

SBC485B

A ruggedized data acquisition and control computer solution for standalone and networked monitoring and control. Analog I/O, Digital I/O and Network Communications.

THE SBC485B - FEATURES:

- ◆ RISC microprocessor running at 20 MHz.
- ◆ Transient Protected wide input range, 15-35 VDC.
- ◆ RS-232 communications up to 19,200 baud with RJ-45 connector.
- ◆ Transient Protected RS-485 half-duplex connection with multi-drop capability and up to 4000 ft. cabling.
- ◆ Address selection dipswitch for up to 31 networked controllers.
- ◆ Two 4-20ma 12-bit Digital to Analog outputs.
- ◆ Eight 12-Bit Analog to Digital Converter Channels.
- ◆ Eight bi-directional digital I/O to connect to keypads, LCD's and discrete control lines.
- ◆ Two SPDT Relay Outputs.
- ◆ 512 bytes of EEPROM for non-volatile storage of calibration or other constants.
- ◆ A Windows(tm) program is available to control the SBC485 from a PC.
- ◆ Simple ASCII communications protocol.
- ◆ Integration with Visual Basic, Visual C and Think & Do Control software.

THE SBC485B - APPLICATIONS:

The SBC485B is designed for industrial control and OEM applications.

- ◆ Data Acquisition and control in distributed environmental control and monitoring systems.
- ◆ Standalone data recording and monitoring.
- ◆ OEM applications include RF synthesizer control, industrial process control systems, etc.

SBC485B SPECIFICATIONS

Size	6.00" X 4.25"
Processor	RISC Processor w/ EPROM, SRAM and EEPROM.
CLK Speed	20 MHz
Power	15-35 VDC power supply, 1.2 Watts max.
RS-232	RJ-45, Up to 19200 Baud.
RS-485	Network Multi-drop, Up to 19200 Baud.
D/A Conv.	12-Bit, up to 2 Channel, 4-20 mA.
A/D Conv.	12-Bit, 8 Channel, 2.5, 5.0 and 10.0 V.f.s.
Digital I/O	8-Bit Bi-directional w/optional bias resistors
Relays	2 SPDT Electromechanical Relays

POWER SUPPLY

The low EMI power supply provides power for all standard and optional features from a wide range DC input.

SERIAL COMMUNICATIONS

The SBC485 includes RS-232 capability and allows communication with any terminal or PC. In addition it provides the OEM with a multi-drop capable RS-485 full-duplex interface switch configurable to 31 unique addresses. The Baud rate is programmable. The Serial Communications pins are transient protected.

DIGITAL I/O

The digital I/O capability is 8 bits and based on a Phillips μ C bi-directional data port. The port allows easy interface to standard parallel LCD's and keypads. Sockets for SIP resistor pull-ups are provided to increase source current if necessary.

RELAYS

Two SPDT Electromechanical Relays provide an additional two outputs to drive valves, contactors, sensing circuits or alarms.

LED AND ENCODER INTERFACE (OPTIONAL)

An optional LED and Encoder interface provides a user interface for data entry and display.

POWER SUPPLY

The low EMI power supply operating from DC provides power for all standard and optional features.

TECHNICAL MANUAL

A complete technical manual includes:

- ◆ Complete specifications.
- ◆ Functional descriptions.
- ◆ Operating Instructions.
- ◆ Test and troubleshooting information.

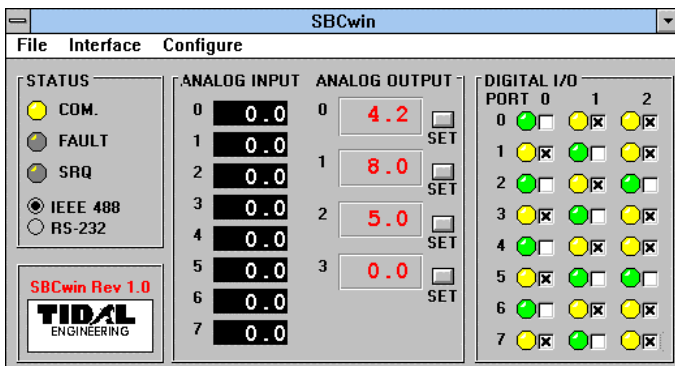
SOFTWARE

SBC485B includes application firmware in EPROM for:

- ◆ RS-232/RS-485 Functions and I/O D/A, A/D and Digital I/O commands.

A Windows(tm) program called SBCwin is provided to control the SBC485B from a PC using either the RS-232 or RS-485 interface.

The SBC485B and the Visual Basic source code for SBCwin are also available to OEM's as a starting point for your dedicated control program development.



Custom and Turnkey control systems are available based on the SBC-485B. Our experienced team of hardware engineers, programmers and integrators provide turnkey solutions to control and monitoring requirements.

Think & Do software development and integration with the SBC-485B data acquisition boards results in state-of-the-art performance and reliability for medium to large-scale control and monitoring requirements.

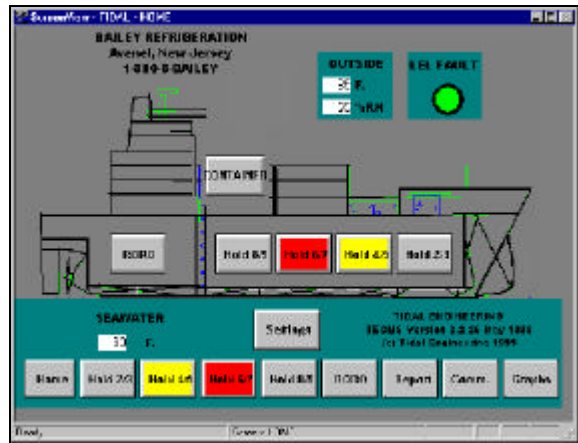
INTEGRATION APPLICATIONS

Recent integration applications include:

- ◆ Shipboard environmental control and monitoring systems.
- ◆ Plastics web discharge monitoring and control.
- ◆ Battery charger control and reporting.



SBC485B W/THINK & DO SOFTWARE INTEGRATION



PRICE LIST (PRICES EFFECTIVE UNTIL JULY 2001)

Model	Description	EA.
SBC485B	Loaded SBC485B, 20 MHz, RS-485 & RS-232 Interfaces, 2 Current output D/A channels, 8 A/D Channels, 2 relay outputs.	\$550
LED-EN	Eight 7 Segment LED with Encoder interface	\$75

The SBC485B is available exclusively from:

ADI AMERICAN DISTRIBUTORS INC.

ADI is an ISO-9002 certified distributor of Electronic and Electro-Mechanical components and assemblies. Founded in 1983, ADI serves domestic and international customers in both commercial and military markets. ADI has introduced several high technology board level solutions in joint venture with Tidal Engineering. Tidal Engineering, founded in 1994, is involved in contract engineering and product development in embedded software, digital, analog and power electronics.



ADI American Distributors Inc.
 Distributors of Electronic and Electro-Mechanical Components
 2 Emery Avenue, Randolph NJ 07869
 Tel (973)-328-1181 • Fax (973)-328-2302
 Email craig@tidaleng.com
<http://www.tidaleng.com>

Our products have been recognized in "Test and Measurement World's "Best in Test Awards".

For more information contact Craig Borax