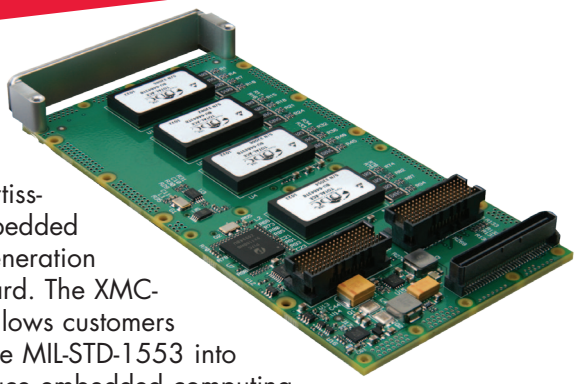

Photo courtesy of General Dynamics Land Systems Inc.

Fact Sheet

XMC-603

Quad-Channel MIL-STD-1553 Module

- Up to four independent MIL-STD-1553 interfaces
- Support for MIL-STD-1553A, MIL-STD-1553B Notice 2, and STANAG 3838
- Both transformer-coupled and direct-coupled interfaces supported
- BC, RT, MT modes independently selectable for each channel
- XMC form factor
- Backplane I/O
- x1 PCI Express® (PCIe) Gen 1 interface
- Linux®, VxWorks® and Windows® XP-E drivers available



The XMC-603 is Curtiss-Wright Controls Embedded Computing's next generation 1553 Mezzanine card. The XMC-603 XMC module allows customers to readily incorporate MIL-STD-1553 into military and aerospace embedded computing systems where carrier cards support either a full XMC mezzanine connector set (Pn5 and Pn6) or a mixed set PMC and XMC connectors (Pn4 and Pn5).

As one of several products in our comprehensive range of rugged XMC modules, the XMC-603 integrates well with other elements of our product line, featuring after sales technical support, life-cycle management services, and assured long-term availability.

Learn More
Sales Info: sales.cwcembedded.com
Sales Email: sales@cwcembedded.com

ABOVE & BEYOND

CURTISS WRIGHT Controls
Embedded Computing
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Fact Sheet

XMC-603

Features

Number Ports

- Up to 4 independent dual-redundant MIL-STD-1553 ports
- Implemented with DDC's Total-ACE 1553 Controller

1553 Support

- MIL-STD-1553A, MIL-STD-1553B Notice 2, and STANAG 3838
- McAir supported through customer specific variant
- 64K bytes dual port RAM with parity
- BC, RT, MT modes independently selectable for each channel
- Hardware RT address available for all channels
- Transformer and direct coupled interfaces

XMC Interface

- x1 lane PCIe Gen 1

Backplane

- Dual 1553 interfaces through PMC Pn4 along with RT addresses, direct and transformer coupled
- Quad 1553 interfaces through PMC Pn4 with RT addresses, direct or transformer coupling (variant dependent)
- Dual or quad 1553 interfaces through XMC Pn6 along with RT addresses, direct and transformer coupling (variant dependent)

Mezzanine Format

- VITA 42.0 XMC
- Compliant to IEEE 1386 and IEEE 1386.1 specifications, ANSI/VITA 20-2005
- Primary and secondary cooling interfaces supported

Software Support

- Drivers available for VxWorks 6.x AMP and SMP, Linux, Windows XP-E
- Power up BIT available on select Curtiss-Wright carrier cards

Ruggedization Levels

- Curtiss-Wright air-cooled Levels 0 and 100
- Curtiss-Wright conduction-cooled Level 200

Power Requirements

- XMC VPWR of +5 or +12 V
- 3.3 V and 3.3 V_AUX

Manufacturing

- PWB meets UL 94 V-0 flammability rating
- Circuit card assembly is done to Class 3 standards of IPC-A-610C, Acceptability of Electronic Assemblies

Figure 1: XMC-603 Quad MIL-STD-1553 Block Diagram