The IXI Technology ATDS PCM Serial Board is the most compact, powerful and reliable serial ATDS interface available today. It can be installed in an industry standard PCI Mezzanine Card (PMC) slot to provide an interface to a Tactical Digital Information Link (TADIL) A serial channel (MIL-STD-188-203-1A, Appendix D2). The IXI ATDS interface board is easy to program and offers a variety of input and output modes to support all ATDS protocols. In addition to conventional input and output operations, the ATDS board has a built-in passive tap mode that provides interface monitoring and data capturing capability. A software-enabled, embedded time-stamp generator tags input words with 125 ns resolution. The time-stamp clock can be synchronized between multiple boards by using a small interconnect cable and can be driven by an external clock source.

Design Features

An internal loop-back path allows the ATDS board to be tested without disconnecting cables. Field upgrades can be done easily by running a simple utility to update the onboard Field Programmable Gate Array (FPGA). The interface comes standard with a driver for any one of the supported operating systems, a loop-back module, an excellent documentation package, and sample C language code that can be freely used in application software.

ATDS PMC Serial Board Features
General Product Features

- MIL-STD-188-203-1A, Appendix D2 compliant
- Transceiver short circuit protection
- DTS or TDS operation
- Frame interval of 13.33ms or 22.00ms
- Full picket addressing and sidetone support
- Data recirculation (fault) testing
- KG-40 reset signal
- DTS/TDS mode LED
- Net control LED
- User LED
- Interrupt, PIO & DMA operation
- Field Programmable Gate Array (FPGA) technology
- PCI 2.2 compliant
- PCI master and slave operation
- Internal loop-back test without disconnecting ATDS cables
- Software-enabled time stamp on input words with 125 ns resolution

- Passive tap mode
- Fully software configurable (no programming switches or jumpers)
- Automatic switch between XMC PMC power supply

Time-Out 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 first word

Software Support*

Choice of driver included with board purchase:

- Windows® 2000/XP/VISTA/7
- SolarisTM
- Linux®
- VxWorks®
- Labview

*Contact factory for new OS support

Options and Accessories

- Cable Assemblies

ATDS PMC Serial Board Technical Specs

ATDS Interface	MIL-STD-188-203-1A, Appendix D2
PCI Bus Interface	PCI 2.2 Compliant 32-Bit, 33MHz, Universal Card (3.3V or 5V I/O Signaling)
Input Buffer	4K x 32-Bit FIFO
ATDS I/O Connector	25-pin Micro D (Molex 83614-9012)
Form Factor	Single Wide, Non-Extended PMC (Per IEEE P1386.1, Draft 2.0)

Weight	3.0 oz.
Power Consumption	Average +5V Current Draw: 0.45A Average +12V Current Draw: 0.19A Average +3.3V Current Draw: 0.5A Average +VI/O Current Draw: 5mA Average Power Dissipated: 3.9W
Relative Humidity	5% to 90% (Non-Condensing)
STD Operating Temp.	0°C to +55°C
Industrial Operating Temp.	-40°C to +70°C

MODEL NUMBERS:

SP-12102-00	PMC, ATDS
SP-12102-01	PMC ATDS, CONFORMAL COATED
SP-12102-01-IND	PMC, ATDS, INDUSTRIAL TEMP.

ACCESSORIES:

CA-SW125-00	CABLE, MICRO-- D TO MICRO-- D, F/F, 36"
CA-SW125-01	CABLE, MICRO-- D TO PIGTAIL, 36"
CA-SW125-02	CABLE, MICRO-- D TO PIGTAIL, 72"
CA-SW125-03	CABLE, MICRO-- D TO PIGTAIL, 10 FT.
CA-SW125-04	CABLE, MICRO-- D TO MICRO-- D, F/F, 36"
CA-SW125-05	CABLE, MICRO-- D LOOPBACK PLUG
CA-SW125-06	CABLE, MICRO-- D TO 25 PIN DBMAM-- 25P, 6 FT

THIS SECTION IS FOR ADDITIONAL OPTIONS WITH CARRIER CARD:

SC-12102-00	cPCI, ATDS
SE-12102-00	PCIe, ATDS
SV-12102-00	VME, ATDS, 1 CHANNEL
SW-12102-00	PCI, ATDS