XMC-A825-16

16-Channel ARINC-825
ISOLATED CAN, CAN FD
Intelligent CAN Interface
www.arinc825.com

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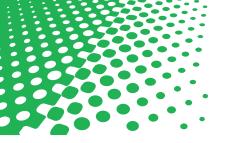**16-channel XMC ARINC-825 / CAN-FD**

CAN AVIATION ALLIANCE

- **Based on the latest 28nm XILINX ARTIX-7 FPGA**
- **Over 215,000 internal Logic Cells**
- **5 Internal 128 MHz Microprocessors**
- **16-Bosch M_CAN Cores**
- **Field Updatable , Highly Configurable**
- **Ready for Special Missions Applications**
- **Custom FPGA and software loads available**

KEY FEATURES AND BENEFITS:

- 2nd Generation Controller Area Network (ISO 11898), ARINC825 and CANaerospace Protocol Compliant Interface Module from the alliance that designed the worlds first working ARINC-825 interface, the interface used to validate the ARINC-825 standard

- 16 Isolated and fully Independent CAN Interfaces using embedded Bosch M_CAN licensed IP and capable of simultaneous 8Mb/S CAN FD on all buses.

- Compatibility with CAN protocol, Every CAN FD node is able to receive and transmit CAN messages according to ISO 11898-1.

- ARINC-825 and CANAerospace Protocol Stacks from Stock Flight Systems.

- Up to 128Gbytes of µSDXC memory on board for recording of data.

- High Resolution Time Stamping for all CAN Messages

- Ultra stable Transmission Timing through use of high stability MEMS oscillator and VHDL based transmission message scheduler.

- Applicable to XMC, PCI, cPCI, PXI, PCIe, VME Platforms as well as Standalone Operation.

- 10/100/1000 BaseT Ethernet Interface with UDP/IP Protocol and API

- Driver & API Support for Linux, VxWorks and Windows XP Windows 7 and Windows 8.1

- Window-Oriented CAN/ARINC825/CANaerospace Tool-box Software

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The standalone version (PowerNECS) integrates the XMC-A825 module into a rugged aluminum box that can be powered from 9-36 VDC allowing it to run from standard 14V or 28V DC aircraft power buses and may be used for flight test applications.

XMC-A825 modules can work as either standalone systems linked to host computers via Ethernet/ UPD/IP or as a plug-in board for computer hosts offering XMC, PXI, PCI, CompactPCI, PCI-X, PCI-Express or VME interfaces. The XMC825 is supplied with VxWorks, Linux, Mac, and Windows XP/7/8/10 drivers and Application Programming Interfaces (API) for Ethernet/ UDP/ IP, VxWorks, Linux and Windows XP/7/8 as well as the eXtended CAN Tool (XCT) software, a powerful window-oriented ARINC825 network toolbox for Linux, Mac, and Windows XP/7/8/10.

ABOUT ICS AERO:

Innovative Control Systems, LP. (ICS) was established in 1990 in Phoenix Arizona with the goal to provide Engineering Consulting, Value Added Resale (VAR) and System Integration services to High Technology Aerospace Companies. Since that time, we have had many customers, both national and international. Today, we supply many different manufacturers with ASCB communications, Telemetry Interface, Simulation and other Data Acquisition equipment. Our customer base includes over 30 major aerospace companies and suppliers. Some names in our customer base include: Honeywell, Raytheon Aircraft Corporation, EMBRAER, Cessna, Gulfstream , Fairchild-Dornier, Bell-Agusta, NASA, Hamilton Sundstrand, B.F. Goodrich, Aircraft Braking Systems, Vibrometer, Smiths Industries, GE Aviation and many others. Today, the vision has grown to include many Data Acquisition and Telemetry products. We are a world authority on, and specialize in, interface solutions to Honeywell's ASCB Aircraft communications bus. As a result, we develop many custom products for our customers who have needs in this area.

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