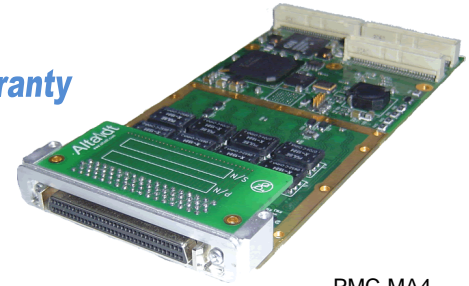


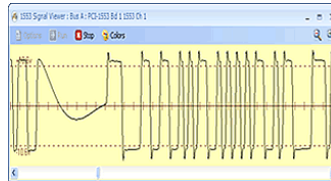
Key Features for PMC-MA4:

- One to Five Independent, Dual Redundant MIL-STD-1553 Channels
- Dual Function (BC/Mon or mRT/Mon) or Full Function (BC/mRT/Mon)
- 512 Kbyte RAM per 1553 Channel
- ARINC – 8 Channels Total:
 - 4 Shared TX/RX & 4 Dedicated RX
 - 512 Kbyte of RAM
- ****Capture 1553 & ARINC Waveforms****
 - First 1553 Channel & First Two ARINC RX Channels
 - 8-bit A/D for Voltage Measurements
- Channels May be Factory Configured to fix ARINC RX/TX or Monitor Only 1553.
- Commercial, Industrial (Extended) Temperature and Conduction Cooled
- Front or Rear Panel (P4) Configurations
- Advanced BC & ARINC TX Frequency Controls: 1553 Framing/Subframing;
- RT/ARINC RX Full Buffering with 64-bit 20 nsec Time Tags
- Advanced, Multi-layer *AltaAPI* Provided at No Cost with Source Code
- Windows, Linux, RTOS, Labview Support
 - .NET 2.0 Client/Server
 - Contact Factory for Latest RTOS Support
- True HW Playback (BC or TX)
- Industry First: 20ns Signal Generation
 - Bit Construction
 - Supports RT or ARINC Validation Testing
- IRIG-B or PPS Ext Clock
- Avionics/ RS-485 Discrettes
- Advanced BIT Features and Temperature Sensors
- Full HW Interrupt Features
- PCI 32 Bit, 33/66MHz & PCI-X Compatible

5 Year Limited Warranty



PMC-MA4



A/D Signal Capture on First 1553 Channel & First Two ARINC RX

Alta Data Technologies' PMC-MA4 interface module is a multi-channel, multi-protocol 1553 and ARINC PMC card supported by the latest software technologies. The PMC card are based on the industry's most advanced 32-bit FPGA protocol engine, *AltaCore*[™], and by a feature-rich application programming interface, *AltaAPI*[™], which is a multi-layer ANSI C and Windows .NET 2.0 (MSVS 2005 C++, C#, VB .NET) architecture. This hardware and software package provides increased system performance and reduces integration time.

The PMC-1553's BC capability includes variable message/label framing/subframing with transmission scheduling provides the most advanced control operations. ARINC TX has complete frequency control per channel. RT and ARINC RX, Monitor, Playback and Signal Generator functions also include industry leading functions to meet the most demanding requirements.

AltaCore is guaranteed 1553B Notice II & IV and ARINC compliant and all cards are manufactured to the highest IPC-Level 3 standards and certified AS9100 processes. Playback and Signal Generation are part of BC-TX operations. We are committed to a risk free integration and will be glad to help with any level of your system development.

Interface Cards are
Provided with the Advanced
AltaAPI for ANSI
C/Linux/RTOS and .NET
2.0.
Optional *AltaView* Analyzer
& *AltaRTVal*[™]

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AltaView
Multi-Protocol Analyzer GUI with XML db,
Real-time Views, Controls and Archiving
Customer Windows GUI/Application/Labview

AltaAPI Architecture
Layer 2: Windows Managed DLL
OOO for .Net 2.0, C#, C++, VB, Labview
Network Client/Server Layer

Layer 1: Portable ANSI C API
Real-time & Linux Applications

Layer 0: OS Device Driver
Windows, Linux, RTOS

Hardware - PCI, PCI Express or Other

Multi-Channel, Multi-Protocol Avionics PMC-MA4 Specifications



General

- 32-Bit PCI 33/66MHz/PCI-X Compatible
 - PCI-SIG PCI 2.1 Compliant
 - ANSI/VITA 20-2001 Compliant
- 1-5 MIL-STD-1553B Notice II & IV Channels
- 4 Shared RX/TX & 4 RX ARINC Channels
- 8-bit ADC on First 1553 Channel and First Two ARINC RX Channels
- Weight: 6oz/180grams
- Power (Estimated @ Max Bandwidth) 8-10W
- Parts Temp (C) : -55 to +120 Storage, 0 to +70 Commercial, -40 to +85 Extended
- 6 Avionics and 1 RS-485 Discretes
- Power-Up, Loop-Back and User BIT
- IRIG-B PAM and PPS Time Sync Input
- IPC Level 3 and AS9100 Manufacturing

BC & ARINC TX Features

- Variable Framing and Subframing
- Schedule Message Timing in Frames_or Intermessage/Label Gap Spacing
- Low and High Priority Aperiodic Scheduling
- ARINC TX Has Complete Frequency Control Per Channel – No Framing/SubFraming
- Infinite Linked Data Buffers
- Interrupts, No-Ops, Ext Trigger
- 1553 Legal and Reserved Mode Codes
 - 1553A and 1553B Support
- 64-Bit, 20 ns Time Tags
- Full Error Injection/Detection

1553 RT Features

- Infinite Linked Data Buffers
- Legal and Reserved Mode Codes
 - 1553A and 1553B Support
 - Full Buffering of All Mode Codes
- 64-Bit, 20 ns Time Tags
- Full Error Injection/Detection

RX Features – Dual Buffering Modes

- Channel Level Label/Word Tables
- Multi Channel Data Tables for All Channels
- ARINC 717 Frame Support
- 64-Bit, 20 nsec Time Tags
- Full Error Detection

Playback/Signal Vector (BC or TX)

- Real Hardware Playback from Archive Files
- Accurate Timing to 1 usec.
- Signal Vector Generation at 20/100 nsecs
INDUSTRY FIRST

1553 Monitor

- Sequential and RT Mapped Monitor
 - Available with All Card Models
 - Hardware Trigger
- 64 bit, 20ns Time Tags

AltaAPI, AltaView, AltaRTVal Software

- Multi-Layer **AltaAPI** Architecture to Support Windows (.Net 2.0) and ANSI C Linux
 - For RTOS Platforms, Contact Factory
- Optional **AltaView** is Based on the Latest Windows MS Office 2007 User Interface Style with Ribbon-Bar
 - Full Analyzer Integration Tool
 - Multi Language Support
- Optional **AltaRTVal** provides full AS4111 and AS4112 5.2 Protocol RT Validation GUI and Reports

Part Number: PMC-MA4

- Add Suffix #D or #F for 1553 Dual or Full Function Channel Count (#). Further add "8" for ARINC.
Example: **PMC-MA4-4D8**
- Contact Factory for Desired Channel Configuration.

Environment Options

- -E for Ext Temp Parts (-40 to +85C), -C for Ext Temp, Conduction Cooled/Conformal Coated/Rear Panel, -R for Rear Panel P4 Commercial

5 Year Limited Warranty!

EU and China RoHS Compliant
Contact Alta for Special Lead Build Configurations



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