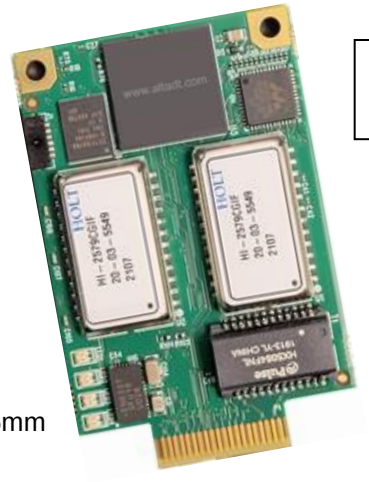
MEZ-EWMUX

One F-16 PP194 WMUX Bus (Wing) Small Mezzanine with Ethernet Host Interface



36.25x56mm

Alta WMUX Interfaces are the Most Widely Used F-16 WMUX COTS Products

- One PP194 WMUX Full Duplex Bus (Wing)
  - Not Dual Redundant A-B
- Full Function CIU, RIUs, Bus Monitor (BM)
- Ideal for Your Custom Test or Mission System
- Full Design Schematics from Reference Card (below)
- Use Almost Any Operating System
  Straight Berkely Socket Layer in AltaAPI SDK
- 1553 Bus & Ethernet Activity Signals Routed
- 3.3V Power – 1.25 Amp Max

Key Features

- **One PP194 WMUX Full Duplex Bus (Wing)**
- **10/100/1000 Ethernet Interface**
- Reference-Development Card Available
- Full Schematics, Design Guidelines, ESS Test Examples, and 3-D STEP Files
- **Full Function** CIU, RIUs and BM
- One Mbyte of Memory
- Commercial or Industrial Extended Temperature Parts
- AltaAPI SDK Provided. Use the Same Code as Other WMUX Alta Products
  - 100% or Filtered Subaddress Messages
- **Advanced BIT Features and Dual Temperature Sensors**

Not to Scale

- **MEZDEV-E01** 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 1553 and AUX Signals. Use Alta HTKCAB-2-AUX01 Cable to Break-out to 1553 BJ-77 Jacks & DB26.

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WMUX AltaCore™
MEZ-EWMUX Specifications

General

- One PP194 WMUX Full Duplex Bus (Wing)
  - Not Dual Redundant A-B
- 10/100/1000 UDP Ethernet 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. 1.25 Amp Max

- One Megabyte RAM
- Common Data Packets (CDPs) for all BC, RT and Monitor Functions – Industry First
- Parts Temp (C): -55 to +120 Storage, 0 to +70 Commercial, -40 to + 85 Extended
- Loop-Back & User BIT, Dual Temp Sensors
- 6 Avionics Discretes
- Bus Activity and Ethernet Link Status Lines Provided – To LEDs on MEZDEV Reference
- Polling Interrupts
- IPC Class 3 and ISO 9001:2015 Processes

CIU Features

- Simple One-Shot Lists to Advanced Message Framing with 100 nSec Accuracy
- Infinite Linked CDP Data Buffers
  - 64-Bit, 20 ns Time Tags, Interrupts, Triggers
- Auto Master Reset TX on RIU Error Option
- Hardware Interrupt any Message or Buffer/CDP
- Inverted TX capability
- Full Error Injection/Detection

RIU Features

- Full Regular and Inverted Support (Inverted RX is normalized)
- Infinite Linked CDP Data Buffers
  - 64-Bit, 20 ns Time Tags, Interrupts, Triggers
- Hardware Interrupt Option for Any Buffer/CDP
- Full Error Injection/Detection

Bus Monitor

- Sequential and RT Mapped Monitoring with 64-Bit, 20 ns Time Tags, Interrupts, Triggers.
  Full Error Detection.

Signal Vector PHY TX (as CIU)

- Signal Vector Generation at 20 nsecs
  INDUSTRY FIRST
  - Construct WMUX/1553 Bit Signals at 20 nsecs

Software: *AltaAPI*

- Multi-Layer ***AltaAPI*** Architecture to Support Windows, Linux and VxWorks. Full Source and BSD Sockets that will port to almost ANY Operating System.
- Numerous Example Programs

Part Numbers

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

- **MEZ-EWMUX-1F**

Options: -A for AltaView; -E Ext Temp; -F Conformal Coating; -I 1553 TX Inhibit; -N NVRAM Write Disable.
Example (alpha order): **MEZ-EWMUX-1F-AEFIN**

Development Card: RJ-45, USB-C Power, Honda I/O Connector. Full Reference Schematics.

- **MEZDEV-E01**
- **HTKCAB-2-AUX01 Honda Connector**
  - Breaks-out 1553 Busses and AUX

5 Year Limited Warranty!

EU and China RoHS Compliant

Contact Alta for Special Lead Build Configurations

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