



# BL2000 Wildcat™

*Single Board Computer*

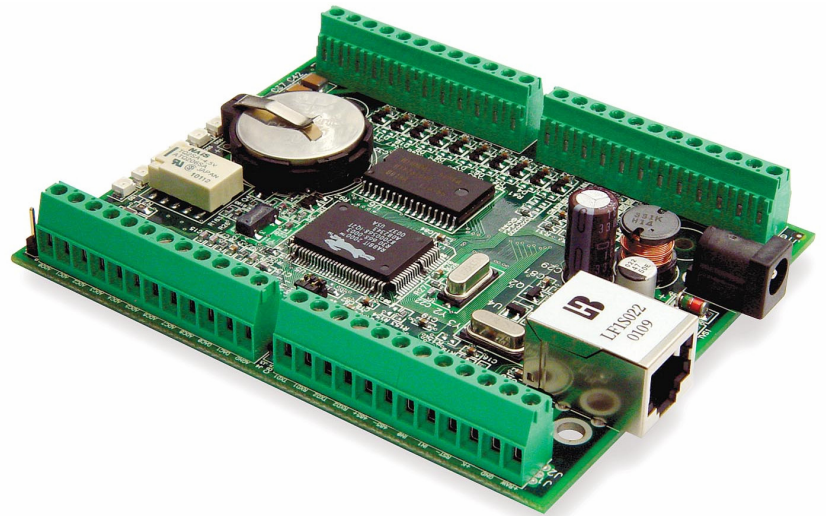
**Models BL2000, BL2010, BL2020, BL2030**

The Wildcat gives OEM designers Ethernet connectivity in a low-cost, high-performance single-board computer. These compact boards are rich with the digital I/O, A/D, and D/A designers need for embedded control and monitoring applications. In addition, the Wildcat's compact board size of 4.15" x 3.43" (105 x 87 mm) allows for easy integration. Ethernet models are ideal for remotely monitoring and supervising another programmable system or web-enabling new or existing products. For applications where Ethernet connectivity is not required, the Wildcat has non-Ethernet versions.

## Features

- Rabbit 2000 microprocessor @ 22.1 MHz
- 10Base-T Ethernet with RJ-45
- Up to 28 digital I/O
- Up to 11 A/D and 2 D/A
- 4 serial ports
- Optional 512K Flash / 512K SRAM
- Onboard relay

The BL2000 models are available in four configurations—two with Ethernet, two without, and feature up to 28 digital I/O including 5 or 7 dual-purpose analog or digital inputs, 3 RS-232/485 serial ports (plus one programming port), Rabbit 2000™ microprocessor at 22.1 MHz, 128K SRAM and 256K Flash, onboard SPDT relay, LEDs, 7 timers, and battery-backed real-time clock.



For the most demanding applications, the BL2000 and BL2020 models include 4 channels of 12-bit resolution A/D input, 5 channels of dual-purpose input, and 2 channels of 12-bit D/A output. For applications not requiring high-resolution analog I/O, the BL2010 and BL2030 offer 4 channels of 10-bit resolution A/D input and 7 channels of dual-purpose input. The dual-purpose inputs are software configurable as analog inputs or programmable-threshold digital inputs.

All BL2000 models can be programmed and debugged over Ethernet/Internet using appropriate accessory hardware. Systems with built-in 10Base-T Ethernet can be directly controlled and monitored across networks or the Internet and can also open sockets to remote devices, serve web pages, or send E-mail.

## Programming the Wildcat

Programs are developed using Z•World's industry-proven Dynamic C® software development system. An extensive library of drivers and sample programs is provided, along with royalty-free TCP/IP stack with source. All Wildcat models can be programmed and debugged over Ethernet/Internet using appropriate accessory hardware.

## BL2000 Wildcat Specification

Feature	BL2000	BL2010	BL2020	BL2030
<b>Microprocessor</b>	Rabbit 2000 at 22.1 MHz			
<b>Ethernet Port</b>	10Base-T, RJ-45, link and activity LEDs		None	
<b>Flash Memory</b>	256K (standard)			
<b>SRAM</b>	128K (standard)			
<b>Backup Battery</b>	Socketed 3 V lithium coin-type, 256 mA h, supports RTC and SRAM			
<b>Keypad/Display</b>	See our "OP" products for serial display options			
<b>Digital Inputs</b>	11: protected to $\pm 36$ V DC			
<b>Digital Outputs</b>	8: sink 200 mA, 2: sink 750 mA, 40 V DC max.			
<b>Analog Inputs</b>	Four 12-bit resolution	Four 10-bit resolution	Four 12-bit resolution	Four 10-bit resolution
	1 M $\Omega$ , $\pm 10$ V DC, up to 4,000 samples/sec			
<b>Analog Outputs</b>	Two 12-bit resolution, 0-4 V DC, update rate 12 kHz	None	Two 12-bit resolution, 0-4 V DC, update rate 12 kHz	None
<b>Dual Purpose Analog or Digital Inputs</b>	5 at 12 k $\Omega$ , 12-bit resolution, 0-48 V DC	7 at 12 k $\Omega$ , 10-bit resolution, 0-48 V DC	5 at 12 k $\Omega$ , 12-bit resolution, 0-48 V DC	7 at 12 k $\Omega$ , 10-bit resolution, 0-48 V DC
<b>Relay Output</b>	SPDT, 1 A @ 30 V DC, 0.3 A @ 120 V AC Uses 1 digital output			
<b>Serial Ports</b>	4 total: two 3-wire (or one 5-wire) RS-232, 1 RS-485, and one 5 V CMOS-compatible (programming)			
<b>Serial Rate</b>	Max. burst rate=CLK/32 Max. sustained rate=burst/2			
<b>Connectors</b>	Screw terminals support max. 14 AWG/1.5 mm <sup>2</sup> (standard)			
<b>Real-Time Clock</b>	Yes			
<b>Timers</b>	Five 8-bit timers (four cascadable from the first) and one 10-bit timer with 2 match registers			
<b>Watchdog/Supervisor</b>	Yes			
<b>Power</b>	9-40 V DC or 24 V AC $\pm 10\%$ , 1.5 W max., power jack			
<b>Operating Temp.</b>	-40°C to +70°C			
<b>Humidity</b>	5-95%, non-condensing			
<b>Board Size</b>	3.413" x 4.139" x 0.82" (87 x 105 x 21 mm)			
<b>Enclosure Size</b>	4.9" x 5.6" x 1.1" (124 x 142 x 28 mm)			
<b>LEDs</b>	8 total: Power On, Microprocessor Error, Ethernet Link, Ethernet Activity, 4 Output status		6 total: Power On, Microprocessor Error, 4 output status	
<b>Pricing (qty. 1/100)</b>	\$249 / 219	\$199 / 175	\$209 / 184	\$159 / 140
<b>Part Number</b>	101-0430	101-0455	101-0456	101-0457
<b>Starter Packages</b>	\$449	\$399	\$409	\$359
<b>Part Number</b>	U.S. 101-0472 Int'l 101-0476	U.S. 101-0472 Int'l 101-0476	U.S. 101-0472 Int'l 101-0476	U.S. 101-0472 Int'l 101-0476