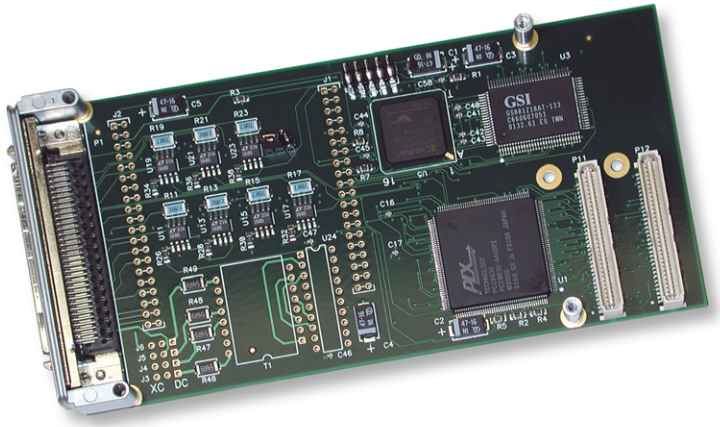
GE Fanuc
Intelligent Platforms



PMC-MMSI

Single-function PMC Interface

Features

- 10 Mbit per sec EBR-1553/MMSI
- Single Function Interface
  - 12 Line BC with Composite Monitor Output or 12 Remote Terminals or Dual Mode Monitor (cable supports eight lines and monitor)
- Supports Both Specification and Link Modes
  - Hardware Line RT Identification
- Bus Controller (BC)
  - BC->RT, RT->BC
  - Mode Codes, Broadcast and single-shot messaging
  - Programmable time delays
  - Major/Minor frames
  - Logical Hub Composite Monitor output
- Remote Terminal (RT)
  - RT data wrapping
  - Multiple RT buffers
  - Automatic Mode Code and Status Bit responses
- Bus Monitor (BM)
  - Error detection
  - Both terminal and composite monitoring modes
  - 48-bit time-tagging and LabWindows/CVI
- Architecture
  - CORE-MMSI architecture
  - BC & RT link list structures
  - 1 Mbyte RAM per channel
  - High impedance idle txcvrs
- Software Support
  - Advanced, high-level API
  - Source code included
  - BusTools Analyzer optional

The PMC-MMSI from GE Fanuc Intelligent Platforms is a flexible, current release, EBR-1553/MMSI PMC mezzanine board interface. The PMC-MMSI includes advanced API (Application Programming Interface) software that will reduce application development time. Standard features include LTC1685 RS-485 fail-safe transceivers, 1 Mbyte of RAM, 48-bit message time-tagging, extensive BC & RT link-list structures, error detection, automatic/manual RT Status Bit and Mode Code responses, along with advanced BC functionality. Transition cabling to standard 1553 cable jacks is provided for eight lines and one monitor line.

EBR-1553/MMSI Interfaces

The PMC-MMSI interfaces incorporate the latest release of the EBR-1553/MMSI SAE AS-1A2 task group specification and support the hardwire Link-Mode as typically used for weapon racks.

Single-function Interfaces

Each single-function PMC-MMSI interface has all the features and functionality required to perform the EBR-1553/MMSI and Link-mode specifications for a 12-line Bus Controller, 12 Remote Terminals or a Dual Mode Monitor, one function per interface.

In Bus Monitor mode the PMC-MMSI supports either a Composite Monitor input or an individual Terminal Monitor with error detection.

Software

GE Fanuc Intelligent Platforms provides an advanced MMSI API in source code, along with driver support for Windows XP, 2000, Me, NT, 98, 95 and VxWorks operating systems. To access EBR-1553 functionality without software development, BusTools/MMSI, GE Fanuc Intelligent Platforms' bus analysis, simulation and data logging/monitoring solution is available.

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PMC-MMSI Single-function PMC Interface

Specifications

Physical
- Single-wide PMC card (74 mm x 149 mm)
- Universal keying (3.3 and 5 volt)

Environmental
- Commercial operating temp. range: 0°C to +70°C

Software
- API - High-level libraries with source code included for Windows® XP, 2000, Me, NT, 98, 95 and VxWorks®
- GUI - Optional BusTools/MMSI GUI bus analyzer

Connections
- Point to point, with 78 ohm terminating resistor
- Front panel bezel
- Transition cabling to 1553 cable jacks included (eight lines, plus monitor)
- Monitor Interface: 78 ohm BM termination

Single-function Operations
- BC or 12 RTs or Dual Mode Monitor

On-board Shared RAM
- 1 Mbyte

Options
- PCI or CompactPCI Carrier card
- BusTools/MMSI analysis software

Warranty
- 3 year limited hardware warranty
- No cost library card driver upgrades

Description

Bus Controller
- Programmable control over:
  - Major and minor frame content and timing
  - Intermessage gap times
  - Response time-out and late response
  - Multiple BC retry
- Modify messages, data or setup while card is running
- Insert aperiodic messages into a running BC list
- "Oneshot" mode for simplified BC operation
- Selectable interrupt generation and status messages
  - Full range of system conditions
  - All detected errors
- Error detection
  - Bit count error
  - Inverted sync
  - High word
  - Incorrect RT address
  - Low word
  - Parity error
- Spec Mode and hardwire Link-Mode

Remote Terminal
- Multiple RT operation (up to 12 RTs)
- Modify data, status words or setup while card is running
- Programmable message content (linked message buffers)
- Interrupts can be generated on a per message basis upon End of Message and error conditions

Bus Monitor
- Capture bus traffic with:
  - Time-tagging
  - Error status
  - Word status
  - Message status
  - RT response time
- 48-bit, microsecond resolution timetagging
- BC Logical Hub Composite Traffic Monitor
- Terminal Monitor

Ordering Options

PMC-MMSI-SF
EBR-1553/MMSI 12 line, single-function PMC interface

PMC-MMSI-SFX
EBR-1553/MMSI 12 line, single-function PCI interface

PMC-MMSI-SF3
EBR-1553/MMSI 12 line, single-function 3U cPCI interface

PMC-MMSI-SFF
EBR-1553/MMSI 12 line, single-function 6U cPCI interface

About GE Fanuc Intelligent Platforms

GE Fanuc Intelligent Platforms is a leading global provider of embedded computing solutions for a wide range of industries and applications. Our comprehensive product offering includes many types of I/O, single board computers, high performance signal processors, fully integrated, rugged systems including flat panel displays, plus high speed networking and communications products. The company is headquartered in the U.S. and has design, manufacturing and support offices throughout the world. Whether you're looking for one of our standard products or a fully custom solution, GE Fanuc Intelligent Platforms has the breadth, experience and 24/7 support to deliver what you need. For more information, visit www.gefanuc.com.

GE Fanuc Intelligent Platforms Information Centers

Americas:
1 800 322 3616 or 1 256 880 0444

Asia Pacific:
+81 3 5544 3973

EMEA:
Germany: +49 821 5034-0
UK: + 44 1327 359444

Additional Resources

For more information, please visit the GE Fanuc Intelligent Platforms web site at:

www.gefanuc.com