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BL1600 Dimensions; Inputs and Outputs

Little G BL1600

- 26 logic-level I/O are ideal for data acquisition and control
- 6 high-current drivers power solenoids, relays, and small motors
- Optional Prototyping Board makes custom circuit design easy
- A PLCBus[™] port allows you to add Z·World expansion boards, increasing the overall functionality

The BL1600's combination of logic-level I/O and highcurrent drivers makes it a versatile single-board computer in a compact "form factor." Ideal for many OEM applications, the BL1600 provides 12 digital inputs and 14 digital outputs, along with RS-485 and RS-232 serial ports.

The BL1600's battery-backed RAM, battery-backed real-time clock, and EEPROM protect data when power is disconnected or when operating under severe power fluctuations.

Connecting the BL1600 to peripheral devices is easy through the ribbon-cable header and the unit's screw terminals. An optional Prototyping Board is available for developing custom circuits for system expansion or for operator interfaces.

The PLCBus[™] expansion port allows adding I/O lines, relays, analog conversion channels, and more control.

Programming the BL1600

Programs for the BL1600 are developed using the Dynamic C[®] 32 software development system described on page 6.

Little G Tool Kit

The Little G BL1600 Tool Kit contains all the tools needed for fast prototyping: a manual with schematics, programming cable, AC adapter, 128K flash EPROM, and "breakout cables" for the connector headers. The kit also includes a sourcing high-current driver. International orders do not include the AC adapter unless specifically requested.

Versions

BL1600 Full-featured SBC. Specifications stated above **BL1610** BL1600 without serial ports, high-current driver chip, EEPROM, or real-time clock. 2 additional outputs available

BL1600 Specifications

Board Size	4.52" x 4.175" x 1.0"
Enclosure Size	N/A
Operating Temp.	-40°C to +70°C
Humidity	5–95%, non-condensing
Power Requirements	9–24 V DC, 150–270 mA. Linear regulator
Configurable I/O	8 additional inputs when PLCBus™ not used
Digital Inputs	12, TTL- and CMOS-compatible, 2.5 V digital threshold
Digital Outputs	 14, TTL- and CMOS-compatible. 6 can be high-current outputs. 1 additional high-current output is available if RS-485 is not used. At 25°C, a channel can sink up to 500 mA continuously. Output is subject to package power limits and duty cycle. Load limit is 48 V
Analog Inputs	No
Analog Outputs	No
Resistance Meas. Input	No
Processor	Z180 at 9.216 MHz
SRAM	32K, socketed (supports up to 512K)
EPROM	32K, socketed (supports up to 512K)
Flash EPROM*	Supports up to 256K See Options and Upgrades above
EEPROM	512 bytes
Counters	2 in hardware, others in software
Serial Ports	Either 2 RS-232, or 1 RS-232 (with RTS/CTS handshake) and 1 RS-485 (two-wire)
Serial Rate	Selected baud rates up to 57,600 bps
Watchdog/Supervisor	Yes
Time/Date Clock	Yes
Backup Battery	3 V lithium coin-type, 190 mA·h
Keypad and LCD	Supported on digital I/O lines or through LCD Controller via PLCBus™
Expansion Port	PLCBus™

*Flash memory replaces standard EPROM.

Options and Upgrades

Prototyping Board. Plugs on top of the BL1600 or BL1610, providing a large prototyping area for custom circuits and interfaces
Flash EPROM. 128K and 256K. Factory installed
SRAM. 128K and 512K. Factory installed
LCD Controller Cards. 4 x 20, 4 x 40 character, 240 x 64 graphics