

### FEATURES

- > Based on IP module technology
- > Highly flexible configurations available Cross-platform portability (PC/AT, VME, VXI, PCI, CompactPCI)
- > Large, on-board buffers for receive and transmit data
- > Full featured API for Windows XP, 2000, Me, NT, 98, 95, VxWorks and LabVIEW available
- > Auto-sync and raw mode receive operations
- > Supports a wide range of databus speeds
- > Extended temperature range available
- > Mix ARINC 573 with other IP Modules (ARINC 429, MIL-STD-1553, etc.)
- > C utility routines in source code provided



Condor Engineering has developed a powerful and versatile way to provide interfaces to ARINC 573 Harvard Bi-Phase and BPRZ (Bi-Polar Return to Zero) databuses. This unique solution is built on the rugged, cross-architecture IP Module platform (also known as IndustryPack). IP Modules are standards-based I/O mezzanine cards (about the size of a business card), that mount onto host carrier boards (PC/AT, VME, VXI, PCI, CompactPCI, etc.), enabling cross-platform portability.

High-level API (Application Programming Interface) support for Windows XP, 2000, Me, NT, 98 and 95 is included with board-level PC/AT, PCI and CompactPCI solutions from Condor Engineering. Support for VxWorks and LabVIEW environments is optionally available for the VME-AIC and VXI-AIC products. C language utility routines are provided in source code.

### Hardware

Each IP-573 module has one Receive and one Transmit channel, allowing configurations with up to four Receive and four Transmit channels on a single VME, VXI, PCI, CompactPCI or PC/AT board.

IP-573 operational features include autosync or raw mode operation, selection of bus speeds, sub-frame size, transmit slew rate, internal self-test, maskable interrupts, and the option of utilizing either interrupt driven or polled operation. The electrical interface desired (HBP or BPRZ), is defined by the customer when ordering the product.

Condor's powerful auto-synchronization mode simplifies your protocol software. You define the required sync words (and subframe size), and then the hardware automatically stores only the data frames that match your desired elements.



### SOFTWARE FEATURES

High-level API (Application Programming Interface) support for Windows XP, 2000, Me, NT, 98 and 95 is included with board-level PC/AT, PCI and CompactPCI solutions from Condor Engineering. C language utility routines are provided in source code.

When ARINC 573 is supported as part of an integrated VME-AIC or VXI-AIC product, a common interface is provided for access to all protocols on the board. Support for these AIC boards in VxWorks and LabVIEW environments is optionally available.

### SPECIFICATIONS

#### ARINC 573 Bi-Phase Receive Channel

- Number channels: 1 bus
- Voltage levels: +/- 5V differential
- Bit rate: 768, 1536, 3072, 6144, 12288 or 24576 bits/sec
- Subframe size: 64, 128, 256 or 512 words
- Buffer size: 4 KBytes
- Word size: 12 bits

#### ARINC 573 Bi-Phase Transmit Channel

- Number channels: 1 bus
- Voltage levels: +/- 5V differential
- Software selectable transmit slew rate
- Bit rate: 768, 1536, 3072, 6144, 12288 or 24576 bits/sec
- Subframe size: 64, 128, 256 or 512 words
- Buffer size: 4 KBytes
- Word size: 12 bits

#### ARINC 573 BPRZ Transmit Channel

- Number channels: 1 bus
- Voltage levels: +/- 10V differential
- Software selectable transmit slew rate
- Bit rate: 768, 1536, 3072, 6144, 12288 or 24576 bits/sec
- Subframe size: 64, 128, 256 or 512 words
- Buffer size: 4 KBytes
- Word size: 12 bits

**Warranty:** 3 year limited hardware warranty

#### Physical

- Power required: +5 VDC, +12 VDC
- Standard operating temperature: 0° to 70°C
- Optional extended operating temperature: -40° to +85°C
- Card Size: 1.8" x 3.9" (single-wide IP Module)

#### ARINC 429 575 Protocols

- Up to 32 Rx and 32 Tx channels
- 12.5 or 100 KHz bit rates

#### Available Interfaces

- ARINC 419, 429, 561, 568, 573, 575, 582, 708, 717, +
- MIL-STD-1553B
- RS-232, RS-422, RS-485

#### ARINC 561/6, 573, 582, 708 or 717 Protocols

- Up to 4 Rx/4 Tx channels per board

#### Physical/Environmental

- 4 IP Module sites on 6U board
- 2 IP Module sites on 3U board
- 0°C to 70°C operating temperature range

#### Power (typical)

- +5 VDC: 83 mA
- +12 VDC: 39 mA
- -12 VDC: 39 mA

### AVAILABLE CONFIGURATIONS

- |                    |   |
|--------------------|---|
| <b>IP-573-BPRZ</b> | ARINC 573 Bi-Polar Return To Zero IP Module interface with 1 Rx, 1 Tx channels, buffers |
| <b>IP-573-HBP</b>  | ARINC 573 Harvard Bi-Phase IP Module interface with 1 Rx, 1 Tx channels, buffers        |

See our on-line Commercial Products Configuration Guide for available configurations.  
<http://www.condoreng.com>

