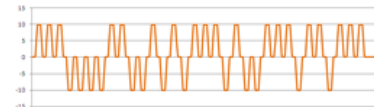


## Key Features for PCCD-A429:

- ARINC-419/429/575/573/717 Configurations:
  - 4 RX/TX Shared Channels
  - 4 RX/TX Shared & 4 RX Channels
  - For Shared Channels, RX Function is Always Available and TX is Software Selectable.
  - Channels Can Be Fixed on Request
- A/D Signal Capture on First Two RX Channels!
- Dual 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
  - Standard Molex or Custom I/O Connector Configurations
- One Mbyte of Memory RX/TX Buffering
- Channel Independent TX Label/Word Frequency Control
- Dual RX Buffering at Channel and Multi-Channel Level 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
- Industry First: 100 nsec Signal Generation
  - Bit Construction
  - Supports Advanced Validation Testing
- IRIG-B or PPS Ext Clock
- 8 Avionics/ One RS-485 Discretes
- Advanced BIT Features and Temp Sensors
- Full HW Interrupt Features
- PCI 32 Bit, 33/66MHz & PCI-X Compatible

## 5 Year Limited Warranty



Wave Form Data Shown on Excel Graph  
Auto Signal Capture with AltaView!



Rugged, Thumb-Screw Connector to Flying Cable Included

Alta Data Technologies' PCCD-A429 interface modules offer 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.

This PCMCIA card 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 2.0 (MSVS 2005 C++, C#, VB .NET) architecture. This hardware and software package provides increased system performance and flexibility while reducing integration time.

The PCCD-A429 Transmit (TX) capability includes both simple and complete frequency control options for each channel. TX also includes Playback and Signal Generator operations. Dual Receive (RX) functions include independent simultaneous channel level buffering and multi channel level buffering.

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

**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  
OOB 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

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

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# Multi-Channel (4-8) *AltaCore* ARINC PCCD-A429 (PCCARD) Specifications

## General

- PCMCIA Type II – PCCARD Cardbus
- Encode or Decode Almost any ARINC-429 Physical Layer Signal.
- A/D Signal Capture on First Two RX Channels!!
- 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)
- 4 Avionics/Triggers and One RS-485 Discrete
- Power-Up, Loop-Back and User BIT
- IRIG-B PAM and PPS Time Sync Input
- IPC Level 3 and ISO-9001 Manufacturing

## TX Features

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

## Playback/Signal Generator (TX)

- Real Hardware Playback from Archive Files
- H/W Playback Timing to 10 usec.
- Signal Vector Generation at 100 nsecs  
\*\*INDUSTRY FIRST\*\*
  - Construct Bit Signals at 100 nsecs
  - Ideal for Test Validation

## 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
- Interrupts, External Trigger
- Full Error Detection

## AltaAPI, AltaView Software

- Multi-Layer *AltaAPI* Architecture to Support Windows (.Net 2.0) and ANSI C Linux, VxWorks
  - 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

### PCCD-ARINC-4

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

### PCCD-ARINC-8

- 4 Shared Rx/TX; 4 RX ARINC-429 Channels
- 2 RX/2TX ARINC-717 Shared Channels
  - (Each 717 Tx or Rx Replaces Two 429 Channels)

### Environment Options

- -E for Ext Temp Parts (-40 to +85C)

## 5 Year Limited Warranty!

EU and China RoHS Compliant

Contact Alta for Special Lead Build and Fixed Channel Configurations

*AltaAPI* Software with ANSI C Source and .Net 2.0 DLL with Client/Server provided at No Cost.

**Alta**dt

data technologies

Alta Data Technologies LLC

4075 Aloe Circle NE

Rio Rancho, NM 87144 USA

(In US): 888-429-1553

(Outside US): 505-994-3111

Fax: 805-504-8588

Cage Code: 4RK27 • NAICS: 334418

www.altadt.com • alta.sales@altadt.com