DIGI RABBITNET SERIES

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

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 OPT200 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.

**APPLICATION EXAMPLE**

**REMOTE PC**

**BL45200 SERIES**

**SINGLE-BOARD COMPUTER**

Master Controller

- **RN1100** (Digital I/O)
- **RN1200** (A/D Card)
- **RN1300** (D/A Card)
- **RN1400** (Relay Card)
- **RN1600** (Keypad/Display Interface)

**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

**RELATED PRODUCTS**

- Dynamic C®
- Rabbit® SBC BL4S200 Series
- Rabbit® SBC BL2600 Series
- Rabbit® SBC OPT700 eDisplay
- Rabbit® SBC BL2100 Series
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<th>SPECIFICATIONS</th>
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<td>20-101-0612</td>
<td>RN1100 RabbitNet Digital I/O Expansion</td>
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<td>20-101-0616</td>
<td>RN1200 RabbitNet A/D Expansion</td>
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<td>20-101-0688</td>
<td>RN1300 RabbitNet D/A Expansion</td>
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<td>20-101-1198</td>
<td>RN1400 RabbitNet Relay Expansion Card</td>
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<td>20-101-0879</td>
<td>RN1600 RabbitNet Keypad/Display Interface Card</td>
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**RABBITNET™ SERIAL PORT**

- RS-422, 1Mbps

**POWER**

- +/– 5 VDC, 20 mA
- +5 VDC, 100 mA
- +5 VDC, 20 mA DCIN=13V for 10V output, >23V for 20V output, 100 mA
- 5V, 500mA (all relays engaged)
- Power save: 250 mA
- 5V, <60 mA (excluding backlight)

**OPERATING TEMPERATURE**

- -40°C to +70°C
- -40°C to +85°C
- -40°C to +70°C
- -40°C to +85°C

**HUMIDITY**

- 5-95%, non-condensing

**CONNECTORS**

- Friction lock connectors:
  - 6 polarized 9-position terminals with .1” pitch
  - 2 2-position power terminals with 0.156” pitch
  - 1 4-position terminal with .156” pitch
  - 1 RJ-45 RabbitNet jack

- Friction lock connectors:
  - 1 polarized 9-position terminals with 0.1” pitch
  - 1 4-position terminal with 0.156” pitch
  - 1 RJ-45 RabbitNet jack
  - 6 screw terminal headers max 14AWG
  - 1 4-position friction lock connector with .156” pitch
  - 1 RJ-45 RabbitNet jack
  - 1 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)

**PRODUCT WARRANTY**

- 1 year

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