

Tough Communication Problems...



...need Powerful Tools



Micro Computer Control Corporation
Small Area Network Specialists
www.mcc-us.com

I²C Bus Monitor Plus

The I²C Bus Monitor Plus is our laboratory grade, troubleshooting tool for the I²C Bus, SMBus, IPMI, and other derived protocols. When connected to an I²C or derived protocol bus, the I²C Bus Monitor Plus captures, filters, and displays bus message data and timing information.



If your designs include heavy I²C Bus, SMBus, or derived protocol content, the I²C Bus Monitor Plus will give you the bus monitoring power you need, including data timestamping, variable logic voltage thresholds, and flexible triggering. Whether you're testing designs with a single master and slave, such as programming configuration EEPROM's, or monitoring multiple masters and slaves in a server maintenance system, the information packed screens help you get your debug and certification done faster.

Key Features

- Display Filtering on message Slave Address, Data Bytes, and Protocol Violations.
- Microsecond Timestamping of Bits, Bytes and Messages.
- Non-intrusive capture of bus traffic to 400kHz.
- Smart Battery System (SBS) Protocol Analysis.
- Adjustable Logic Voltage Levels.

Additional Features

- I²C Bus, SMBus, SSI, and IPMI Development Tool.
- 256K byte Data Recording Memory, Supports General Calls, and Multi-Master/Multi-Slave Addressing.
- Displays Start/Stop Events, Device Addresses, Read/Write Requests, Acknowledgements, Data, and Bit, Byte, and Message timing.
- Trigger Input for synchronization with external events.
- Trigger Output on bus events or pattern match for triggering external test equipment.

Typical Applications

Product Development

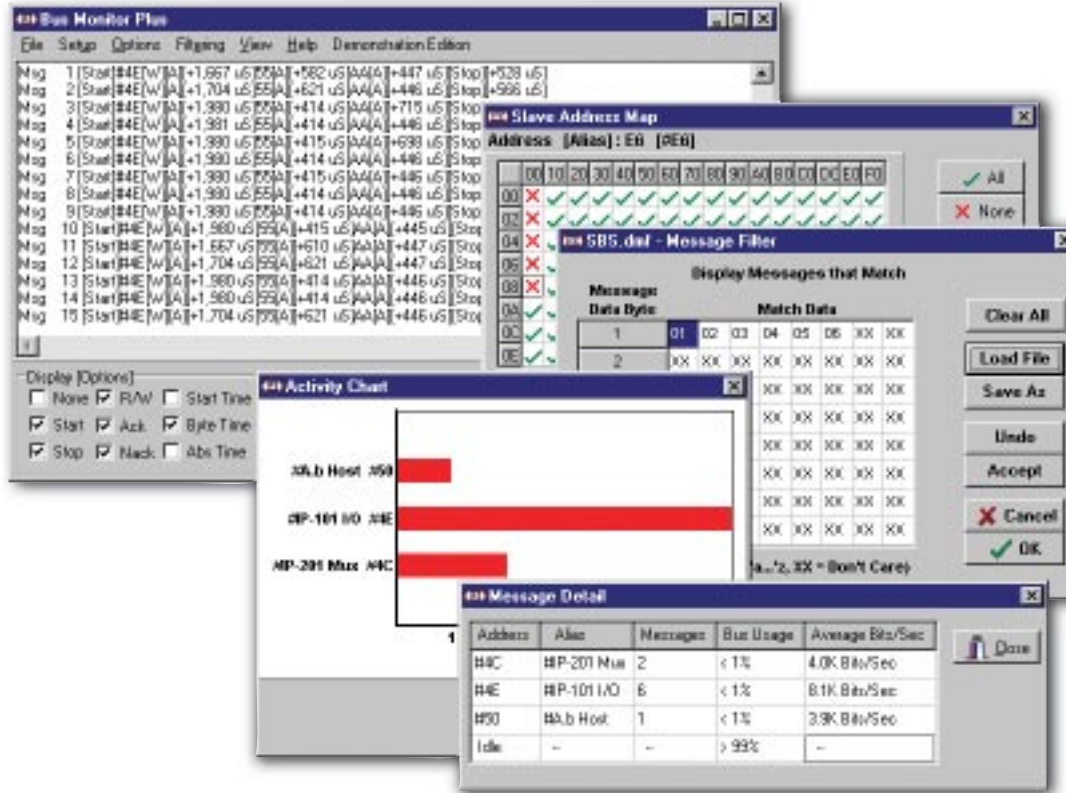
- Software/Hardware Development
- Testing
- Troubleshooting

Manufacturing

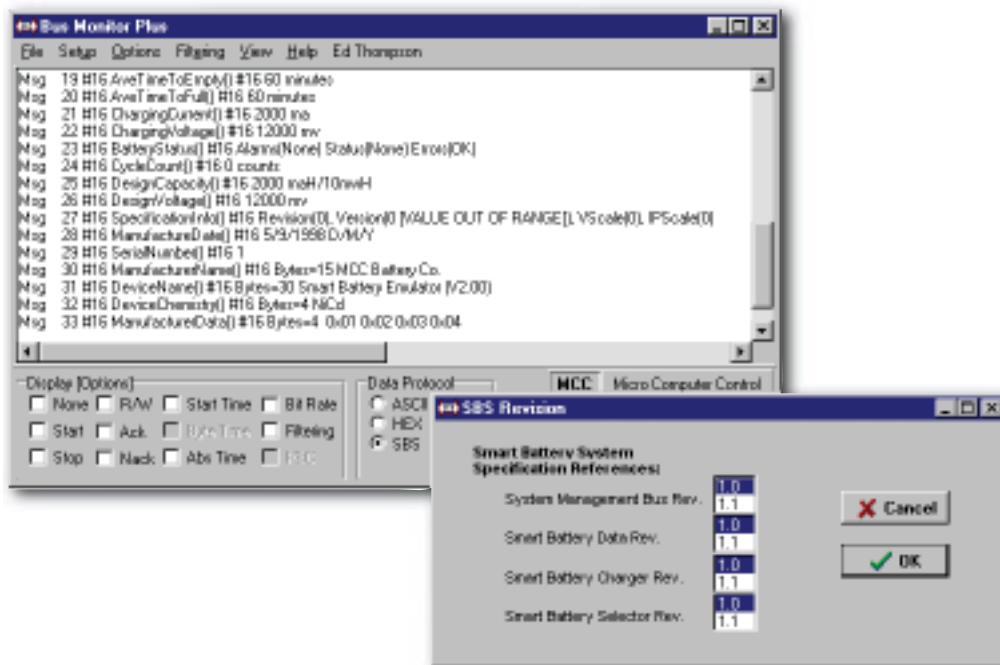
- Manufacturing Tests
- Inspection
- Quality Control

For more information
www.mcc-us.com

The I²C Bus Monitor Plus includes an extensive array of message monitoring capabilities, and can time-stamp bits, bytes, or messages.



The I²C Bus Monitor Plus can display Smart Battery Data in engineering units, and can detect, filter, and display protocol violations.



Product Specifications (version 2)

Ports

I²C Bus

A test cable provides connection to the network under test. Test clips are provided for:

- SCL Clock Line (with Variable Threshold)
- SDA Data Line (with Variable Threshold)
- GND Ground Line
- Target System VCC (Optional)

Trigger Input (BNC)

- TTL signal input to synchronize data collection with external events.

Trigger Output (BNC)

- TTL signal output to synchronize external equipment with I²C Bus Start, Stop, Ack, Nack, and Bit Pattern matching events.

Utility Port (DB-9)

Use to attach optional external equipment in automatic test environments. Signals include:

- SDA, SCL Input
- SDA, SCL Output (TTL)
- Trigger Input, Trigger Output (TTL)

Interface Options

- ISA, PCI, or PC Card (formerly PCMCIA)

Optional Add-On Interface kits available separately.

Control Software

The I²C Bus Monitor Plus includes an extensive array of message monitoring capabilities. These include:

Display Options

- I²C Bus Events (Start/Stop, R/W, Ack/Nack)
- Bit, Byte, and Message Timing (uS)
- Message Bit Rate (Bits/Sec)
- Absolute or Relative Time Measurement

Protocols Supported

- I²C Hex—Displays all data in hexadecimal.
- I²C ASCII—Displays data in printable ASCII or hexadecimal.
- SBS—Displays Smart Battery System (SBS V1.0, V1.1) data in engineering units with protocol revision selection (Host, Battery, Charger, and Selector) and violation detection.

Message Filtering

- Bus activity can be monitored on a selective or non-selective basis. Filter displayed messages on Slave Address, up to 8 Data bytes, and SBS protocol violation only.

SDA/SCL Logic Threshold Control

- Software controlled 0.7V to 2.5V.

Software Requirements

- 32-bit Windows (95/98/ME/NT4/2000/XP).

Power

- Includes external Wall Power Supply (USA, Euro, or International).

Subject to change without notice.

Included Parts List

1. I²C Bus Monitor Plus Pod.
2. I²C Bus Monitor Plus Software for Windows.
3. Computer Interface Card (ISA, PCI, or PC Card).
4. Computer Interface Cable.
5. Interface Card Driver CD.
6. I²C Bus Clip Lead Cable, 2 Ft.
7. I²C Interface Cables, 4 Ft.
8. BNC to Clip Lead Trigger Cable.
9. Power Supply (USA, Euro, or International).
10. User's Guide.

Optional Add-On Parts

1. ISA Interface Kit (#MIIC-102/ISAH).
2. PCI Interface Kit (#MIIC-102/PCIH).
3. PC Card Interface Kit (#MIIC-102/PCCH).

Order Part Number	
Interface Option	Power Option
ISA	Blank = 120/60, USA Plug
PCI	E = 220/50, Euro Plug
PCC (for PC Card, formally PCMCIA)	I = 120-220/50-60, International Plug Set



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