EXC-8000PCIe

The EXC-8000PCIe is part of the 8000 family of multiprotocol carrier boards. This PCI Express interface board supports up to eight independent, removable modules. Each module can be any of the 8000 family modules.

The EXC-8000PCle supports Direct Memory Access (DMA), which enables the board to access system memory for reading and writing independently of the computer's CPU. This results in faster data transfer to and from the board, with much less CPU overhead than when not using DMA.

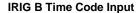
General Features

Supported protocols (on up to 8 removable modules):

ARINC 429/575 (5 ch. per module)
ARINC 708/453 (2 ch. per module)
MIL-STD-1553 (single or multifunction)
MIL-STD-1760 (single or multifunction)
Discrete I/O (10 ch. per module)
Serial RS-232/485/422/ (2 ch. per module)
ARINC 825 (5 ch. per module)
ARINC 717 (2 ch. per module)

16-bit Count Down Timer
 1–65,635 µs resolution
 Interrupt or global reset upon count down

MMSI/AS5652 (5 ch. per module)



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: 188.0 mm x 106.9 mm
Weight: 135 g (without modules)

Operation Environment

January 2019, A-1

◆ Temperature: 0°-70°C standard temperature

-40° to +85°C extended temperature (optional)

♦ Humidity: 5%–90% noncondensing

♦ MTBF: 188,540 hours at 25°C, G_F, S217F



Host Interface

♦ PCI Express compliance: x1 lane PCle v1.1

Memory space occupied:

64 MB

♦ Interrupts: INTA# virtual wire

Power: Depends on configuration. For

more details, see the user's

manual.

Software Support

Excalibur Carrier Board Family Software Tools:

♦ Intuitive and flexible API with source code

 Compatible with 32/64-bit Windows 7/8/10 & Linux kernel 3.x/4.x

Includes application interface for NI LabView &

 Exalt Plus: Excalibur Analysis Laboratory Tools for Windows (optional)

Ordering Information

♦ EXC-8000PCle/xx

Multi-protocol interface board for PCIe compatible systems

Note: 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





These specifications are subject to change without notification



