ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

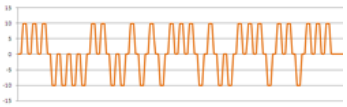
All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Alta Data Technologies MPCIE-A429-6* at our website: ***Click HERE***

MPCIE-A429

ARINC Interface For Mini PCI Express Systems





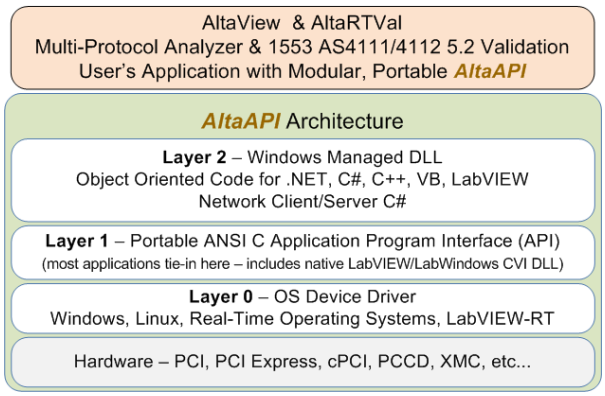
Wave Form Data Shown on ExcelGraph
Auto Signal Capture with AltaView!

Alta Data Technologies' MPCIE-A429 Mini PCI Express F1 interface module offers a variety of ARINC-429/575/717 channel configurations with software selectable RX/TX channels, baud rates, bit encoding and word configurations (Start/Sync/Stop length, Parity, bits/word, MSB/LSB). Encode or decode almost any ARINC-429 transceiver compatible signal.

The card design is based on the industry's most advanced 32-bit ARINC FPGA protocol engine, ***AltaCore***™, and a feature-rich application programming interface, ***AltaAPI***™, which is a multi-layer ANSI C and Windows .NET (MSVS 2005/08/10 C++, C#, VB .NET, LabVIEW, RTOS) architecture.

The MPCIE-A429 Transmit capability includes both simple and complete frequency control options for each channel and Playback and Signal Generator modes. Three Receive (RX) functions including channel and multi channel levels.

AltaCore is guaranteed ARINC-419/429/575/573/717 compliant and all cards are manufactured to the highest IPC-610 Class 3 standards and ISO 9001:2008 processes. Alta is committed to provide each customer with a risk free integration and will help with any level of your system development.



Alta's Advanced Software Architecture

Key Features:

- ARINC-419/429/575/573/717 Configurations:
  - 4 RX/TX Shared Channels
  - 2 RX Channels
  - For Shared Channels, RX Function is Always Available and TX is Software Selectable (Tri-State).
  - Channels Can Be Fixed on Request
- A/D Signal Capture on First RX!
- One ARINC-717 RX/TX Shared
  - Replaces Corresponding 429 Channels
- Fully Programmable Label/Word Encoding and Decoding
  - Word Length, Start/Sync/Stop Bits, MSB/LSB, RX/TX Bit (Baud) Rates, Parity, Bit Encoding Types.
- Commercial, Industrial (Extended) Temp
- Channel Independent TX Label/Word Frequency Control. One Shot or List Control.
- Three RX Modes for Channel and Multi-Channel Buffering, each with 64-bit, 20 nsec Time Tags
- Advanced, Multi-layer ***AltaAPI*** Provided at No Cost with Source Code
- Windows, Linux, RTOS, LabVIEW & RT
  - .NET Managed DLLs
  - Contact Factory for Latest RTOS Support
- True HW Playback
- Industry First: 1 uSec Signal Generation
  - Bit Construction
  - Supports Advanced Validation Testing
- IRIG-B RX PAM or RX/TX PPS Ext Clock
- Eight Avionics & One TTL Bi-Directional
- Advanced BIT Features and Temp Sensors
- Full HW Interrupt Features
- Mini-PCI Express – PCI Express 1.1
- Full-Mini PCI Express Type F1 Card

www.altadt.com

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

Multi-Channel
MPCIE-A429 Specifications

General

- Mini-PCI Express – PCI Express 1.1
- Full-Mini PCI Express Type F1 Card
- Encode or Decode Almost any ARINC-429 Physical Layer Signal.
- 8-bit, 1 uSec A/D Signal Capture on First RX!
- One Megabyte RAM
- Weight: 3oz/90grams
- Parts Temp (C) : -55 to +120 Storage, 0 to +70 Commercial, -40 to + 85 Extended
- Flying Lead Cable Provided (User Configured)
- Full Word/Label Encoding/Decoding
    - Bit Rates 500 to 200K
    - Bit Types, Length, Start/Stop and Parity Settings (most advanced in industry)
- 8 Avionics Discretes and One TTL
- Power-Up, Loop-Back and User BIT
- IRIG-B RX PAM and RX/TX PPS Time Sync
- IPC Level 3 and ISO 9001:2008 Processes

TX Features

- Simple or Detailed Frequency (Hz) Control Per Label/Word List
- ARINC-717 Frame Support
- Interrupts, External Trigger
- Full Error Injection

RX Features – Three Buffering Modes

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

Playback/Signal Generator (TX)

- Real Hardware Playback from Archive Files
- H/W Playback Timing to 10 usec.
- Signal Vector Generation at 1 uSec **INDUSTRY FIRST**
    - Construct Bit Encoding
    - Ideal for Test Validation

Software: *AltaAPI & AltaView*

- Multi-Layer ***AltaAPI*** Architecture to Support Windows and C Linux, VxWorks, LabVIEW, etc..
    - Contact Factory For RTOS Platforms
- Optional ***AltaView*** is Based on the Latest Windows MS Office 2007 User Interface Style with Ribbon-Bar
    - Full Analyzer Integration Tool
    - Multi Language Support

Part Numbers

MPCIE-A429-6

- 4 Shared RX/TX ARINC-429 Channels
- 2 RX ARINC-429 Channels
- One RX/TX Channels 717
    - (717 TX or RX Replaces Two 429 Channels)

Options: -E for Ext Temp Parts (-40 to +85C); -F for Conformal Coating; -A for AltaView; -N for NVRAM Write Protect. Example: MPCIE-A429-6-AEFN.

NOTE: On shared channels: TX lines have an extra RX load; when powered-off, RX channels can have severe voltage drain – use only dedicated RX channels for critical systems.

.

5 Year Limited Warranty!

EU and China RoHS Compliant

Contact Alta for Special Lead Build Configurations

AltaAPI Software with ANSI C Source,.Net and LabVIEW & RT provided at No Cost.

Alta Data Technologies LLC
4901 Rockaway Blvd., Building A
Rio Rancho, NM 87124 USA
888-429-1553 (in US)
505-994-3111 (outside US)
www.altadt.com
alta.sales@altadt.com

Information in this data sheet is subject to change without notice. Alta is not responsible for errors or omissions. All trademarks are reserved by their respective owners. AltaCore, AltaAPI, AltaView and AltaRTVal are trademarks of Alta Data Technologies.1808 – Page 2/2

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP