

# MILITARY & DEFENSE

NTDS ABCH PMC



## NTDS ABCH PMC

A high performance NTDS module for PMC Slots

### SPECIAL FEATURES

- Industry Standard PMC Module
- Passive Tap Capability
- High Density NTDS I/O Connection
- Test Without Disconnecting Cables

The NTDS ABCH Parallel PCI Mezzanine Card connects to military computers and peripherals with MIL-STD-1397C Parallel Type A, B, C or H interfaces. The NTDS ABCH PMC is a daughter card that installs in a standard PMC slot on a host CPU or PMC carrier, providing robust NTDS I/O capabilities in a compact form factor.

IXI Technology's NTDS ABCH PMC is easy to program and offers a variety of input and output modes to support any NTDS protocol. Hardware-independent input and output channels allow the NTDS ABCH PMC to perform simultaneous input and output (full duplex) operations. NTDS  $t_{yp}$  is software-selectable allowing quick reconfiguration without the use of hardware jumpers or switch settings.

NTDS ABCH PMC boards can be used for passive tap applications as well as normal NTDS I/O. An on-board time stamp generator tags individual input words with 125 ns resolution. Time stamping is software-selectable and can be used with active or passive communications.

All boards in the NTDS ABCH PMC family are software-compatible making it easy to mix parallel and serial NTDS boards in the same system as well as allowing transparent migration.

For maintenance and reliability, NTDS ABCH PMC Parallel Interface boards feature short-circuit protection to prevent failures due to improper cabling or NTDS type mismatches. An internal loop-back path allows the NTDS ABCH PMC to be tested without disconnecting cables. The NTDS ABCH PMC can be updated in the field by reconfiguring its Field Programmable Gate Array (FPGA) logic to add features or compensate for non-compliant interfaces. Using FPGA technology reduces component obsolescence, enabling the NTDS ABCH PMC to be deployed and supported for years to come.

### PRODUCT OVERVIEW

- MIL-STD-1397C Type A, B, C, and H compliant
- Full-duplex NTDS transfers
- 8- or 16-bit NTDS I/O via PMC PN4 connector
- Interrupt, PIO & DMA operation
- Independent NTDS input and output channels
- Field Programmable Gate Array (FPGA) technology
- Separate word counters and time-outs for EI/EF words and data words on inputs and outputs
- PCI master and slave operation
- Short-circuit protected, tri-state drivers
- Internal loopback test without disconnecting NTDS cables
- Software enabled time stamp on input words with 125ns resolution
- Time stamps can be synchronized across multiple interfaces
- Supports receipt of multiple Forced EF's
- Software compatible with Swift NTDS PCI, PMC, cPCI, PC/104-Plus, and PCIe boards

## GENERAL PRODUCT FEATURES

### Input Mode Features

- Separate or combined data and command word buffers
- Input command words, stop on data word
- Input data words, stop on command word
- Passive tap mode

### Output Mode Features

- Concurrent data and command buffer operation

### Time-out Mode Features

- Time-out values in 10µs or 1ms increments
- Time-out between words and/or total transfer times
- Start time-out at beginning of operation or upon transfer of the first word

### Software Drivers Available\*

- Choice of driver included with board purchase: Windows® XP/Vista/7/8/10,

\* VxWorks®, Solaris™, Linux®, LynxOS®, HP-UX

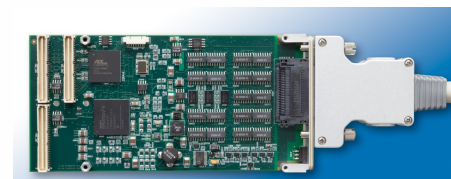
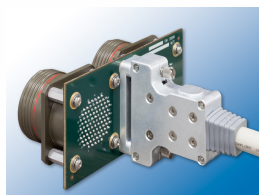
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## OPTIONS AND ACCESSORIES

- Adapter Modules
- Cable Assemblies
- Tap Accessories



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## TECHNICAL SPECIFICATIONS

NTDS Interface	MIL-STD-1397C Type A, B, C and H 8-, 16- or 32-bit NTDS I/O
PCI Bus Interface	PCI 2.2 Compliant 32-Bit, 33/66 MHz, Universal Card
Input Buffer	64K x 32
NTDS I/O Connector Factor	IEEE 1386 Single Size CMC (149mm x 74mm)
Weight	3.3oz
Power Consumption	Average +5V Current Draw: 1.0A Average +VI/O Current Draw: 5mA Average Power Dissipated: 5.1W
Relative Humidity	0% to 90% (non-condensing)
Operating Temperature	0°C to +55°C