I^{2}C Bus / SMBus Tools

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I^{2}C Bus / SMBus Monitors

MCC
Micro Computer Control
Small Area Network Specialists

I^{2}C Bus Monitor Plus (MIIC-102)

The I^{2}C Bus Monitor Plus is our laboratory grade troubleshooting instrument for the Inter-Integrated Circuit (I^{2}C) Bus, SMBus, and other derived protocols. When connected to an I^{2}C or derived protocol bus and a host computer, the I^{2}C Bus Monitor Plus captures, filters, and displays bus message data and timing

PRODUCT HIGHLIGHTS
- Benchtop Laboratory Grade Unit.
- Capture, Filter, Display, Analyze.
- 400KHz, Address+Data Filtering, uSec Timestamp, Real-time Trigger In+Out.
- Includes free I^{2}C and SMBus Analyzer Software.
- See Smart Battery Data in Engineering.
- Used by Leading Engineers Worldwide.
- CE Certified.
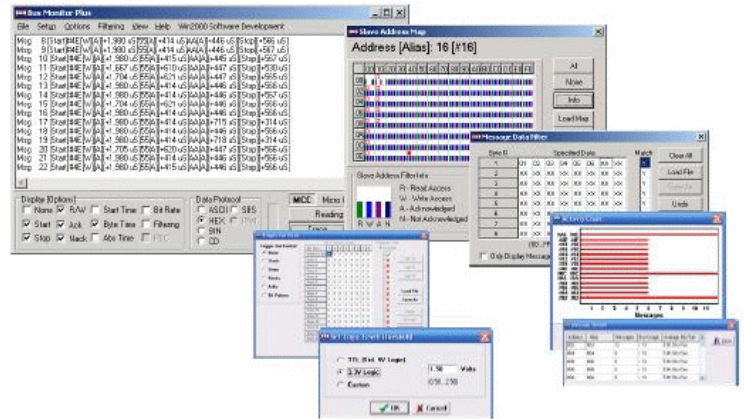
I^{2}C Bus Monitor (MIIC-101G)

The I^{2}C Bus Monitor is our Stand-Alone and Remote Troubleshooting Tool for the I^{2}C (Inter Integrated Circuit) serial bus developed by NXP (Philips) Semiconductor, or the System Management Bus (SMBus) developed by Intel, and other derived protocols.

PRODUCT HIGHLIGHTS
- Hand held or Remote Operation.
- Capture, Filter, Display, Analyze.
- 100KHz, Address Filtering, Real-time Trigger In+Out.
- LCD Display or Optional Analyzer Software.
- See Smart Battery Data in Engineering.
- World's Most Widely Used I^{2}C Bus Monitor.
- CE Certified.

I^{2}C Bus Adapters

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USB To I^{2}C Bus

RS-232 To I^{2}C Bus

Our I^{2}C Bus adapters bring I^{2}C directly to any computer. Just plug an iPort into your computer's USB or RS-232 port, load our free software, and you will be sending and receiving I^{2}C messages in seconds.

Capabilities Chart	i2cStick (MIIC-207)	iPort/USB (MIIC-204G)	iPort/AFM (MIIC-203G)	iPort/AI (MIIC-202G)	iPort (MIIC-201G)
I^{2}C Speed (kbps)	23,86, 100,400	23,86, 100,400	23,86, 100,400	100	12.5,100
I^{2}C Voltage (Volts)	3.3 to 5	3.3 to 5	3.3 to 5	3.3 to 5	3.3 to 5
Communication Speed (bps)	Virtual (1) 115200	Virtual (1) 115200	115200	19200	19200
Buffer (bytes)	256	256	256	16	16
OS	Win, Linux	Win, Linux	ALL	ALL	Win
Power	USB	AC or USB	AC or I^{2}C	AC or I^{2}C	AC or I^{2}C
Clip Lead Cable	Optional	Included	Optional	Optional	Optional
Interrupt Signal	No	Yes	Yes	No	No
iBurner I^{2}C EEPROM Programming Software	Free	Free	Free	Free	No
I^{2}C Message Center Software	Free	Free	Free	Free	Free
LabVIEW Library	Optional	Optional	Optional	Optional	No
.NET Library	Free	Free	Free	Free	No
Smart Battery Software	No	No	No	No	Optional

1) Virtual Communication Port (VCP) driver assigns standard COMn port number.
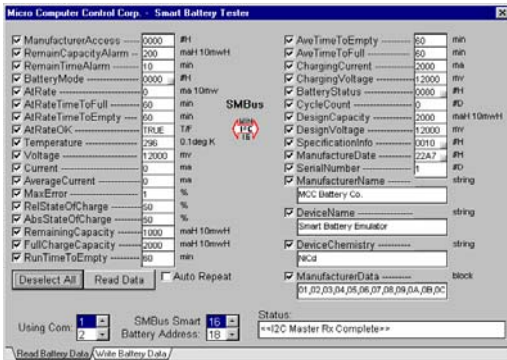
PRODUCT HIGHLIGHTS
- Add I^{2}C to Your Windows (x86 or x64) 7, Vista, XP, 2000, ME, 98se, or Linux PC.
- Supports 7-bit addressing Standard (100k) and Fast (400k) Mode I^{2}C Bus Activity.
- High Performance I^{2}C Bus Co-Processor.
- Maximum I^{2}C Bus Throughput with Low Overhead.
- 19.2, 57.6, and 115.2k RS-232 Baud Rates.
- Supports Bus Master and Slave, Transmit and Receive, and /INT Signaling (on selected models).
- Supports Multi-Master systems with Arbitration Loss Detection.
- Compatible with 3v and above I^{2}C , or 1.5v and above with our iVoLT Voltage Level Translator.
- USB Bus Powered.
- Includes our free I^{2}C Message Manager and Message Center Windows software.
- Download our free iBurner EEPROM Programming software.
- Download our free iPort/USB Driver for Linux.
- Download our free Message Center for Linux software.
- Simple ASCII commands make building custom I^{2}C applications EASY.
- Virtual Com Port based driver eliminates USB complications.
- Compatible with existing iPort/AI and iPort/AFM applications.
- Download free Sample Projects in C++, Visual Basic, VB.NET, C#.NET, J#.NET, and C++.NET.
- Compatible with our LabVIEW Driver Library.
- eXtended Commands support 2-Wire, "I^{2}C-Like" and low level signaling.
- Built-in ESD and Auto-Resetable Fuse Protection (on USB-based models).
- USB-IF and WHQL Certified, CE Marked.
- NXP microcontroller-based. Fully licensed to use the I^{2}C Bus technology.
- See Capabilities Chart for specific adapter details.

Software and Accessories

SMBus Smart Battery Tools

Smart Battery Tester (SBTest) connects directly to an SMBus Smart Battery V1.0 via an iPort Host Adapter, and provides direct on-screen access to the battery's internal parameters.

SBTest can Read or Write smart battery parameters. Its primary use is to confirm or exercise a smart battery's operation over a period of time. Operations include selection of parameters to access, single or repeated access, display of parameters in engineering units, and logging of selected battery parameters to a comma-delimited file for importation into a spreadsheet program.
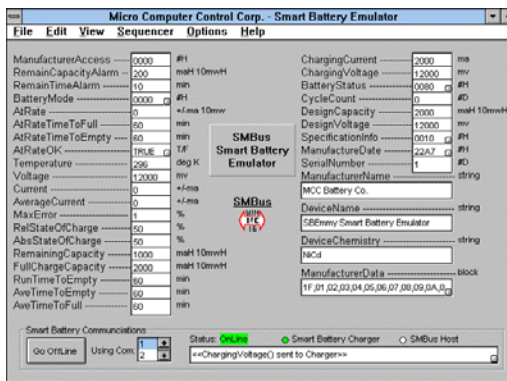
Smart Battery Emulator (SBEmmy) is designed to emulate the messaging system of an SMBus Smart Battery V1.0, providing a tool for SBS Host or Device developers. It provides direct on-screen access to the over 30 parameters within an emulated smart battery. When connected to a Smart Battery System via an iPort Host Adapter, SBEmmy responds to messages from other SBS devices, and can generate Host and Charger Warning and Alarm messages in accordance with Smart Battery System specifications.

I^{2}C Bus Accessory Boards, Interfaces, and Cables

I^{2}C Bus Prototyping Board (IP-101)

I^{2}C Bus Distribution Board (IP-201)

I^{2}C Bus Voltage Level Translator (iVoLT)
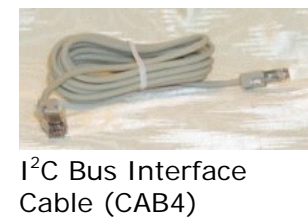

I^{2}C Bus Clip Lead Cable (CABCL)

I^{2}C Bus Mux Board (IP-201)

I^{2}C Bus Multiplexer Cabinet (CALL)

I^{2}C Bus ESD/Overvoltage Protection (iProTx)

I^{2}C Bus Interface Cable (CAB4)