

# MIL-STD-1553 Technology

Micross-Sital Partnership

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#### **Product Line Overview**



Micross manufactures Sital MIL-STD-1553 Technology. These products provide pin-for-pin fit-form-function hardware and software compatibility with industry standard fully-integrated components, packaging 1553 protocol, memory, transceivers and isolation transformers in a compact BGA.





OCTAVA

BC/RT Monitor

BOARDS

**IC SOLUTIONS** 

Total-OCTAVA BC/RT Monitor with Transformers



Transceiver / Transformer



8-Channel PMC Board



Mini-PCI Express Board

# TESTERS





ARINC-429 PCI Express Board

12 TX, 16 RX

MultiComBox Multi-I/O USB Tester

PhysiMUX Wire Fault Detection

PhysiCAN Can Bus Wire Fault Detection

## THE MICROSS/SITAL ADVANTAGE

#### **Hi-Rel Data Bus Solutions**

- Data Bus Solutions for MIL-STD-1553, ARINC-429 and CAN Bus/ CAN-FD/ARINC-825
- · Components, Boards, Testers, IP Software, IP Integration, Transformers, and Couplers

#### **Distinguishing Features**

- · Very Low-Power Transceivers with Built-In Compensation to Eliminate Residual Voltages; aka Dynamic Offsets or "Tails"
- · Bus Controllers Include Built-In IDS/IPS (Intrusion Detection/ Protection) Capabilities
- · Options for High-Speed Synchronous Host Interface
- IRIG-106 Chapter 10 File Format for Monitor Mode
- · MIL-STD-1553 and EBR-1553 IP Cores with Built-In Reset Logic to Mitigate Against Single Event Upsets for Space Applications
- Capability for Wire Fault Protection for Detecting and Locating Open and Short Circuit Faults in Data Buses

#### **Quality Certifications**

- · MIL-PRF-38534 Screening and Qualification Available
- · DO-254 and DO-178 Certifiable
- micross.com/MIL-STD-1553

Total-OCTAVA, MIL-STD-1553 Terminal with Integrated Transformers			
Part Number	Mode	Memory Organization	Description
OCT-64863T8-E02	BC/RT Monitor	64K x 17 RAM	Asynchronous Local Bus Interface, -40 to +100° C, MIL-STD-1553/1760 Amplitude Compliant
OCT-64743T8-E02	RT Only	4K x 16 RAM	Asynchronous Local Bus Interface, -40 to +100° C, MIL-STD-1553/1760 Amplitude Compliant

Dual Compact MIL-STD-1553 or 1553/1760 Transceiver/Transformer			
Part Number	Mode	Temperature Range	Description
SIT-2579	MIL-STD-1553	-40°C to +85°C	Dual Redundant Transceiver/Transformer Combo. 16-pin, 17.0 x 13.2 16-pad Leadless Flatpack
SIT-2579-ET	MIL-STD-1553	-55°C to +125° C	Dual Redundant Transceiver/Transformer Combo. 16-pin, 17.0 x 13.2 16-pad Leadless Flatpack
SIT-2579-1760	MIL-STD-1553/1760	-40°C to +85°C	Dual Redundant Transceiver/Transformer Combo. 16-pin, 17.0 x 13.2 16-pad Leadless Flatpack
SIT-2579-1760-ET	MIL-STD-1553/1760	-55°C to +125° C	Dual Redundant Transceiver/Transformer Combo. 16-pin, 17.0 x 13.2 16-pad Leadless Flatpack

OCTAVA, MIL-STD-1553 RT/BC/Monitor			
Part Number	Mode	Memory Organization	Supply Voltage
OCT-61743	RT Only	4K x 16 RAM	5V Transceiver, 3.3V Logic
OCT-61745	RT Only	4K x 16 RAM	5V Transceiver, 5V Logic
OCT-61843	BC/RT Monitor	4K x 16 RAM	5V Transceiver, 3.3V Logic
OCT-61845	BC/RT Monitor	4K x 16 RAM	5V Transceiver, 5V Logic
OCT-61864	BC/RT Monitor	64K x 17 RAM	5V Transceiver, 3.3V Logic, 5V RAM
OCT-61865	BC/RT Monitor	64K x 17 RAM	5V Transceiver, 3.3V Logic, 5V RAM

Compact MIL-STD-1553/1760 Transceiver Module		
Part Numbe	Temperature Range	Description
SIT-1579	-40° to +125° C (Industrial)	MIL-STD-1553 Transceiver, Low Power Transmitter, Closed Loop "Tails" Compensation
SIT-1579-ET	-55° to +125° C (Military)	Asynchronous Local Bus Interface, -40 to +100° C, MIL-STD-1553/1760 Amplitude Compliant

Dual, 3 Stubs MIL-STD-1553 Coupler		
Part Number	Mounting	Description
CPLR1553STL-06	Panel	The Base Dual 3-Stub Coupler, Ready for Panel Mount. Connect Either the 4 Screws or the D-Type Connector Screws
CPLR1553STL-06-PCI	PC Back-Panel	The Base Dual 3-Stub Coupler Mounted to a Standard PC Back-Panel for Easy Integration Inside PC Housing
CPLR1553STL-06-PXI	cPCI Back-Panel	The Base Dual 3-Stub Coupler Mounted to a Standard cPCI Back-Panel for Easy Integration Inside 3U cPCI or PXI Housing
CPLR1553STL-12- PNL-6U	6U Back-Panel	2X Base Dual 3-Stub Couplers Mounted to a Standard 6U Back-Panel for Easy Integration Inside a 6U VME or VPX Housing

#### Micross & Sital Announce Global Manufacturing & Distribution Partnership

Micross is pleased to announce our exclusive partnership with Sital Technology, the leader in MIL-STD-1553 IP cores, specializing in integrated FPGA solutions. With this collaboration, Micross is now the exclusive world-wide manufacturer, distributor, and value-services provider of Sital's best-in-class 1553 products, including Octava, Total Octava, and integrated transceiver solutions.





### **Need Information?**

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