RabbitNet™

Expandable Control Boards

A point-to-point synchronous protocol that connects additional I/O and analog cards to a master device.

Overview

The RabbitNet signals are differential RS-422, which are series-terminated at the source. Peripheral cards and master controllers connect using a standard CAT 5/6 Ethernet cable or a crossover cable if using an OP7200 as a slave display.

There are several RabbitNet card options which include:

- RN1100 - Digital I/O
- RN1200 - A/D
- RN1300 - D/A
- RN1400 - Relay expansion
- RN1600 - Keypad display interface.

The RabbitNet system typically consists of a master single-board computer and one or two peripheral cards. Several Rabbit SBCs such as the BL4S200 or BL2600 act as the master controller for fast data processing and provide the power on board needed for the peripheral cards.

Distances between a master unit and peripheral cards can be up to 10 m or 33 ft with speeds up to 1 Megabit per second. Cards can be mounted in 100 mm DIN rail trays and optionally there is a RN1000 hub to connect up to 8 devices.

Related Products

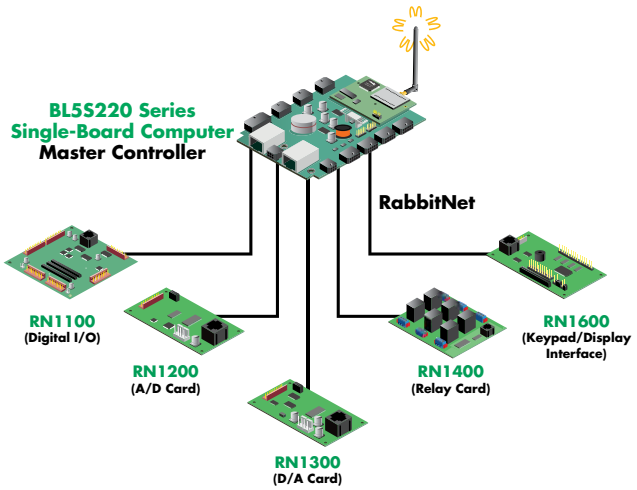
Dynamic C


BL4S200


BL2600


OP7200

Application Highlight



Features/Benefits

- 8 channels of 12-bit analog output
- 24 protected and filtered digital inputs
- 16 high-speed protected sinking/sourcing digital outputs
- 6 SPDT Relays
- 10 A maximum switching current (5A DC)
- Display and Keypad

Product Model Specifications

RabbitNet Card	RN1100	RN1200	RN1300	RN1400	RN1600
Feature	Digital I/O Expansion	A/D Expansion	D/A Expansion	Relay Expansion	Keypad /Display
Specifications	**Digital Inputs:** 24, protected to +/-40VDC, switching threshold is 1.5V nominal **Digital Outputs:** 16, push-pull up to 200mA each, 40VDC max **Analog Inputs:** 4 buffered channels 10-bit resolution, 8-bit accuracy, sample rate 1.5K samples/s, • 2 channels 0-10V, single ended • 1 channel 0-1V, single ended • 1 channel -0.25-.25V differential input resistance >100K	**Analog Inputs:** 8 single-ended 11-bit or 4 differential 12-bit analog inputs @ 1M input impedance, 2.5K samples/s sampling rate All 8 channels can be configured as 11-bit 4-20mA analog inputs	8 channels of 12-bit analog outputs, 8 ohm output impedance, 2.5kHz update rate; software controlled output-voltage ranges: 0-2.5V, 0-5V, 0-10V, 0-20V(channels AOUT0-AOUT1) 0-10V,0-20V (channels AOUT2-AOUT7)	**6 SPDT Relay Outputs:** • Max contact settling time: 10ms, Max switching voltage: 250VAC, 125VDC • Max switching capacity: 1200 VA, 240W DC • Snubbers: Buiilt-in 47W, 100nF	**Keypad Interface:** 1-64 keys **LCD interface:** 1x8 - 4x20 character display LED backlight support
RabbitNet™ Serial Port	RS-422, 1Mbps				
Power	+/-5VDC, 20mA	+5VDC, 100mA	+5VDC, 20mA DCIN>13V for 10V output, >23V for 20V output, 100mA	5V, 500mA(all relays engaged) Power save: 250mA	5V, <60mA (excluding backlight)
Operating Temperature	-40° C to +70° C		-40° C - +85° C	-40° C to +70° C	-40° C - +85° C
Humidity	5-95%, non-condensing				
Connectors	**Friction lock connectors:** • Six polarized 9-position terminals with .1" pitch • Two 2-position power terminals with 0.156" pitch • One 4-position terminal with .156" pitch • One RJ-45 RabbitNet jack	**Friction lock connectors:** • One polarized 9-position terminals with 0.1" pitch • One 4-position terminal with 0.156" pitch • One RJ-45 RabbitNet jack		• Six screw terminal headers max 14AWG • One 4-position friction-lock connector with .156" pitch • One RJ-45 RabbitNet jack	• One RJ-45 RabbitNet jack • 0.156" 4-position vertical power header • 1x16, 0.1" position vertical header for keypad interface • 2x8, 0.1" vertical header for LCDM interface • 1x16, 0.1" vertical socked for LCDM interface
Board Size	3.55" x 3.95" x 0.67" (90 x 100 x 17mm)	1.94" x 3.94" x 0.67" (50 x 100 x 17mm)	1.97" x 3.94" x .67" (50 x 100 x 17mm)	3.94" x 5.87" x .75" (100 x 150 x 19mm)	2.95" x 3.94" x .77" (75 x 100 x 20mm) (Din rail mountable)
Part Number	20-101-0612	20-101-0616	20-101-0688	20-101-1198	20-101-0879

You can purchase with confidence knowing that Digi is always available to serve you with expert technical support and our industry leading warranty. For detailed information visit www.digi.com/support

91001657
B2/415

Digi International Worldwide HQ
877-912-3444
952-912-3444
www.digi.com

Digi International France
+33-1-55-61-98-98
www.digi.fr

Digi International Japan
+81-3-5428-0261
www.digi-intl.co.jp

Digi International Singapore
+65-6213-5380

Digi International China
+86-21-50492199
www.digi.com.cn

www.digi.com