

RCM5400W RabbitCore®

Advanced Wi-Fi Connectivity

Description

The RCM5400W RabbitCore module series provides Wi-Fi/802.11b/g functionality which enables you to create low-cost, embedded wireless control and communications solutions for embedded control applications.

RabbitCore modules mount directly onto a user-designed motherboard and act as the controlling microprocessor for the system. Measuring only 1.84" x 2.85" x 0.55" (47 mm x 72 mm x 14 mm), the Rabbit 5000 microprocessor-based RCM5400W series delivers the capability to integrate real-time control and Wi-Fi connectivity into your design.

The Rabbit 5000 delivers the same proven architecture as our industry-proven Rabbit 4000 microprocessor, along with additional features including hardware DMA, higher clock speeds, more I/O lines, six serial ports, and more instructions to reduce code size and improve processing speed.



Key Features

- Integrated Wi-Fi/802.11b/g wireless connectivity
- Up to 39 general-purpose I/O lines configurable
- Small size: 1.84" x 2.85" x 0.50" (47 mm x 72 mm x 13 mm)

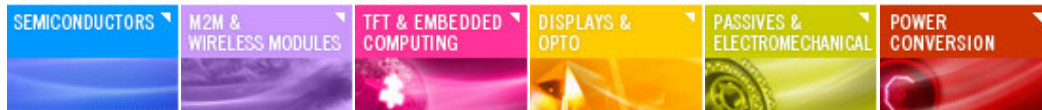
Design Advantages

- Faster development time using a fully engineered, "ready-to-run/ready-to-program" microprocessor core module
- Easy C-language program development and debugging
- Complete development kit to get up and running quickly
- Large program memory and data storage
- Easily scalable for commercial deployment applications



Alcom Belgium - Singel 3 - 2550 Kontich
Tel.: ++32 (0)3 458.30.33 - Fax: ++32 (0)3 458.31.26 - info@alcom.be

Alcom Netherlands - Rivium 1e straat 52 - 2909 LE Capelle a/d IJssel
Tel.: ++31 (0)10 288.25.00 - Fax: ++31 (0)10 288.25.25 - info@alcom.nl



Applications

- Industrial control
- Remote Terminal Unit (RTU)
- Serial-to-Ethernet bridge
- Building automation
- Remote monitoring and communications
- Security and surveillance

Developing with RabbitCores

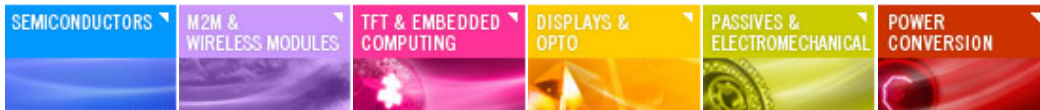
The RabbitCore family of microprocessor core modules is designed to facilitate rapid development and implementation of embedded systems. Develop programs with our industry-proven [Dynamic C® development system](#), a C-language environment that includes an editor, compiler and in-circuit debugger. Download the program from your PC via a USB or serial port, and debug right on the target hardware – no in-circuit emulation is required. This environment reduces effort and speeds hardware and software integration. Rabbit provides an extensive library of drivers and sample programs, along with royalty-free TCP/IP stack with source.

Jumpstart your evaluation and design efforts with a complete development kit, which includes a RCM5400W core module, prototyping board, Dynamic C integrated development environment and documentation on CD-ROM, serial cable for programming and debugging, and Getting Started manual.



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Specifications

Features	RCM5400W	RCM5450W
Microprocessor	Rabbit® 5000 @ 73.73 MHz	
Data SRAM	512K	
Program Execution Fast SRAM	512K	1 MB
Flash Memory	512K	1 MB
Serial Flash Memory	1 MB	2MB
Wi-Fi Compliance	802.11b/g standard, ISM 2.4 GHz	
Backup Battery Connection	Supports RTC and data SRAM	
General Purpose I/O	Up to 39 parallel digital I/O lines	
Serial Ports	6 high-speed, CMOS-compatible ports	
Slave Interface	Use the RCM5400W as an intelligent peripheral device slaved to a master processor	
Real Time Clock	Yes	
Timers	Ten 8-bit timers, one 10-bit timer, and one 16-bit timer	
Watchdog/Supervisor	Yes	
Pulse-Width Modulators	4 channels	
Input Capture	2 channels	
Quadrature Decoder	2 channels	
Power	3.3 V DC ±5% 625 mA @ 3.3 V while transmitting/receiving 175 mA @ 3.3 V while not transmitting/receiving	
Operating Temperature	-30°C to +75°C	
Board Size	1.84" × 2.85" × 0.55" (47 mm × 72 mm × 14 mm)	
Part Number	20-101-1246	20-101-1247
Development Kit	U.S. and International (non-Japan): 101-1262 Japan: 101-1263	



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