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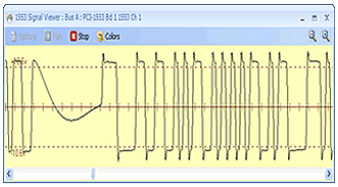
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Find the *Alta Data Technologies MPCIE2-1553-1D* at our website: *Click HERE*

MPCIE2-1553

1-2 MIL-STD-1553 Channels for Mini-PCI Express Systems

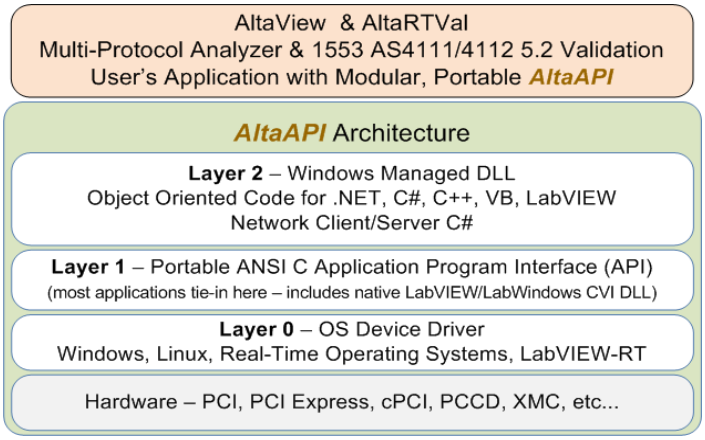




A/D 1553 Signal Capture Built-In!

Alta Data Technologies' MPCIE2-1553 provides 1-2 independent, dual redundant 1553 channels on a Full Mini-PCI Express Type 2 interface card. The MPCIE2-1553 is based on the industry's most advanced 32-bit 1553 FPGA protocol engine, ***AltaCore***™, and by a feature-rich application programming interface, ***AltaAPI***™, which is a multi-layer ANSI C and Windows .NET (MSVS 2005-15 C++, C#, VB .NET) architecture. **Ideal for small embedded computers such as COM Express systems.**

AltaCore-1553 is **guaranteed** 1553B Notice II & IV **compliant** and all cards are manufactured to the highest IPC-Level 3 standards and ISO 9001:2008 processes. Cards are available in dual-function (BC/Mon or multi-RT/Monitor) or full-function (BC, mRT and Mon) configurations. Playback and Signal Generation are part of BC operations. Alta is committed to a risk free integration and will be glad to help with any level of your system development.



Alta's Advanced Software Architecture

Key Features

- **1-2 Independent, Dual Redundant 1553 Channels for Mini PCIe F2 Slots**
- Dual Function (BC/Mon or mRT/Mon) or Full Function (BC/mRT/Mon)
- One Mbyte of Memory per Channel
- Fully Compliant to MIL-STD-1553B Notice II/IV,1553A and Link-16
- Commercial or Industrial Extended Temperature Parts
- *** A/D Signal Capture First Channel! View 1553 Waveforms with AltaView!***
  - 8-bit, 50 nSec A/D for Voltage Measurements
- BC Framing/Subframing/Aperiodic
- Common Data Packets (CDP) for BC, RT and Monitor – Complete Message Info
- True HW Playback – HW Sync Channels
- Industry First: 20ns Signal Generation
  - Bit Construction – 1553 PHY TX
  - Supports RT Validation Testing
- Advanced, Multi-layer ***AltaAPI*** Provided at No Cost with Source Code
- Windows, x86 Linux, LabVIEW & RT
- IRIG-B RX PAM or RX/TX PPS Ext Clock
- RS-485 Discrete/Clock & Trigger
- **Advanced BIT Features and Dual Temperature Sensors**
- Mini-PCI Express – PCI Express 1.1
  - MSI & Legacy HW Interrupt Support
- Full-Mini PCI Express Type F2 Card
- **4.22 +/- 0.38mm Height on Primary Side. This is approximately 1.8mm taller than Specification.**

4901 Rockaway Blvd., Building A Rio Rancho, NM 87124 USA
(In US): 888-429-1553 (Outside US): 505-994-3111 Fax: 805-504-8588

Single-Channel
MPCIE2-1553 Specifications

General

- Mini-PCI Express – PCI Express 1.1
- Full-Mini PCI Express Type F2 Card
- 1-2 Dual Redundant 1553 Channels
- One Megabyte RAM per Channel
- 4.22 +/- 0.38mm Height on Primary Side. This is approx. 1.8mm taller than Spec.
- Common Data Packets (CDPs) for all BC, RT and Monitor Functions – Industry First
- MIL-STD-1553B Notice II & IV
  - 1553A and Link-16
- Power Estimate at Full Bandwidth 2W
- Parts Temp (C) : -55 to +120 Storage, 0 to +70 Commercial, -40 to + 85 Extended
- One RS-485 Discrete/Clk/Trg.
  - One Single Ended Trigger
- Loop-Back & User BIT, Dual Temp Sensors
- IRIG-B RX PAM and TX/RX PPS Time Sync
- IPC Class 3 and ISO 9001:2015 Processes

BC Features

- Simple One-Shot Lists to Advanced Message Framing and Subframing
- Message Timing with 100 nSec Accuracy
- Infinite Linked CDP Data Buffers
  - 64-Bit, 20 ns Time Tags, Interrupts, Triggers
- Low and High Priority Aperiodic Messages
- Multi Branching Per Message, No-Ops, Delays, Ext Trigger In/Out, Interrupts etc…
- Up to 15 Retries Per Message
- Legal and Reserved Mode Codes
- 1553A and 1553B Support
- Full Error Injection/Detection

Playback/Signal Vector PHY TX

- Real Hardware Playback from Archive Files
- Signal Vector Generation at 20 nsecs **INDUSTRY FIRST**
  - Construct 1553 Bit Signals at 20 nsecs
  - **AS4111 5.2 RT Val Protocol Capability
  - Advanced BC, RT or any 1553 PHY Signal TX

RT Features

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

Monitor

- Sequential and RT Mapped Monitoring with Infinite Linked CDP Data Buffers
  - Available with All Card Models
  - 64-Bit, 20 ns Time Tags, Interrupts, Triggers
  - Full Error Detection
- 8-bit, 50 nSec A/D Waveform Signal Capture with Trigger on Words or Errors
  - ***AltaView*** Software is Ideal for Signal Display

Software: *AltaAPI*, *AltaView*

- Multi-Layer ***AltaAPI*** Architecture to Support Windows and x86 Linux
  - Contact Factory For RTOS Platforms
  - LabVIEW & RT Support
- Optional ***AltaView*** is Based on the Latest Windows MS Office User Interface Style with Ribbon-Bar
  - Full Analyzer Integration Tool
  - Multi Language Support

Part Numbers

Dual Function: BC/Mon or mRT (Multi RT)/Mon

- **MPCIE2-1553-2D**

Full Function: BC, mRT (Multi RT) and Monitor

- **MPCIE2-1553-2F**

Channel Count Digit: "1" or "2" Above

Options: -E for Ext Temp Parts (-40 to +85C);
-A for AltaView; -I 1553 TX Inhibit, -N NVRAM Write Disable, -F Conformal Coating. Options Example (alpha order):
MPCIE-1553-2F-AEFIN

5 Year Limited Warranty!

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Contact Alta for Special Lead Build Configurations

Alta Data Technologies LLC
4901 Rockaway Blvd., Building A
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888-429-1553 (in US)
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Alta dt data technologies

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