds (SBS) time-of-day
- ◆ Application:
 - Synchronization of Time Tags, display and IRIG B time

Physical Characteristics

- ◆ Dimensions: 160mm x 100mm
- ◆ Weight: 152g (without modules)

Operating Environment

- ◆ Temperature: 0°–70°C standard temperature
 - 40° to +85°C extended temperature (optional)
- ◆ Humidity: 5%–90% noncondensing
- ◆ MTBF: 298,000 hours at 25°C, G_F, S217F



Host Interface

- ◆ PCI compliance: Target 8/16 bit
- ◆ Memory space occupied:
 - 1024 Kbytes (128K per module)
- ◆ Interrupts: INTA#
- ◆ Power: Depends on configuration. For more details, see the user's manual.

Software Support

- ◆ *Excalibur Carrier Board Software Tools:*
 - Intuitive and flexible API with source code
 - Compatible with 32/64-bit Windows 7/8/10/11 & Linux kernel 3.x/4.x/5.x
 - Includes application interface for NI LabView & CVI
- ◆ *Exalt Plus:* Excalibur Analysis Laboratory Tools for Windows (optional)
- ◆ GUI driven software for many of our supported protocols

Ordering Information

- ◆ **EXC-8000cPCI/xx**
 - 3U size multi-protocol interface board for cPCI compatible systems. Replace "xx" with module codes. See **Ordering Information** in the board's user's manual.
- ◆ Additional Options:
 - E Extended temperature option
 - 001 With conformal coating
 - 002 With rear I/O connector [P2], instead of the J1/J2 front panel connectors
- ◆ **EXC-8000CON**
 - J1/J2 mating connector assembly (not included with board)
- ◆ Adapter cables can be ordered per configuration

July 2023, Rev A-2

These specifications are subject to change without notification