

## ATS-PXI-429 ARINC 429 Interface to PC Card



### PRODUCT SPECIFICATIONS

#### UART

- One each of standard serial UART ports supporting RS-232/422 interfaces
- Baud Rate – Max 115.2 kbps

#### Digital I/O Channels

- 16 digital I/O channels pre-configured as 8 Inputs and 8 Outputs
- TTL/CMOS compatible I/O channels

#### MIL-STD-1553B – Optional

- Single channel dual redundant interface DDC controller
- Programmable as BC or RT or MT
- 64K words of SRAM – DDC controller
- 31 remote terminal control
- Message formats: BC-RT, RT-BC, RT-RT,
- Broadcast, System Control
- Transformer or Direct coupling options

#### ARINC429 – Optional

- 1 or 2 ARINC429 controllers (Each controller 2Tx / 4Rx)
- DDC controller
- 128 x 32 Shared RAM interface on each 6-channel controller (4Rx & 2RTx)
- Programmable Interrupts
- Configurable Bit Format Control
- Built-in Fault Detection Circuitry
- Wraparound Test for each channel

#### Software:

- Driver and high-level API libraries for Windows 98/2000/NT/XP, Linux, Linux-RT, VxWorks 5.5 can be made available
- Sample applications will be provided to help users quickly setup and use the card

#### Physical:

- PXI / cPCI 3U form factor
- Card dimensions – 160 mm x 100 mm
- I/O connector – 68-pin SCSI type

#### Environmental:

- Operating temperature range: 0°C to +50°C
- Storage temperature range: -20°C to +70°C

#### Warranty:

- 1 year limited hardware warranty

### HARDWARE

#### CompactPCI Modules

The ATS-CPC-MPAC modules meet the CompactPCI specifications 2.0 Rev 3.0 and are available in both 3U and 6U formats. The cPCI modules are available in commercial grade only. Front panel and Rear I/O connectivity options are provided.

#### I/O CONNECTIVITY UART Channels

The ATS-CPC-MPAC cards provide two standard serial UART ports supporting RS-232 and RS-422 interfaces. These are capable of a maximum asynchronous baud rate of 115.2 Kb/s.

#### Digital I/O Channels

Additional to the serial I/O capabilities, the ATS-CPC-MPAC is equipped with TTL/CMOS level digital I/O channels. It comes with 16 general-purpose digital I/O channels. These are pre-configured as 8 inputs and 8 outputs. These can be used to generate an interrupt on any type of level shift event.

### MIL-STD-1553B Interface – Optional

The ATS-CPC-MPAC card's single function MIL-STD-1553B architecture emulates a Bus Controller or 31 Remote Terminals or Monitor Terminal modes. Polling and interrupt generation is also provided. The 1553B Channel come with 64K (DDC) of static RAM.

### Transformer and Direct Coupling

The cards are provided with the option of using them either in the transformer mode or in the direct mode. A jumper is provided on the cards to select the mode. The default connectivity is transformer-coupled mode.

### ARINC429 Interface – Optional

The card can be configured with up to 2 ARINC429 controllers. Each controller is configured with 2Tx & 4Rx channels and has 128 x 32 bit static RAM. Look-up tables loaded into the RAM enable the modules receive circuitry to filter and sort incoming data by label and destination bit. It also provides multilevel data specific interrupts or hardware triggers.

## SOFTWARE

### The ATS-CPC-MPAC software includes:

- Bus Monitor
- Drivers & APIs

#### Bus Monitor

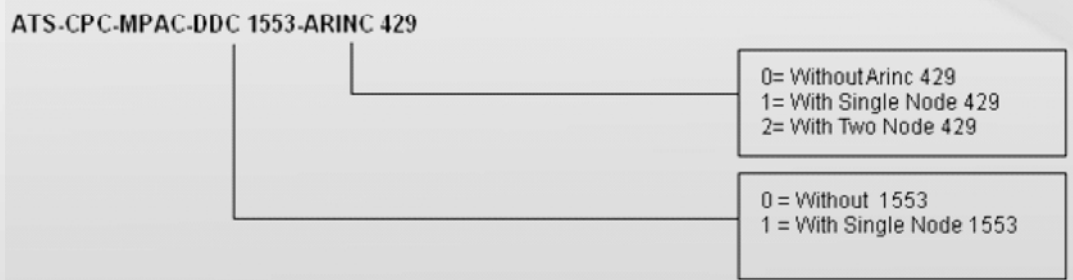
- Record and replay of data
- Replay with rate selection
- Message identifier
- Multi console at a time
- Bus ideal time analyzer
- Filtering option up to sub address
- Message sampling option

#### Drivers & APIs

The ATS-CPC-MPAC card comes with a powerful set of library functions to access the entire I/O functionality. The drivers are designed in a modular fashion consisting of component functions & application functions. The user's test program can be developed with few calls to the driver, by using the set of Application functions provided. Drivers and high-level API libraries for Windows 98/2000/NT/XP, Linux & RT-Linux, VxWorks 5.5, LynxOS 4.0 are available depending on the platform. Sample programs are included with the card.

## ORDERING INFORMATION

### Hardware Selection



## CONTACT US

For more information, you can use the following particulars:

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