SABTECH INDUSTRIES
TACTICAL DATA LINK SPECIALISTS

Swift™ PCI NATO STANAG 4146 Type C/H

The NATO Swift STANAG 4146 interface module installs in a standard PCI 3.3V, 5V, or Universal signaling slot to provide a full duplex interface for NATO STANAG 4146 Type C and H channels. The NATO Swift is easy to program and offers a variety of input and output modes to support any NTDS protocol. In addition to conventional input and output operations, the NATO Swift 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 125ns 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.

Reliability and flexibility are designed into the NATO Swift. An internal loop-back path allows the NATO Swift STANAG 4146 Parallel interface module 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 software driver for any one of the supported operating systems, transition cable module, an excellent documentation package, and sample C language code that can be freely used in application software.

The NATO Swift STANAG 4146 Parallel interface module is the ideal COTS choice for connecting NATO- standard military computer equipment to PCI bus systems for applications such as software development, emulation, simulation, training support, and others. For the most compact, powerful, and reliable NATO STANAG 4146 interface available today, choose the NATO Swift STANAG 4146 Parallel interface module from Sabtech.

Swift PCI NATO STANAG 4146 Type C/H

Product Overview

- NATO STANAG 4146 Type C and H compatible
- Full-duplex 8, 16, or 32-bit transfers
- Differential drivers and receivers
- 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 2.1 compliant (supports Plug & Play)
- PCI master and slave operation
- Internal loopback test without disconnecting NTDS cables
- Software enabled time stamp on input words with 125ns resolution
- Supports receipt of multiple Forced EF's

Input Mode Options

- 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 Options

- Concurrent data and command buffer operation

Time-out Options

- 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 Support*

- Choice of driver included with board purchase: Windows NT®, Windows® 2000/XP, Linux®, LynxOS®, Solaris™, HP-UX

* Check with factory for availability

Options and Accessories

- Cable Interface Modules (CIM)
- Assemblies
- Tap Accessories

Swift PCI NATO STANAG 4146 Parallel Interface Module Specifications

Interface	NATO STANAG 4146 Type C and H
PCI Bus Interface	PCI 2.1 Compliant (5V I/O, 32-Bit, 33Mhz)
Input Buffer	4K x 32-Bit FIFO (standard) 64K x 32-Bit FIFO (optional)
NTDS I/O Connector	176 Pin Receptacle (Molex 52755-1760)
Form Factor	6.875" x 4.2" (Standard PCI Short Card)
Weight	5.6 oz
Relative Humidity	0% to 90% (non-condensing)
Operating Temperature	0°C to +55°C