

- PC/104 compatible
- DDC controller
- Programmable as Bus Controller or Remote Terminal or Monitor Terminal
- Up to 3 Dual Redundant MIL-STD-1553B channels
- 31 Remote Terminal Controls
- Direct or Transformer Coupled
- Software Driver support for a host of Operating systems / Environments

## OVERVIEW

The AT-PC104-1553 card provides a flexible, Single function, dual redundant MIL-STD-1553B interface to the PC/104 embedded bus. It provides the highest level of performance & flexibility for MIL-STD-1553B protocol on the PC/104 bus. The AT-PC104-1553 offers Simulation, Monitoring functions. The card comes integrated with powerful software that reduces application development time. All data bus functionality is supported by our advanced API (Application Programming Interface).

## HARDWARE

The AT-PC104-1553 card's single function architecture emulates a Bus Controller or 31 Remote Terminal or Monitor Terminal modes. Polling and interrupt generation is also provided.

### Transformer and Direct Coupling

The card can be configured to work either in the transformer-coupled mode or in the direct-coupled mode. Jumpers are provided on the cards to select the mode. It is configured to work in the transformer-coupled mode by default.

## SOFTWARE

The AT-PC104-1553 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 cards come with a powerful set of library functions to access the entire MIL-STD-1553B functionality. The drivers are designed in a modular fashion consisting of component functions and application functions. The user's test program can be developed with few calls to the driver by using the set of application functions provided. Driver and high-level API libraries for DOS, Windows 2000 are available. Sample programs for BC, RT, MT modes are included.

# AT-PC104-1553

## MIL-STD-1553B PC104 CARD

### PRODUCT SPECIFICATIONS

#### MIL-STD-1553B Interface

- Programmable as Bus Controller or Remote Terminal or Monitor Terminal
- Up to 3 Dual Redundant MIL-STD-1553B channels
- Direct or Transformer coupled
- Message formats BC-RT, RT-BC, RT-RT, Broadcast, System Control
- 31 Remote Terminal Controls

#### DDC Controller

##### Bus Controller

- 64K words of SRAM per channel for DDC controller
- Automatic retries on alternate bus
- Inter Message Gap from 8µs to 65ms
- Frame auto repeat up to 5s
- Programmable response timeout up to 130µs

#### Remote Terminal

- Programmable command illegalization
- Programmable Single Message or double buffering or circular buffering
- BUSY Bit programmable by sub address
- Alphanumeric message ID

#### Monitor Terminal

- Word monitor per word basis
- Selective message monitor & time stamping
- Dynamic data update
- Message Periodicity
- Bus error status
- Busload
- Unique Message identifier
- Record and Replay option
- Message identifier

#### Software Support

- Driver and high-level API libraries for DOS, Windows 2000
- Sample programs Provided

#### Physical

- Standard PC/104 card size (3.55in x 3.75in)

#### Environmental

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

#### Power

- +5 +/- 5% VDC supply

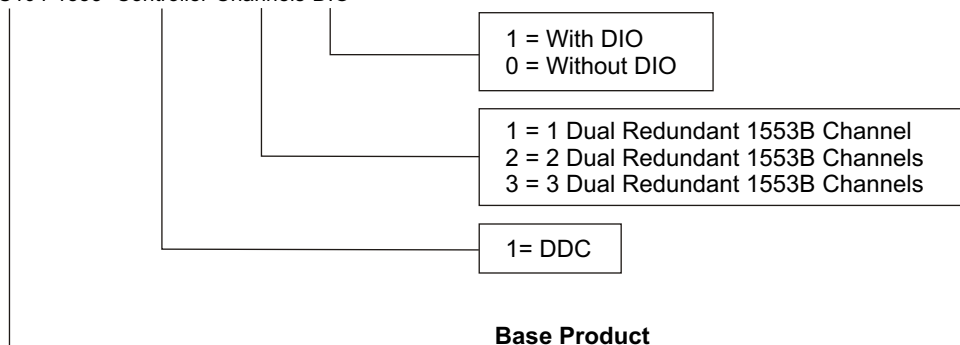
#### Warranty

- 1 year limited warranty

### ORDERING INFORMATION

#### Hardware Selection

AT-PC104-1553- Controller-Channels-DIO



#### Base Product

AT-PC104-1553 = MIL-STD-1553B PC104 Card

- Contact sales for support for other Operating Systems
- Contact sales for configuration of front and rear I/O configuration
- Contact sales for environmental options



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