



MICROPROCESSOR
CORE MODULE



RABBITCORE® RCM3900 SERIES

Combines Fast Ethernet, extended temperature and mass storage to bring versatility to embedded design

The RabbitCore RCM3900 series of core modules has fast program execution SRAM and data SRAM, Flash memory and the circuitry necessary for reset and management of battery backup for its internal real-time clock and data SRAM. Two 34-pin headers bring out the Rabbit® 3000's I/O bus lines, parallel ports and serial ports.

The RCM3900 modules' mass storage can use the Dynamic C® software FAT file system software component to store data and use the same directory file structure commonly used on PCs.

The microSD™ Card can be hot-swapped to transfer data quickly using a standardized file system that can be read directly from the RCM3900 module, or removed and read using a microSD card reader.

BENEFITS

- Rabbit 3000 microprocessor at 44 MHz
- Extended operating temperature range:
-20° C to +80° C
- 10/100Base-T Ethernet
- Up to 1 GB microSD hot-swappable storage
- Lower-risk design of embedded systems applications
- Software debugging directly on target hardware

RELATED PRODUCTS



RabbitCore®
RCM4300
Series



RabbitCore®
RCM3209
Series



RabbitCore®
RCM3000
Series

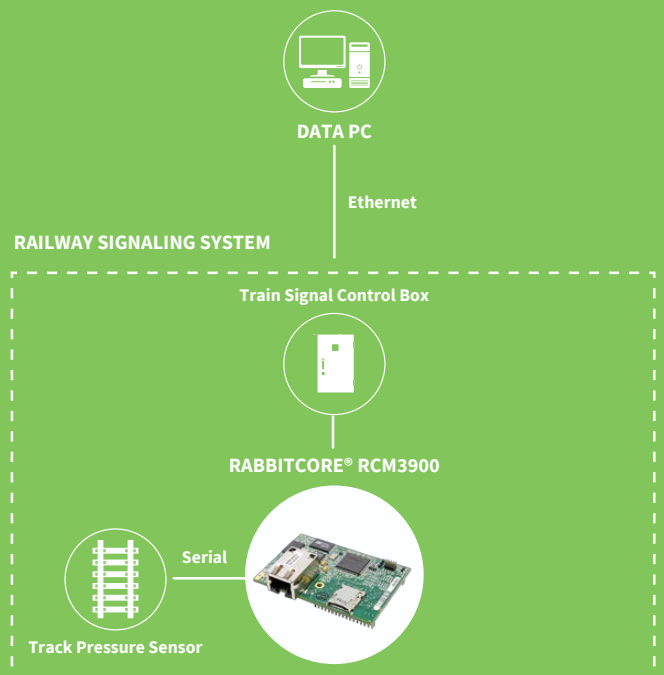


Rabbit MiniCore®
RCM6700
Series



Dynamic C®

APPLICATION EXAMPLE



SPECIFICATIONS		RCM3900		RCM3910	
FEATURES					
MICROPROCESSOR		Rabbit® 3000 at 44 MHz			
EMI REDUCTION		Spectrum spreader for reduced EMI (radiated emissions)			
ETHERNET PORT		10/100Base-T, RJ-45, 3 LEDs			
SRAM		512K program (fast SRAM) + 512K data			
FLASH MEMORY (PROGRAM)		512K			
MEMORY (DATA STORAGE)		32 MB (fixed NAND flash) + 128 MB – 1 GB microSD™ Card		128 MB – 1 GB microSD Card	
LED INDICATORS		LINK/ACT (link/activity) FDX/COL (full-duplex/ collisions) SPEED (on for 100Base-T Ethernet connection) CE/BSY (NAND flash enabled/user –programable.			
BACKUP BATTERY		Connection for user-supplied backup battery (to support RTC and data SRAM)			
GENERAL-PURPOSE I/O		52 parallel digital I/O lines: • 4 configurable I/O • 4 fixed inputs • 4 fixed outputs			
ADDITIONAL INPUTS		Startup mode (2), rest in			
ADDITIONAL OUTPUTS		Status, rest out			
EXTERNAL I/O BUS		Can be configured for 8 lines and 5 address lines (shared with parallel I/O lines)			
SERIAL PORTS		Five 3.3V, CMOS-compatible ports (shared with I/O): • All 5 configurable as asynchronous (with IrDA) • 3 configurable as clocked serial (SPI) • 2 configurable as SDL/HDLC • 1 asynchronous serial port dedicated programming			
SERIAL RATE		Maximum asynchronous baud rate = CLK/8			
SLAVE INTERFACE		A slave port allows the RCM3900/RCM3910 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 cascable, 3 reserved for internal peripherals, one 10-bit timer with 2 match registers)			
WATCHDOG/SUPERVISOR		Yes			
PULSE-WIDTH MODULATORS		4 PWM registers with 10-bit free-running counter and priority interrupts			
INPUT CAPTURE		2-channel input capture can be used to time input signals from various port pins			
QUADRATURE DECODER		2-channel quadrature decoder accepts inputs from external incremental encoder modules			
POWER		3.15-3.45 VDC 325 mA @ 44.2 MHz, 3.3V			
OPERATING TEMPERATURE		-20° C to +85° C			
HUMIDITY		5% to 95%, non-condensing			
CONNECTORS		Two 2 x 17, 2 mm pitch ; One microSD Card socket			
BOARD SIZE		1.850" x 2.725" x 0.86" (47 mm x 69 mm x 22 mm)			

PART NUMBERS	DESCRIPTION
20-101-1196	RCM3900. Replacement for the RCM3365
20-101-1197	RCM3910. Replacement for the RCM3375

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.

© 1996-2015 Digi International Inc. All rights reserved.
All trademarks are the property of their respective owners.

91001578
D1/915

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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Rabbit Semiconductor:](#)

[20-101-1196](#)