

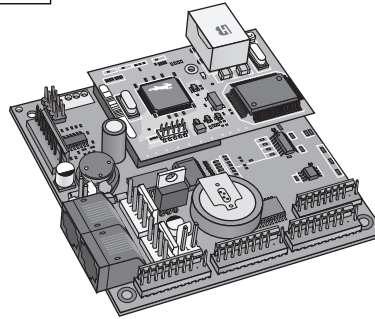
# RABBIT Single Board Computers



Products may be RoHS compliant.  
Check mouser.com for RoHS status.

## BL2500 COYOTE

Gives OEM designers extremely low-cost embedded control for high-volume applications such as product control, factory equipment control, access control, HVAC, and vending machines. Two standard models—one with Ethernet, one without—feature the Rabbit 3000™ microprocessor at 29.4 MHz, with 256K Flash and 128K SRAM.



### Complete Kits For New Users

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
	<b>812—20-101-0577</b>	Jumpstart your evaluation and design efforts with a complete development kit, which includes BL2500 Coyote, demonstration board, Dynamic C development system and complete documentation CD-ROM, serial cable for programming and debugging.	<b>299.00</b>

### Product Only

\* RoHS Compliant † Requires 1.27mm programming cable

*812—101-20-0575	BL2500 10Base-T Ethernet	<b>189.00</b>
812—101-0599	BL2500 with 512K/512K	<b>209.00</b>
812—20-101-0602	BL2500 with 10/100, 512K/512K, 44.2clk †	<b>239.00</b>
812—20-101-0576	BL2510 No Ethernet	<b>149.00</b>
812—101-0600	BL2510 with 512K/512K	<b>179.00</b>

### Expansion Boards

\* RoHS Compliant

812—101-0688	RabbitNet D/A Expansion Card	<b>89.00</b>
812—101-0617	RN1400 RabbitNet Relay Expansion Card	<b>89.00</b>
812—101-0616	RabbitNet A/D Expansion Card	<b>89.00</b>
*812—20-101-0612	RabbitNet Digital I/O Expansion Card	<b>89.00</b>
694—101-0467	8 Meg Serial Flash	<b>119.00</b>
812—101-0282	Universal Relay Board	<b>99.00</b>
*812—20-101-0879	RN1600 RabbitNet Keypad/Display Interface Card	<b>69.00</b>

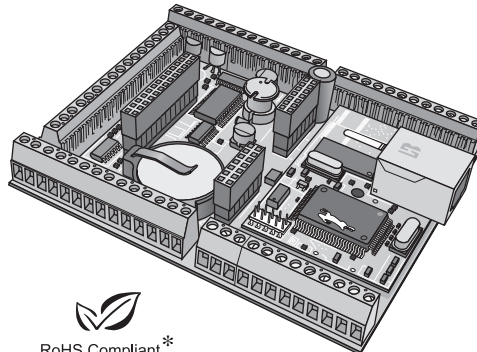
### Programming/Development Tools

\* RoHS Compliant

694—101-0666	Dynamic C Module	<b>359.00</b>
*694—20-101-0580	RabbitLink Card	<b>129.00</b>
694—101-0589	Rabbit Cloning Board	<b>89.00</b>
694—540-0070	RS-232-to-USB Converter Cable	<b>39.00</b>
538—63811-1000	Crimp Tool	<b>39.00</b>
*694—20-101-0542	1.27 mm Programming Cable	<b>25.00</b>
*812—20-101-0581	Connectivity Kit	<b>18.00</b>
812—101-0887	RN1600 RabbitNet Expansion Kit	<b>149.00</b>

## BL2100 SMARTCAT

Designed for medium-scale control and monitoring applications, the Smartcat is a high-performance single-board computer that gives OEM designers Ethernet and keypad/display options all in one low-cost package. The Smartcat offers plenty of sinking/sourcing digital I/O with A/D and D/A, providing comprehensive integrated control capabilities in a compact 4.14" x 3.41" (105 x 87 mm) form factor. Ethernet models are ideal for remotely monitoring and supervising another programmable system or web-enabling new or existing products. The Ethernet interface is fully supported by software to enable network and Internet connectivity.



### Specifications:

\* 13–36 V DC supply voltage required

Feature	BL2100	BL2110	BL2120	BL2130
Microprocessor	Rabbit 2000™ @ 22.1 MHz			
Ethernet Port	10Base-T, RJ-45, link and activity LEDs	None		
Flash	256K			
SRAM	128K			
Backup Battery	Socketed 3-V lithium coin-type, 265 mA•h, supports RTC and SRAM			
Keypad/Display	See keypad/display options and our "OP" products (for serial display options)			
Digital Inputs	24: protected to ± 36 VDC			
Digital Outputs	16: source/sink 200 mA each, 36 VDC max.			
Analog Inputs	11 at 1 MΩ, 12-bit resolution, ±10 VDC, up to 4,100 samples/sec	None	11 at 1 MΩ, 12-bit resolution, ±10 VDC, up to 4,100 samples/sec	None
Analog Outputs	Four 12-bit resolution, 0-10 VDC*, update rate 12kHz	None	Four 12-bit resolution, 0-10 VDC*, update rate 12kHz	None
Serial Ports	4 total: two 3-wire (or one 5-wire) RS-232, 1 RS-485, and one 5 V CMOS-compatible (programming)			
Serial Rate	Max. burst rate = CLK/32 Max. sustained rate=burst/2			
Connectors	Screw terminals support max. 14 AWG/1.5 mm2			
Real-Time Clock	Yes			
Timers	Five 8-bit timers (four cascaded from the first) and one 10-bit timer with 2 match registers			
Watchdog/Supervisor	Yes			
Power	9–36 VDC, 1.5 W max. (without display), 3 W max. (with display)			
Operating Temp	–40°C to +70°C			
Humidity	5–95%, non-condensing			
Board Size	4.14" x 3.41" x 0.93" (105 x 87 x 24 mm)			

### Specifications:

Feature	BL2500	BL2510
Microprocessor	Rabbit 3000™ at 29.4 MHz	
Ethernet Port	10Base-T, RJ-45	N/A
Flash Memory	256K (standard)	
SRAM	128K (standard)	
LED's	4-User-programmable	
Digital Inputs	16: 15 protected to ±36 VDC, 1 protected to +5 –36V; threshold is 1.5 V nom.	
Digital Outputs	8, sink up to 200 mA each, 36 V DC max. standoff voltage	
Analog Inputs	One 10-bit resolution, 8-bit accuracy, input range 0.1–3.1 V, 10 samples/s	
Analog Outputs	Two 9-bit PWM, 0.1–3.1 VDC, 17ms settling time	
Serial Ports	6 serial ports: 1 RS-485, 2 RS-232 or one RS-232 (with CTS/RTS), 1 CMOS level asynchronous or clocked serial port, 1 expansion serial port multiplexed to two RS-422 clocked SPI ports, 1 CMOS compatible serial port for programming/debug	
Serial Rate	Max. async = CLK/8, Max. sync = CLK/2	
Real-Time Clock	Yes	
Timers	Ten 8-bit timers (6 cascaded from the first) and one 10-bit timer with 2 match registers	
Watchdog/Supervisor	Yes	
Power	8 – 40 V DC 1 W typical w/ no load	8 – 40 V DC 0.8 W typical w/ no load
Backup Battery	3 V lithium coin-type, 1000 mA•h, supports RTC & SRAM	
Operating Temperature	–40° to +70°C	
Humidity	5 – 95%, noncondensing	
Connectors	5 polarized 9-pin Molex® type terminals with 0.1" pitch, Two 4-pin 0.156" pitch Molex type, two 0.156" pitch 2-pin Molex type, two RJ-45, one 0.1" pitch 2x5 IDC, one 2 mm pitch 2x5 IDC programming port	
Board Size	3.95" x 3.95" x 1.16" (100 x 100 x 29 mm)	3.95" x 3.95" x 0.80" (100 x 100 x 20 mm)

### Tool Kit

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
	<b>812—101-0482</b>	SmartCat Tool Kit (board not included)	<b>200.00</b>

### Product Only

\* RoHS Compliant

*812—20-101-0461	BL2100 Analog and Ethernet	<b>339.00</b>
*812—20-101-0568	BL2100 with 512K/512K	<b>379.00</b>
*812—20-101-0567	BL2100 IDC Headers	<b>364.00</b>
812—101-0790	BL2100 IDC Headers, 512K Flash	<b>404.00</b>
812—101-0566	BL2100 Friction Lock Connectors	<b>379.00</b>
812—101-0818	BL2100 Friction Lock Connectors, 512K Flash	<b>404.00</b>
812—101-0565	BL2100 Bottom Mount Sockets	<b>379.00</b>
812—101-0568	BL2100 512K/512K	<b>379.00</b>
812—101-0531	BL2101 0-10V A/D	<b>339.00</b>
812—20-101-0573	BL2101 512K/512K	<b>379.00</b>
812—101-0697	BL2102 Bottom Mount Connectors	<b>379.00</b>
812—101-0462	BL2110 Ethernet, no Analog	<b>249.00</b>
812—101-0551	BL2110 IDC Headers	<b>274.00</b>
812—101-0550	BL2110 Friction Lock Connectors	<b>274.00</b>
812—101-0851	BL2110 Friction Lock Connectors, 512K/512K	<b>314.00</b>
812—101-0549	BL2110 Bottom Mount Sockets	<b>289.00</b>
812—101-0572	BL2110 512K Flash	<b>289.00</b>
*812—20-101-0463	BL2120 Analog, no Ethernet	<b>299.00</b>
812—101-0571	BL2120 IDC Headers	<b>324.00</b>
812—101-0570	BL2120 Friction Lock Connectors	<b>324.00</b>
*812—20-101-0569	BL2120 Bottom Mount Sockets	<b>339.00</b>
812—101-0464	BL2130 No Analog, no Ethernet	<b>209.00</b>
812—101-0548	BL2130 IDC Headers	<b>234.00</b>
812—101-0547	BL2130 Friction Lock Connectors	<b>234.00</b>
812—101-0546	BL2130 Bottom Mount Connectors	<b>249.00</b>

### Product Options and Accessories

\* RoHS Compliant

694—101-0666	Dynamic C Module	<b>359.00</b>
694—101-0589	Rabbit Cloning Board	<b>89.00</b>
*694—20-101-0513	2mm Programming Cable	<b>25.00</b>
812—101-0106	24VDC/110 Power Supply	<b>15.00</b>

### Expansion Boards

\* RoHS Compliant

*694—20-101-0467	8 Meg Serial Flash	<b>89.00</b>
812—101-0282	Universal Relay Board	<b>99.00</b>

### Mounting/Display

*694—20-101-0465	Keypad/Display Unit	<b>79.00</b>
812—151-0127	Panel-Mount Keypad/Display Unit	<b>99.00</b>
812—101-0466	Keypad/Display Unit w/Case	<b>99.00</b>
694—540-0066	Keypad/Display Unit Cable 20'	<b>15.00</b>
812—101-0495	Baseplate	<b>10.00</b>

