

# RCM5400W RabbitCore® Series

MODELS | RCM5400W | RCM5450W |

Advanced Wi-Fi Connectivity

## Key Features

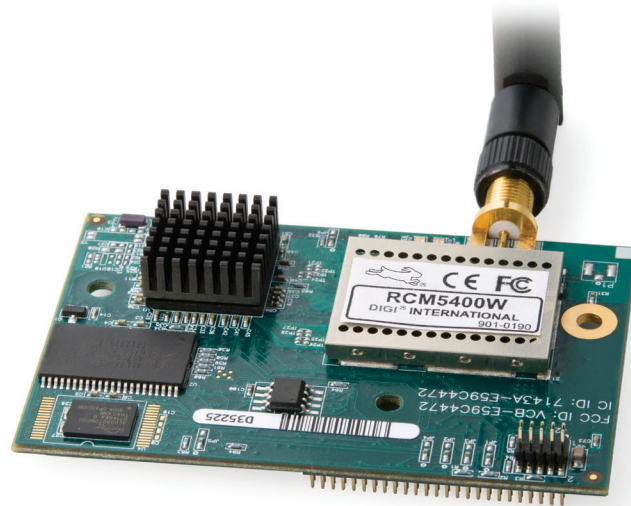
- Rabbit® 5000 running @ 73.73 MHz
- Up to 2 MB of serial flash
- 39 lines of digital I/O
- Integrated IEEE 802.11b/g Wi-Fi
- Up to 6 serial ports
- Small size: 1.84" × 2.85" × 0.50"  
(47 mm × 72 mm × 13 mm)

## 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
- Large memory resources
- Easily scalable for commercial deployment applications

## Applications

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



## RCM5400W – High-Performance Wi-Fi Connectivity

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

The RCM5400W series is a fast and efficient solution for a wide range of wireless embedded applications. RabbitCore modules mount directly on a user-designed motherboard and act as the controlling microprocessor for the system. Measuring only 1.84" × 2.85" × 0.55" (47 mm × 72 mm × 14 mm), the Rabbit® 5000 microprocessor-based RCM5400W series delivers the capability to integrate real-time control and wireless connectivity to your design. In addition, the RCM5400W series offers built-in low-EMI features, including a clock spectrum spreader to reduce EMI problems, helping OEMs pass CE and regulatory RF emissions tests.

The Rabbit 5000 delivers the same proven architecture as our industry-proven Rabbit 4000 microprocessor, along with 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.

## Developing with RabbitCores

RabbitCore modules are designed to ease implementation of embedded systems. Develop programs with our Dynamic C® integrated development environment that provides compiling, linking, editing and debugging capabilities in a single tool.



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

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. Dynamic C reduces effort and speeds hardware and software integration. Rabbit provides an extensive library of drivers and sample programs, along with a royalty-free TCP/IP stack with source.

RCM5400W RabbitCore® Specifications		
Features	RCM5400W	RCM5450W
Microprocessor	Rabbit® 5000 @ 73.73 MHz	
Data SRAM	512K	512K
Program Execution Fast SRAM	512K	1 MB
Flash Memory	512K	1 MB
Serial Flash Memory	1 MB	2 MB
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	
Additional Inputs	Startup mode (2), reset in	
Additional Outputs	Status, reset out	
External I/O Bus	Can be configured for 8 data lines and 6 address lines (shared with parallel I/O lines), plus I/O read/write	
Serial Ports	6 high-speed, CMOS-compatible ports	
Serial Rate	Maximum asynchronous baud rate = CLK/8	
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-channel	
Quadrature Decoder	2-channel	
Power (Pins Unloaded)	3.3 V,DC ±5% 625 mA @ 3.3V while transmitting/receiving 175 mA @ 3.3V while not transmitting/receiving	
Operating Temperature	-30° C to +75° C	
Humidity	5% to 95%, noncondensing	
Connectors	One RP-SMA antenna connector One 2 × 25, 1.27 mm pitch IDC signal header One 2 × 5, 1.27 mm pitch IDC programming header	
Board Size	1.84" × 2.85" × 0.55" (47 mm × 72 mm × 14 mm)	
Part Number	20-101-1246	20-101-1247
Development Kit Part Number	U.S. and International (non-Japan): 101-1262 Japan: 101-1263	

Delmation Products BV  
www.delmation.nl  
Tel: (+31) (0)79 342 2041



**Rabbit®** 2900 Spafford Street Davis, CA 95618 USA Tel 1.888.411.7228 Tel 530.757.8400 Fax 530.757.8402  
Copyright © 2008 Rabbit. All rights reserved. Rabbit is a Digi International brand. Rabbit, RabbitCore and Dynamic C are trademarks of Digi International Inc. in the United States and other countries worldwide. All other trademarks are the property of their respective owners.