

## 阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

## Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

# RCM3700 RabbitCore® Series

MODELS | RCM3700 | RCM3710 | RCM3720 |

Microprocessor Core Module

## Key Features

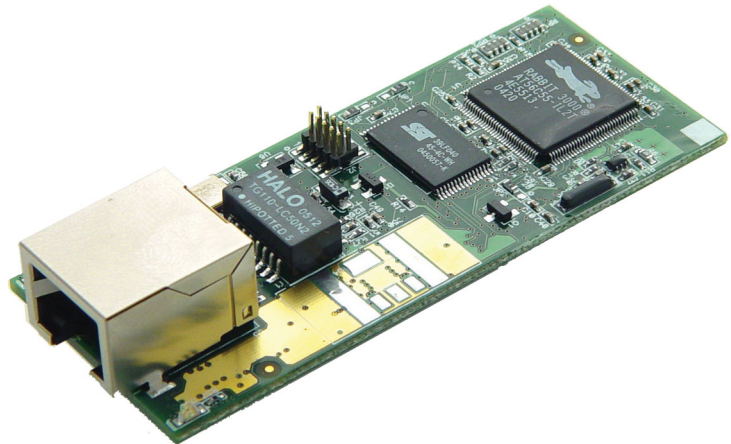
- Powerful Rabbit® 3000 microprocessor at 22.1 MHz
- On board RJ-45 10Base-T Ethernet
- Small footprint: half the size of a credit card
- Up to 512K Flash/512K SRAM, 1 MB Serial Flash
- 33 digital I/O, auxiliary I/O bus
- 4 serial ports capable of (IrDA, HDLC, asynch, sync, SPI)

## Design Advantages:

- Low-cost Ethernet connectivity
- Ready-made platform for fast time-to-market, up to 3 months design integration time savings
- Royalty-free TCP/IP stack in source code
- Integrated development environment with abundant samples and libraries
- Ethernet security software add on modules available
- Embedded Ethernet in tight spaces

## Applications

- Serial to Ethernet conversion
- Device monitoring and data logging
- POS systems
- Handheld devices
- Commercial and industrial control applications



## RCM3700 – Low-cost Ethernet Module

The RCM3700 RabbitCore Family is a low-cost Rabbit 3000 microprocessor based core module designed for Ethernet/Internet applications. The RCM3700 features 512K Flash/512K SRAM or 256K Flash /256K SRAM, 4 serial ports, and an extremely small footprint.

Three versions offer varying memory sizes to provide customers the most effective solution. Extensive demo programs and software application templates make it easy to get the RCM3700 up and running in no time. Software bundles added to the development kit enable rapid development of secure web browser interfaces for embedded system control.

This RabbitCore mounts directly on a user-designed motherboard with a single 0.1" (2.54 mm) 2x20 dual-row IDC header and can interface with all types of CMOS-compatible digital devices. 33 digital

I/O (shared with serial ports), power, and other signals are routed directly to the motherboard. Built-in low-EMI features, including a clock spectrum spreader, practically eliminate EMI problems, helping OEMs pass European CE and other regulatory RF emissions tests.

The RCM3700, programmed with Rabbit Semiconductor's Dynamic C, executes math, logic, and I/O quickly. The Rabbit 3000 microprocessor, RCM3700, and Dynamic C were designed in a complementary fashion for maximum performance and ease of use in embedded systems. Rabbit Semiconductor's



[www.rabbit.com](http://www.rabbit.com)

industry-proven Dynamic C development system is a C-language environment that includes an editor, compiler, and in-circuit debugger. 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, including royalty-free TCP/IP stack with source code. The optional software modules expands the functionality of the RCM3700, providing you with greater control over your embedded solution.

## Dynamic C Add-on Modules

Dynamic C Add-on modules provide added functionality and customization to your embedded applications. Software is available via download or CD-ROM.



### RabbitWeb

Easily create web interfaces to monitor and control embedded applications



### Secure Socket Layer

Industry standard web security for embedded applications



### Fat File System

Popular, network-accessible file system for flash memories

## RCM3700 and RCM3720 Development Kit comes complete with:

- RCM3700 or RCM3720 RabbitCore
- Development board with prototyping area
- AC adapter (U.S./Canada only)
- Dynamic C development system (not a trial version)
- Complete documentation on CD-ROM
- Serial cable for programming and debugging
- Getting Started manual

RCM3700 RabbitCore Specifications			
Features	RCM3700	RCM3710	RCM3720
Microprocessor	Low-EMI Rabbit 3000® at 22.1 MHz		
Ethernet Port	10Base-T interface, RJ-45, 2 LEDs		
Flash Memory	512K	256K	512K
SRAM	512K	128K	256K
Serial Flash Memory	1 MB		
Backup Battery	Connection for user-supplied backup battery (to support RTC and SRAM)		
General-Purpose I/O	33 parallel digital I/O lines: • 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 3.3 V CMOS-compatible ports configurable as: • 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 RCM3700 to be used as an intelligent peripheral device slaved to a master processor, which may be a Rabbit 3000 or another type of processor		
Real-Time Clock	Yes		
Timers	Ten 8-bit timers (6 cascadable, 3 reserved for internal peripherals), 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/Quadrature Decoder	2-channel input capture can be used to time input signals from various port pins • 1 quadrature decoder unit accepts inputs from external incremental encoder modules or • 1 quadrature decoder unit shared with 2 PWM channels		
Power	4.75–5.25 V DC 100 mA @ 22.1 MHz, 5 V; 78 mA @ 11.05 MHz, 5 V		
Operating Temperature	–40° C to +70° C		
Humidity	5% to 95%, non-condensing		
Connectors	One 2 x 20, 0.1" pitch		
Board Size	1.20" x 2.95" x 0.89" (30 mm x 75 mm x 23 mm)		
Pricing			
Pricing (qty 1/100)	\$59 / 49	\$57 / 47	\$55 / 45
Part Number	20-101-0674	20-101-0675	20-101-0961
Development Kit	\$299		\$199
Part Number	U.S. 101-0680	Int'l. 101-0681	U.S. 101-0963 Int'l. 101-0964
Secure Embedded Web Kit	\$699		
Part Number	U.S. 101-0897		Int'l. 101-0898
RabbitWeb Module	\$159		\$149
Part Number	Shipped CD 101-0900		Download 101-0910
FAT FILE System Module	\$159		\$149
Part Number	Shipped CD 101-0905		Download 101-0916
SSL Module	\$299		\$289
Part Module	Shipped CD 101-0896		Download 101-0895

## Secure Embedded Web Application Kit comes complete with:

- RCM3720 Development Kit Contents
- RabbitWeb Software Module
- Secure Socket Layer (SSL) Software Module
- FAT File System Software Module



Rabbit® 2900 Spafford Street Davis, CA 95618 USA Tel 1.888.411.7228 Tel 530.757.8400 Fax 530.757.8402

Copyright© 2006-2008 Rabbit. All rights reserved. Rabbit is a Digi International brand. Rabbit RabbitCore and Dynamic C are trademarks or registered trademarks of Rabbit. All other trademarks are the property of their respective owners.