

FEATURES

- > Up to 32 Tx and 1 Rx ARINC 429 channels
- > PMC module form factor
- > Intelligent interface with large buffers
- > Full featured API included for Windows XP, 2000, Me, NT, 98, 95, Linux Kernel (2.4 and 2.6), VxWorks, LabWindows/CVI, and Visual Basic
- > Supports maximum data throughput on all channels simultaneously
- > Fully independent channel operation
- > Programmable data rates



Hardware

Condor's CEI-820TX is designed for applications where a large number of independent ARINC 429 transmit channels are required. The CEI-820TX PMC Module can be mounted on a wide range of intelligent or non-intelligent PCI, CompactPCI, VME or VXI platforms. Available with either 16 or 32 transmit channels, this intelligent PMC Module provides complete, high-density, integrated databus functionality for ARINC 429 and other related 2-wire avionics protocols. The CEI-820 supports maximum data throughput on all channels while providing on-board message scheduling, automatic slew rate adjustment, along with programmable data rates and parity.

Software

Condor software tools and solutions significantly reduce the time required to integrate ARINC 429 into your application. Included with the CEI-820TX is our flexible, high-level, API (Application Programming Interface) support for Windows XP, 2000, NT, Me, 98, 95, Linux Kernel (2.4 and 2.6), LabWindows/CVI, VxWorks and Visual Basic. This powerful API supports multiple cards, and is compatible with Condor API support on PCI, PC/AT, PC/104, CompactPCI and PCMCIA platforms.

Architecture

Controlled by a powerful Intel 80960 CPU, CEI-820TX features include independent selection of data rate and parity. All channels operate independently.



ARINC

Interface for PMC

CEI-820TX

DATA HANDLING

On-board firmware, large data buffers and a high-level API are integrated together to provide total flexibility of ARINC bus traffic. Simultaneous Scheduled and Burst Mode (FIFO) messaging is supported on all ARINC 429 transmit channels. The ARINC 429 receive channel provides label/SDI filtering.

SPECIFICATIONS

ARINC 429 Receive Channels

- Number of channels: 1
- Data rates: 12.5 KHz, 100 KHz or 5 KHz to 200 KHz programmable
- Standard input levels: ± 6.5 to ± 13 VDC (A to B)
- Filtering: label and/or SDI
- Parity: odd, even or none
- Error reporting: parity

ARINC 429 Transmit Channels

- Number of channels: up to 32
- Data rates: 12.5 KHz, 100 KHz or 5 KHz to 200 KHz programmable
- Automatic slew rate adjustment
- Output level: ± 10 VDC (A to B)
- Parity: odd, even or none
- Error injection option: parity, gap, high or low bit count

Software

- API - Includes high-level API for Windows XP 2000, Me, NT, 98, 95, Linux Kernel (2.4 and 2.6), LabWindows/CVI, VxWorks and Visual Basic
- Source code API library included

AVAILABLE CONFIGURATIONS

- CEI-820TX-16** ARINC 429 Intelligent PMC card with 1 Rx, 16 Tx channels
- CEI-820TX-32** ARINC 429 Intelligent PMC card with 1 Rx, 32 Tx channels

Architecture

- Processor: 100 MHz Intel 80960
- RAM: 2 Mbyte shared memory

Physical / Environmental

- MTBF 147,000 hours, ground benign, 25°C ambient
- PMC Mezzanine Card
- Front bezel and P14 connector I/O (Rx channel not available on P14 connector)
- Operating temperature range: 0°C to +70°C

Power (typical, with no load on Tx channels)

- +3.3 VDC: 750 mA
- +5 VDC: 5 mA
- +12 VDC: 192 mA
- -12 VDC: 192 mA

PCI Signal Compatibility

- Universal (5V or 3.3V)

Warranty: 3 year limited hardware warranty

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

