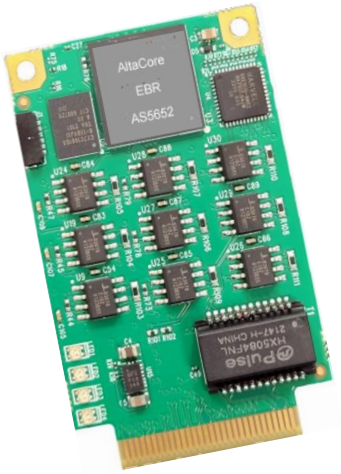
MEZ-EBR-1D

1553-EBR AS5652 Operations for Embedded Ethernet



Approx 36x56mm - Approx Size Shown
Mounts to Low Cost Samtec Connector

- Ideal for Your Custom System – Ready to Deploy!
- Full Design Schematics from Reference Card (below)
- Simple, Quick Design Integration
- Use Almost Any OS – Even DO178
  Straight Berkely Socket Layer in AltaAPI SDK
- EBR Bus & Ethernet Activity Signals Routed
- 3.3V Power – 1Amp Max Dual Channel

Key Features

- **Eight Half Duplex, 10Mbit RS-485 (1553) AS5652 EBR Channels.**
  Link and Spec Modes.
- **Single Function BC/cBM, or 1-8-RT**
- **1000 Ethernet Host Interface**
- Reference-Development Card Available
- Full Schematics, Design Guidelines, ESS Test Examples, and 3-D STEP Files
- One Mbyte of Memory per Channel
- Commercial or Industrial Extended Temperature Parts
- IRIG-B RX PAM or RX/TX PPS Ext Clock
- AltaAPI SDK Provided. Use the Exact Same Code as Other Alta Products.
- **Advanced BIT Features and Dual Temperature Sensors**

Not to Scale

- **MEZDEV-E02** Development-Reference Card
  Connect to Your Computer for Full Testing
- Full Schematics and Design Notes
  - Provides Example Designs and Suggested Support Parts
- RJ-45 Ethernet, USB-C Power Only & Honda Connector
  - Honda Connector for EBR and AUX Signals.
    Use Alta **HTKCAB-AUX01** Cable

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

8 Channel EBR AltaCore™
MEZ-EBR-1D Specifications

General

- 8 Half Duplex RS-485 EBR Interfaces
- AS5652 Compliant: Link & Spec Mode
- 1000 Ethernet Only - UDP & ARP Interface
- 36.25x56mm – 8.2mm max height
  - Similar to Full Mini PCI Express Type F2
- Mounts to Common, Low Cost Samtec HSEC8-120-01-L-RA Connector
  - Not Included
  - Mounting Screws are Included
- 3.3V Power. Max: 1Amp. Weight: 12g
- One Megabyte RAM per Channel
- Common Data Packets (CDPs) for all BC, RT and Monitor Functions
- Parts Temp (C): -55 to +120 Storage, 0 to +70 Commercial, -40 to + 85 Extended
- Loop-Back & User BIT, Dual Temp Sensors
- IRIG-B RX PAM and TX/RX PPS Time Sync (AUX)
- 6 Avionics Discretes (MIL-1760 Ext Addr), and One RS-485 Discrete (AUX)
- Bus Activity and Ethernet Link Status Lines Provided – To LEDs on MEZDEV Reference
- Polling Interrupts
- IPC Class 3 and ISO 9001:2015 Processes

BC Features

- Variable Framing or One-Shot Lists
- RT Link and Spec Mode Support
- Intermessage Gap Spacing (4-10 minimum)
- Polling Interrupts, No-Ops, Ext Trigger
- Time Tags Full Error Injection/Detection

RT Features – Up to 8

- EBR Link and Spec Mode Support
- Infinite Linked Data Buffers
- Time Tags Full Error Injection/Detection

Monitor

- Composite Monitor (cBM) Available to BC Mode Only
- 64 bit, 20ns Time Tags, IRIG, Ext Clock Source

Software: *AltaAPI*, *AltaView*

- Multi-Layer ***AltaAPI*** Architecture to Support Almost any OS. Straight Berkley Socket (BSD) Layer.
  - **Source Provided – Even Use on DO178 Systems**
  - **Dozens of Example C Programs**
- Windows ***AltaView*** Analyzer
  - Full Analyzer Integration Tool

Part Number

- **MEZ-EBR-1D**
  - Single Function (BC/cBM or mRT)

Options: Add -E for Ext Temp Parts (-40 to +85C),
-N for NVRAM Write Protect, -F for Conformal Coat.
Example: MEZ-EBR-1D-EFN

5 Year Limited Warranty!

EU and China RoHS Compliant
Contact Alta for Special Lead Build Configurations
Non-Public Telcom/CE Device

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

Alta dt data technologies