

RCM3365 RabbitCore™

MODELS | RCM3365 | RCM3375 |

Microprocessor Core Module

Key Features

- Powerful Rabbit® 3000 microprocessor @ 44.2 MHz
- 16 MB NAND Flash
- Hot Swappable removable memory socket
- 512K Flash / 512K SRAM
- 10/100 Base-T, RJ-45 port
- 52 parallel digital I/O, alternate I/O bus
- 6 serial ports (IrDA, HDLC, asynch, sync, SPI)
- 3.3 V (with 5 V-tolerant I/O)
- Small Footprint

Design Advantages

- Ideal for network-enabling security & access systems, remote automation, data logging, and industrial controls when coupled with RabbitWeb, FAT File System and SSL software modules.
- Plenty of storage with safe secure firmware and data transfers.
- Complete microprocessor, on-board memory, royalty-free TCP/IP stack, and hundreds of sample programs reduces time-to-market by months.

Applications

- Network-Enabling Security
- Access Systems
- Building Automation
- HVAC Systems
- Industrial Controls
- Other Key Applications

Optional Software Modules

- (SSL) Secure Socket Layer
- FAT File System (FAT) (File Allocation Tables)
- RabbitWeb



RCM3365 RabbitCore – Removable - Memory Core Module

The RCM3365 and RCM3375 RabbitCore modules present a new form of embedded flexibility with removable “hot-swappable” memory cards. Supporting on-board 16 MB NAND Flash as well as memory cards of up to 128 MB, these RabbitCore modules are ideal for data intensive applications requiring low-power operation.

Derived from industrial client feedback and combining traditional RabbitCore product strengths into one device, the RCM3365 takes microprocessor core modules to the next level.

RabbitCores mount directly on a user-designed motherboard and act as the controlling microprocessor for the user’s system. RabbitCores can interface with all manner of CMOS-compatible digital devices through the user’s motherboard. Programs are developed with our industry-proven Dynamic C® development system, a C language environment that includes an editor, compiler, and in-circuit debugger (Dynamic C® is included in all low-cost

development kits). Efficient hardware and software integration facilitates rapid design and development. User programs can be compiled, executed, and debugged using Dynamic C and a programming cable—no in-circuit emulator is required. An extensive library of drivers and sample programs is provided, along with royalty-free TCP/IP stack with source. In addition to Dynamic C, the FAT File System software module is included with the RCM3365 development kit. Other Dynamic C modules are available to enable the rapid development of secure web browser interfaces.



RCM3365 Shown

RabbitCore RCM3365 | RCM3375 Specifications

Features	RCM3365	RCM3375
Microprocessor	Rabbit 3000 @ 44.2 MHz	
Ethernet Port	10/100Base-T, RJ-45, 3 LEDs	
Flash	512K	
SRAM	512K program + 512K data	
Extended Memory	16 MB (fixed) xD-picture card socket support up to 128 MB (NAND Flash)	xD-picture card card socket support up to 128 MB (NAND Flash)
Backup Battery	Connection for user-supplied battery (to support RTC and SRAM)	
LED Indicators	5: ACT (activity), LINK (link), SPEED (10/100 Base-T), FM (flash memory), USR (user-programmable)	
General-Purpose I/O	52 parallel digital I/O: 44 configurable / 4 fixed inputs / 4 fixed outputs	
Additional Inputs	2 Startup Mode, Reset In	
Additional Outputs	Status, Reset Out	
Auxiliary I/O Bus	8 data and 5 address (shared with I/O), plus I/O read-write	
Serial Ports	Six 3.3 V CMOS-compatible: <ul style="list-style-type: none"> • 6 configurable as asynchronous (with IrDA), • 4 configurable as clocked serial (SPI) • 2 configurable as SDLC/HDLC • 1 asynchronous serial port dedicated for programming 	
Serial Rate	Max. asynchronous baud rate = CLK/8	
Slave Interface	Slave port permits use as master or intelligent peripheral with master controller	
Real-Time Clock	Yes	
Timers	Ten 8-bit timers (6 cascadable from the first) and one 10-bit timer with 2 match registers	
Watchdog/Supervisor	Yes	
Pulse-Width Modulators	4 PWM based on a 10-bit free-running counter and priority interrupts	
Priority Interrupts	4 level prioritized interrupt structure consisting of 2 external and 22 internal sources.	
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 V DC, 250 mA @ 44.2 MHz 3.3 V	
Operating Temp.	-40°C to +70°C (0°C to +70°C with installed removable flash memory card)	
Humidity	5–95%, noncondensing	
Connectors - Headers	Two 2 x 17 (2 mm pitch), one 2 x 5, 1.27 mm programming, one xD-Picture card slot	
Board Size	1.850" x 2.725" x 0.86" (47 x 69 x 22 mm)	

RCM3365 | RCM3375 RabbitCore Pricing

Pricing (qty. 1/100/1000)		
Part Number	\$105 / 89 / 75 101-1051	\$98 / 79 / 69 101-1055
RCM3365 Development Kit	\$399	
Part Number	U.S. 101-1053	Int'l 101-1054

Optional Software Modules

RabbitWeb Software Module	\$159	\$149
Part Number	Shipped CD 101-0900	Download 101-0910-102
SSL Software Module	\$299	\$289
Part Number	Shipped CD 101-0896	Download 101-0895
FAT File System Module	\$159	\$149
Part Number	Shipped CD 101-0905	Download 101-0916

RCM3365 Development Kit comes complete with:

- RCM3365RabbitCore
- Prototyping Board
- Serial cable for programming and debugging
- Dynamic C[®] w/ royalty-free TCP/IP stack
- FAT File System Module on CD
- *32 MB xD Picture Card[™]
- Getting Started Instructions
- AC adapter (U.S. only)
- Complete product documentation on CD

*xD-Picture Card[™] is a trademark of Fuji Photo Film Co., Olympus Corporation, and Toshiba Corporation.

Rabbit-based systems do not implement the xD-Picture Card[™] specification for data storage and are neither compatible nor compliant with xD-Picture Card[™] card readers.



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