

# M4KMMSI

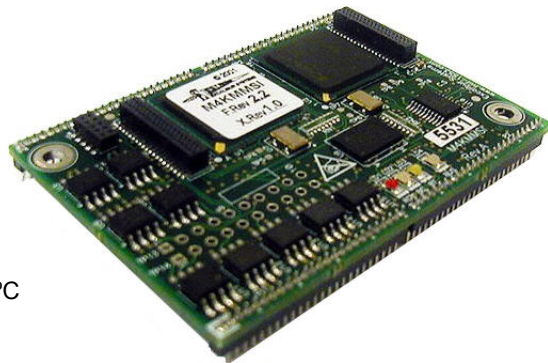
The M4KMMSI is an intelligent, Mini Munitions Store Interface (MMSI) module for the multiprotocol Excalibur 4000 family of carrier boards. Each module of the M4KMMSI contains 64K bytes of dual-port RAM for Data blocks, Control registers, and Look-up Tables. All Data blocks and Control registers are memory mapped, and may be accessed in real-time.

Each M4KMMSI module may be programmed to operate in one of three modes of operation: Remote Terminal, Bus Controller/Concurrent-RT/Concurrent Monitor, and Bus Monitor.

Each module contains up to 8 hub ports EBR-1553 (10 Mbps 1553 protocol using RS-485 transceivers) and 1 composite monitor output.

## General Features

- ◆ Independent MMSI module (up to 8 hub ports)
- ◆ Three hub modes: Spec, Switch and Link
- ◆ Composite monitor output
- ◆ Real-time operation
- ◆ Operates as RT, BC/Concurrent-RT/ Concurrent Monitor or Triggerable Bus Monitor
- ◆ Multiple-RT simulation (up to 8 Remote Terminals)
- ◆ Extended Temperature range available – 40° to +85°C
- ◆ 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
- ◆ 120 Ohm termination resistors on all ports



## Physical Characteristics

- ◆ Dimensions: 67mm x 46mm
- ◆ Weight: 18.7g

## Operation Environment

- ◆ Temperature: 0°–70°C standard temperature  
–40° to +85°C ext. temp. (optional)
- ◆ Humidity: 5%–90% noncondensing
- ◆ MTBF: TBD

## Host Interface

- ◆ 4000 family of carrier boards
- ◆ Power: +5V @ 700mA  
Switch or Link modes, 1 port transmitting @ 90% duty cycle  
+5V @ 1200mA  
Spec or Broadcast modes, all 8 ports transmitting @ 90% duty cycle

## Software Support

- ◆ C drivers with source code
- ◆ MerlinPlus software for Windows
- ◆ Exalt Plus: Excalibur Analysis Laboratory Tools (optional)
- ◆ Additional software may be available on our website

## Ordering Information

- ◆ **M4KMMSI** Standard temperature module
- ◆ Additional Options:
  - E Extended temperature module
  - 001 With conformal coating

**Note:** When ordering this module with a 4000 family carrier board, use the module code specified in the *Module Ordering Information* on our website, or in the user's manual of the carrier board.

July 2008, Rev A-2

*These specifications are subject to change without notification*



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