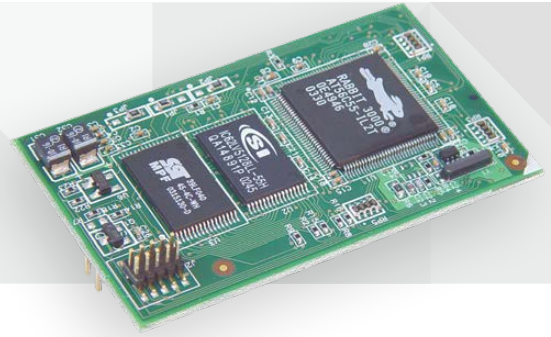




MICROPROCESSOR
CORE MODULE



DIGI RABBITCORE RCM3600 SERIES

Extremely compact and low-cost Rabbit® 3000 microprocessor based core module designed for a wide variety of applications

The RabbitCore RCM3600 series is a perfect introduction into embedded control and monitoring. Its small size and ease of integration when paired with Dynamic C® allow engineers to develop a control and monitoring solution for many of today's applications. The RCM3600 mounts directly onto a user-designed motherboard with a single 2x20 dual row IDC header, interfacing with all types of CMOS-compatible digital devices. Built-in low EMI features, including a clock spectrum spreader, practically eliminate EMI problems, which helps with passing CE and RF emissions tests.

Rabbit hardware and Dynamic C are designed in a complementary fashion for maximum performance and ease of use in embedded systems. The additional software components in Dynamic C allow you to add functionality for customized embedded applications.

BENEFITS

- Rabbit 3000 microprocessor at 22 MHz
- Up to 512K Flash/512K SRAM
- 33 parallel digital I/O with configurable options
- 4 serial ports (IrDA, HDLC, async, SPI)
- 5 VDC input, 3.3VDC interface
- Compact footprint: 2.11" x 1.23" x 0.62" (54 mm x 31 mm x 16 mm)
- Ready-made platform for fast time-to-market – save up to 3 months of design integration time
- Low-cost embedded microprocessor module

RELATED PRODUCTS



RabbitCore®
RCM3100
Series



RabbitCore®
RCM3400
Series



RabbitCore®
RCM3700
Series



RabbitCore®
RCM3900
Series



Dynamic C®

APPLICATION EXAMPLE



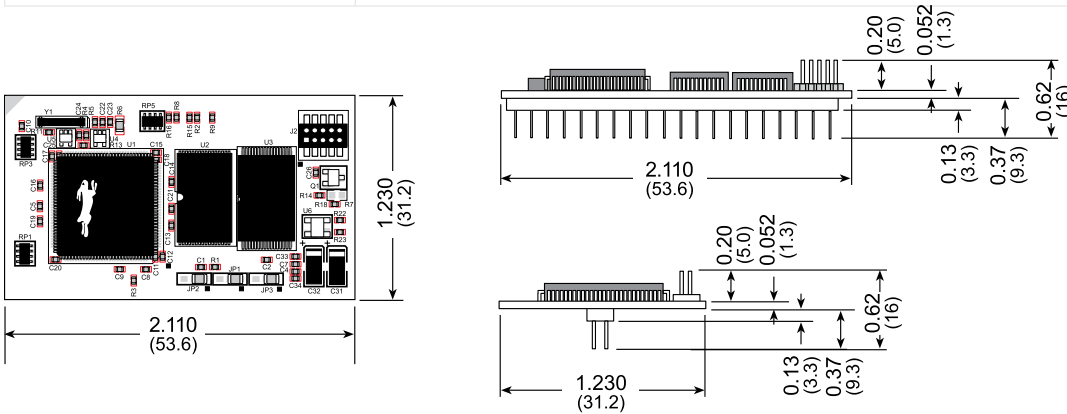
SPECIFICATIONS

RCM3600

RCM3610

FEATURE

| | | |
|--|--|------|
| MICROPROCESSOR | Rabbit® 3000 at 22 MHz | |
| FLASH MEMORY | 512K | 256K |
| SRAM | 512K | 128K |
| BACKUP BATTERY | Connection for user-supplied backup battery (to support RTC and SRAM) | |
| GENERAL-PURPOSE I/O | 33 parallel digital I/O lines: <ul style="list-style-type: none"> • 31 configurable I/O • 2 fixed outputs | |
| ADDITIONAL I/O | Reset | |
| AUXILIARY I/O BUS | Can be configured for 8 data lines and 5 address lines (shared with parallel I/O lines), plus I/O read/write | |
| SERIAL PORTS | Four 3.3V CMOS-compatible ports configurable as: <ul style="list-style-type: none"> • 4 asynchronous serial ports (with IrDA) or • 3 clocked serial ports (SPI) plus 1 HDLC (with IrDA) or • 1 clocked serial port (SPI) plus 2 HDLC serial ports (with IrDA) | |
| SERIAL RATE | Maximum asynchronous baud rate = CLK/8 | |
| SLAVE INTERFACE | A slave port allows the RCM3600 to be used as an intelligent peripheral device slaved to a master processor, which may either be another Rabbit 3000 or any other type of processor | |
| REAL-TIME CLOCK | Yes | |
| TIMERS | Ten 8-bit timers (6 cascadable), one 10-bit timer with 2 match registers | |
| WATCHDOG/SUPERVISOR | Yes | |
| PULSE-WIDTH MODULATORS | 4 PWM output channels with 10-bit free-running counter and priority interrupts | |
| INPUT CAPTURE/QUADATURE DECODER | 2-channel input capture can be used to time input signals from various port pins <ul style="list-style-type: none"> • 1 quadrature decoder unit accepts inputs from external incremental encoder modules or • 1 quadrature decoder unit shared with 2 PWM channels | |
| POWER | 5V ±0.25 VDC 60 mA @ 22.1 MHz, 5V; 38 mA @ 11.06 MHz, 5V | |
| OPERATING TEMPERATURE | -40° C to +85° C | |
| HUMIDITY | 5% to 95%, non-condensing | |
| CONNECTORS | One 2 × 20, 0.1" pitch | |
| BOARD SIZE | 1.23" × 2.11" × 0.62" (31 mm × 54 mm × 16 mm) | |
| PRODUCT WARRANTY | 3 year | |



PART NUMBERS

DESCRIPTION

| | |
|-------------|---------|
| 20-101-0672 | RCM3600 |
| 20-101-0673 | RCM3610 |

DIGI SERVICE AND SUPPORT / 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.

© 1996-2019 Digi International Inc. All rights reserved.
All trademarks are the property of their respective owners.

91001599
C4/319

DIGI INTERNATIONAL WORLDWIDE HQ
877-912-3444 / 952-912-3444 / www.digi.com

DIGI INTERNATIONAL GERMANY
+49-89-540-428-0

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

