

M8KMMSI

The M8KMMSI is an intelligent, Mini Munitions Store Interface (MMSI/AS5652) module for Excalibur's 8000 family of multiprotocol carrier boards. Each module of the M8KMMSI contains 64K bytes of dual-port RAM for Data blocks, Control registers, and Look-up Tables. All Data blocks and Control registers are memory mapped, and may be accessed in real-time.

Each M8KMMSI module may be programmed to operate in one of three modes of operation: Remote Terminal, Bus Controller/Concurrent-RT and Bus Monitor. In addition, the module simultaneously operates as an Internal Concurrent Monitor in BC/Concurrent-RT mode.

Each module contains five hub ports EBR-1553 (10 Mbps 1553 protocol using RS-485 transceivers) and one composite monitor output.

General Features

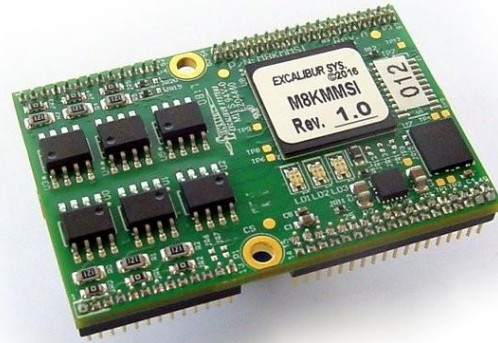
- ◆ Operates as RT, BC/Concurrent-RT or Triggerable Bus Monitor
- ◆ Concurrent Monitor in BC/Concurrent-RT mode
- ◆ Multiple-RT simulation (up to 5 Remote Terminals)
- ◆ Independent MMSI module with 5 hub ports
- ◆ Three hub modes: Spec, Switch and Link
- ◆ Composite monitor output
- ◆ Real-time operation
- ◆ Supports broadcast mode
- ◆ Error injection capability:
 - Word Count (+/-3 words)
 - Incorrect sync
 - Incorrect RT address
 - Incorrect parity
 - Non-contiguous data
- ◆ Service Request Processing
- ◆ Multi-mode triggerable Monitor
- ◆ Extensive interrupt features
- ◆ 1760 Features:
 - Checksum error detection
 - Checksum error injection
 - Header Words
- ◆ 32-bit 4 μ sec Time Tag or 64-bit IRIG B Time Tag
- ◆ IRIG B input (standard IRIG B120 Serial Time Code)
- ◆ 64 KB Dual-port RAM
- ◆ 120 Ohm termination resistors on all ports
- ◆ Ruggedized and extended temperature options

Physical Characteristics

- ◆ Dimensions: 46mm x 30mm
- ◆ Weight: 9g

Operating Environment

- ◆ Temperature: 0°–70°C standard temperature
-40° to +85°C ext. temp. (optional)
- ◆ Humidity: 5%–90% noncondensing
- ◆ MTBF: 993,650 hours at 25°C, G_F, S217F



Host Interface

- ◆ EXC-8000 family of carrier boards
- ◆ Power: 5V @ 475mA
 - Switch or Link modes, one port transmitting @ 90% duty cycle
- 5V @ 875mA
 - Spec or Broadcast modes, all five ports transmitting @ 90% duty cycle

Software Support

- ◆ *MMSI Software Tools*: Intuitive and flexible API with source code
- ◆ Compatible with 32/64-bit Windows 7/8/10/11 & Linux kernel 3.x/4.x/5.x
- ◆ *Exalt Plus*: Excalibur Analysis Laboratory Tools (optional)

Ordering Information

- ◆ **M8KMMSI-R5** MMSI five hub port module
- ◆ Additional Options:
 - E Extended temperature option
 - R Ruggedized option
 - 001 With conformal coating

Note: When ordering this module with a carrier board, use the module code specified in the user's manual of the carrier board.

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These specifications are subject to change without notification

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