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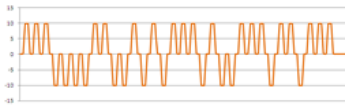
Find the *Alta Data Technologies ECD54-A429-4* at our website: ***Click HERE***

ECD54-A429

High Density ARINC Interface For 54mm PCI ExpressCard Systems



Rugged, Thumb-Screw Connector to Flying Cable Included



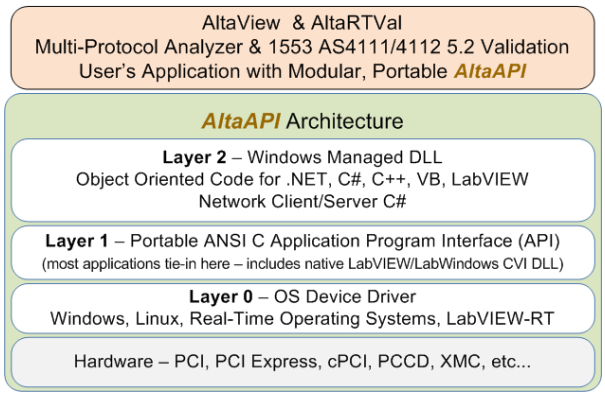
Wave Form Data Shown on ExcelGraph
Auto Signal Capture with AltaView!

Alta Data Technologies' ECD54-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.

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. This hardware and software package provides increased system performance and flexibility while reducing integration time.

The ECD54-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
  - 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
- 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
- Two Avionics/ Two RS-485 Discretes/Clock
- One TTL In and Out Clock
- Advanced BIT Features and Temp Sensors
- Full HW Interrupt Features
- 54mm PCI ExpressCard – PCI Express 1.1

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 (4-8)
ECD54-A429 Specifications

General

- 54mm PCI ExpressCard – PCI Express 1.1
- Encode or Decode Almost any ARINC-429 Physical Layer Signal.
- 8-bit, 1 uSec 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)
- 2 Avionics, 2 RS-485, One TTL In and Out
- 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

ECD54-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)

ECD54-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)

Options: -E for Ext Temp Parts (-40 to +85C); -A for AltaView.

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.

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