



## NTDS PCIe Type E (LLS) Interface Adapter

### Specifications

**GET Part Number**

10078001 (Standard)  
10078001-L (Low Profile)

**NTDS Serial Interface**

MIL-STD-1397C Type E

**Form Factor**

Low Profile PCIe  
(167.65 mm X 68.9 mm)

**Bus Interface**

PCI Express x1 Gen 1

**Power Requirements**

+5 VDC @ 1.4 Amp (typ)  
-12 VDC @ .2Amp (typ)

**NTDS I/O connectors**

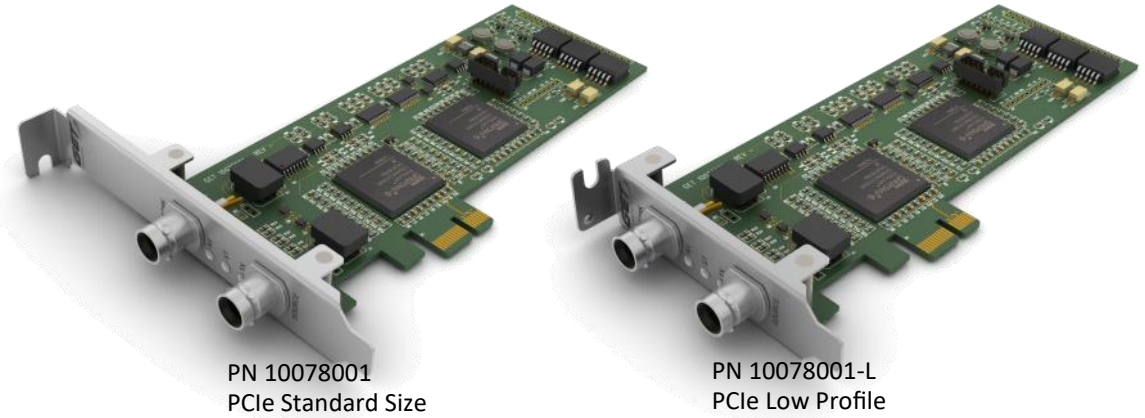
BJ77 TRIAX

**Extended Temperature**

-40°C to 85°C Operating  
(ANSI/VITA 47, Class CC4)

**Ordering Options**

Standard - 10078001  
Low-Profile - 10078001-L



PN 10078001  
PCIe Standard Size

PN 10078001-L  
PCIe Low Profile

**GET Engineering**, the Industry Leader in MIL-STD-1397C Products, introduces its **NTDS PCIe Type E (LLS) Interface Adapter**. Innovative design and cutting edge Field Programmable Gate Array (FPGA) technology combine to deliver superior performance and exceptional reliability while providing fully compliant MIL-STD-1397C communications. FPGA controlled DMA channels for transmit and receive buffers reduce host CPU overhead. The low profile design gives the system builder the flexibility of installing the unit in a 2U rack mount or small form factor (SFF) desktop enclosure.

**Software Driver Support** includes a full featured Common User Interface (CUI) driver. The CUI driver API calls are operating system independent and thereby provide an easy migration path when porting code between operating systems.

**GET Engineering's NTDS PCIe Type E (LLS) Interface Adapter** is extended temperature rated and is shipped with either a standard or low profile rear panel bracket.

# NTDS PCIe Type E (LLS) Interface Adapter



## Environmental Specifications

### Operating Temperature Range

Minus 40° to 85°C Operating  
(ANSI-VITA 47, Class CC4)

### Storage Temperature

Minus 40° to 85°C Operating  
(MIL-STD-810 Method 501 and 502,  
Procedure I)

### Vibration

0.01g<sup>2</sup>/Hz 15-2 KHz, Optional 0.1g<sup>2</sup>/  
HZ 15-2KHz, (MIL-STD-810, Method  
514, Procedure I)

### Operating Shock

20 g peak, Optional 40 g Peak,  
(MILSTD-810, Method 516,  
Procedure I)

### Humidity

5% to 95% humidity operational  
(non-condensing)  
(MIL-STD-810, Method 507)

### Mean Time Between Failures (MTBF)

> 200K Hours per MIL-HDBK-217,  
Rev E, 25°C Ground Benign  
Environment

## Key Features

- NTDS Type E Low Level Serial
- 100% MIL-STD-1397C Compliant
- Full-duplex 16 or 32-bit transfers
- Rear panel ( BJ77 TRIAX ) accessible I/O connectors
- Reconfigurable to support specific applications
- Independent Input and Output ports
- PIO Single Word Transfers
- Operate at maximum NTDS transfer rates
- True Full Duplex operation
- Buffer / Command Time-outs: 1  $\mu$ s granularity
- Inter-word Timers: 1  $\mu$ s granularity
- Platform & operating system independent software
- Field Upgradeable Firmware and Software Drivers
- Internal Loop-Back: test adapter operation without external cables
- Multiple Built In Self Test (BIST) support options

## Transmit Features

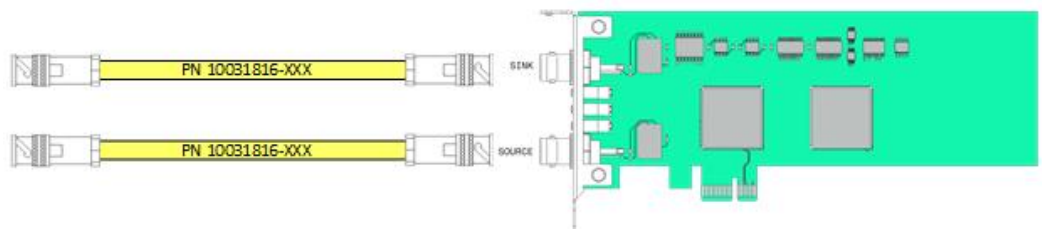
- Transceiver Short Circuit and Transient Protection
- Information Frame Parity and Control Frame ID control
- Extensive SIF support to improve system reliability
- Single word, Burst, and Forced Function Modes

## Receive Features

- Single word, Burst, and Forced Function Modes

## Connection Options

- Other options available.



PCIe Serial