

# 9-Port Mil1394 PMC OHCI Adapter Card

## Triple-Node IEEE-1394b PMC OHCI Solution

### Applications

Vehicle software, hardware, and system emulation labs  
Transformer-coupled IEEE-1394b desktop computer host adapter  
Flight Control, Mission Systems emulation environments

### Benefits

High density 3 PHY 9-port design  
Uses industry standard Texas Instruments TSB41BA3 Physical Layer and TSB82AA2 1394 OHCI Link Layer Controller  
Implemented with active transformer isolation to increase cable length and robustness  
No power over 1394b I/O cable eliminates power and ground shift concerns

### Features

Standard PMC 32/64-bit PMC form factor  
Three independent OHCI IEEE-1394 Beta nodes  
Three ports per node supporting:

- S200 $\beta$  (245.76Mb/s)
- S400 $\beta$  (491.52Mb/s)

Switch-configurable maximum connection speed:

- S200 $\beta$
- S400 $\beta$

Nine active transformer-coupled ports  
68-Pin high-density connector  
Optional 36 inch, 68-pin to nine 1394 9-pin beta cables  
Texas Instruments TSB82AA2 OHCI Link Layer Controller and TSB41BA3 PHY  
32/64-Bit 33/66MHz PCI host interface

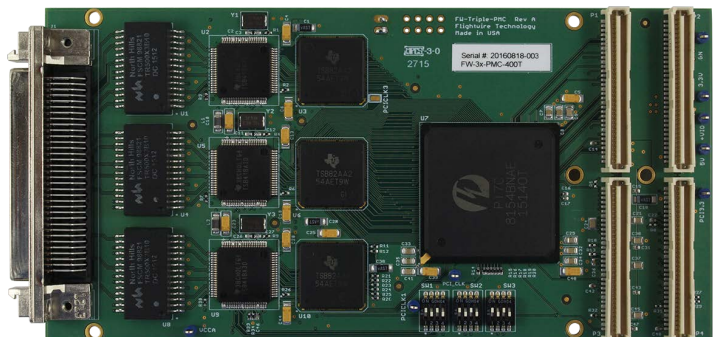
### Overview

The FW-3x-PMC-400T is a triple (3 independent nodes) Mil1394b OHCI host adapter with a 32/64-bit, 33/66MHz PCI host interface in a PMC form factor. The FW-3x-PMC-400T integrates three IEEE-1394 nodes (channels) on to a single PCM host adapter card. Each of the available nine ports are isolated using AS5643/1 defined active transformers that provide guaranteed minimum signal amplitude.

For applications requiring high node/port count and transformer isolation such as Flight Control, Vehicle Management Systems, Mission Systems or Avionics Simulation Laboratories that connect to a cross point switch, the FW-3x-PMC-400T provides the ideal cost performance solution.

The IEEE-1394 connectivity is provided by three Texas Instruments TSB82AA2 Open Host Controller Interface (OHCI) Link Layer Controllers with three TSB41BA3 PHY devices. The 1394 Beta PHY is capable of S100 $\beta$  (transformer option required), S200 $\beta$  and S400 $\beta$  operation. An optional 2 meter 68-pin to nine 1394 9-pin beta cable (FW-68-3CH-9P-9B) connects the FW-3x-PMC-400T to the 1394 bus. A Pericom PI7C8154A PCI bridge is used to interface the three TSB82AA2 to the host bus through the PMC connectors.

The industry standard 1394 OHCI interface allows for Windows, Linux, VxWorks, etc. software support.



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### Complete Product Support Program

As our customers can attest, the New Wave DV team prides itself on excellent customer support. New Wave DV provides industry standard warranties on its products, but it is the human factor that makes our support so valuable to our customers. Our team takes the time and effort to ensure that the customer experience with our products is a positive one.

### Optional Accessories

Custom adapter cable lengths and connectors for air vehicle wire harness connectivity



Request more information.

### Our Commitment

New Wave DV is committed to providing the latest innovations in technology, architectures, and techniques to keep our customers one step ahead of the rest. Our products are intended to offer our customers an entirely unique out-of-the-box experience.

### Ordering Information

**FW-3x-PMC-400T:** 1394b PMC card, 3 node 3 port, TI PHY and Link, 9x electrical ports, transformer-coupled, triple XIO2213B and TSB41BA3 Host Adapter

**FW-68-3CH-9P-9B:**

### Technical Specifications

#### INTERFACES

32/64-Bit 33/66MHz PMC PCI host interface  
3 Independent Nodes, 9-port IEEE-1394 Beta Ports

#### DATA RATES

S200 $\beta$  and S400 $\beta$

#### POWER REQUIREMENTS

5V PCI power

#### COMPLIANCE

Mil1394 (AS5643/1) transformer isolated ports  
IEEE-1394 beta PHY and OHCI Link Layer PCM,  
PCI 32/64-bit 33/66MHz PCI support

#### DIMENSIONS

32/64-bit PMC form factor

#### TEMPERATURE

Operating: 0°C to 70°C  
Storage: -45°C to 85°C

#### FOR MORE INFORMATION:

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