Multi-Channel 1553 and ARINC for Real-Time Ethernet Connectivity

- 10/100/1000 Ethernet <-> 1553 & ARINC Converter/Bridge
- Two Independent, Dual Redundant 1553 Busses
  - Dual or Full Function Modes
- Eight ARINC-429/717 Channels
  - 4 RX/TX & 4 RX; First 2 Channels Share 717
- Thin-Server, Real-Time UDP Ethernet to/from 1553 **
- Auto BM/RX Mode for 1553-ARINC->Ethernet Bridging
- 5-30 VDC, 500-1200 mAm max/400-800 mAm typical.
  200g Weight, 13.5 x 3.7 x 4 cm – Small & Rugged
- Ideal for Lab or Rugged Deployed Applications
- IRIG-B RX Decode, IEEE-1588, PPS & Triggers

**NOTE:** eNet-MA4 (server) is a real-time Ethernet/1553 device, but your computers’ (client) IP stack may not be! The eNet-MA4 device provides real-time UDP receive and transmit requests (<10 uSecs) to data buffers, but the client's IP/UDP stack will induce path delays as compared to backplane cards. For most applications, this product will provide unparalleled flexibility in avionics configurations (much better than USB devices). Contact Alta for test results on various OS and computer configurations – your system results may vary.
AltaCore-1553/ARINC

eNet-MA4™ Specifications

General
- 13.5 x 3.7 x 4cm, 200g without cabling.
- 1-2 Dual Redundant Independent 1553 Busses
- 8 ARINC Channels: 4 RX/TX & 4 RX
- Standard 10/100/1000 Ethernet UDP
- Power 1000E @ 50% Load: 800 mAmmps (1ch)
  Power 1000E @ 50% Load: 1 Amp (2ch)
- 5-30 VDC Conditioned Power
- USB Power OK (2000+ mAmmp Source).
- Glenair Mighty Mouse Connectors.
  801-011-02M10-26PA/B Mates.
- One Megabyte RAM Buffering Per Channel
- Transmit Inhibit Optional
- Flash Disable Factory Setting for Secure Mem
- Parts Temp (C) : -55 to +120 Storage, 0 to +70
  Commercial, -40 to + 85 Extended Temp
- Two Avionics Discretes, TTL Clock, Trigger
- IRIG-B TAM RX, IEEE-1588 or 1, 5, 10 MHz PPS
- Shared ARINC TX Channels Add Electrical Load
- Advanced Startup, User and Continuous BIT
- IP Fragmentation NOT supported.

Playback/Signal Vector (BC or TX)
- Real Hardware Playback from Archive Files.
- Signal Vector Generation at 20/1000 (1553/ARINC)
  nsecs **INDUSTRY FIRST**
  20 nSec 1553 Vectors and 1 uSec ARINC Vectors
- Sequential and RT Mapped Monitoring with Infinite
  Linked CDP Data Buffers
- 8-bit, 50 nSec 1553 and 1 uSec A/D Waveform
  Signal Capture. 1st Channel 1553 and First 2 RX of
  ARINC

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

Part Numbers
Dual Function: BC/Monitor or mRT/Monitor
- **ENET-MA4-1D8** or **ENET-MA4-2D8**
  Full Function: BC, mRT and Monitor
- **ENET-MA4-1F8** or **ENET-MA4-2F8**
  Options: Add -E for Ext Temp Parts (-40 to +85C),
  -N for NVRAM Write Protection, -F for Conformal Coating,
  -I for TX Inhibit and –A for AltaView Analyzer Software.
  Example: ENET-MA4-2F8-AEFIN

Optional Cables:
- **ENETCAB-1553-J1-01/02**
  - 1553 Channels, Ethernet & USB Power
- **ENETCAB-J2-01**
  - ARINC Channels, Auxiliary Mini DB-26

5 Year Limited Warranty
EU and China RoHS Compliant
Contact Alta for Special Lead Build Configurations
Non-Public Telcom/CE Device/Non Safety-Mission

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Rio Rancho, NM 87124 USA
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alta.sales@altadt.com
888-429-1553 or 505-994-3111

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