

New:

AMCE1553/429: Rugged & Ready

AIM's PMC modules target MIL-STD-1553/ARINC429 Embedded Applications

AIM GmbH has introduced 2 variants of its PMC modules, the AMCE1553-x and AMCE429-x, being conduction cooled PMC cards designed specifically for rugged, embedded MIL-STD-1553/MIL-STD-1760 and ARINC429 applications.

The AMCE cards use the field proven AIM Common Hardware Core derived from the existing AMCX1553-x/AMCX429-x test and simulation PMC cards delivering low power consumption required for rugged environments and embedded applications.

The cards are qualified for VITA-47 shock and vibration for class V3 in conduction cooled applications and class V2 in air-cooled applications. They are also designed to meet the shock requirements specified in ANSI/VITA 47 for class OS2. As standard, the AMCE cards

provide conduction cooling, Rear I/O only and support the extended temperature range from -40° to +85°C. Conformal coating is optional.

With onboard flash memory, the cards boot up autonomously after power up. Therefore, the cards are prepared for embedded applications requiring fast and autonomous boot up to operational mode such as with the MIL-STD-1760. The DMA engine is optimized for bus transfers and low PCI utilization for real time applications.

An onboard IRIG-B analogue time decoder is included with sinusoidal output and free-wheeling mode for time tag synchronization.

AMCE1553-x modules handle up to 4 dual redundant MIL-STD-1553 channels with 8 Open/Ground Avionics Level (+35V) Discrete I/O signals plus Trigger I/O. A 'Bus Controller Disable' function supports 'Remote Terminal Only' Applications. Transmit Inhibit for

Monitoring Only Applications is an assembly option. Single Function variants of the cards are also available.

AMCE429-x modules handle up to 32 fully programmable (Tx/Rx) ARINC429 channels with a maximum of 8 Open/Ground Avionics Level (+35V) Discrete Inputs and eight Open/Ground Avionics Level (+35V) Discrete Output signals in addition to Trigger I/O. Transmit Inhibit for Monitoring Only Applications is an assembly option.

An easy to use Application Programming Interface (API) is provided along with low level 32/64-bit operating system specific drivers for Windows 7/8/10, Linux and VxWorks to ease systems integration.

AIM has offices in the UK and the USA with the main design and manufacturing facilities based in Freiburg, Germany. ■

