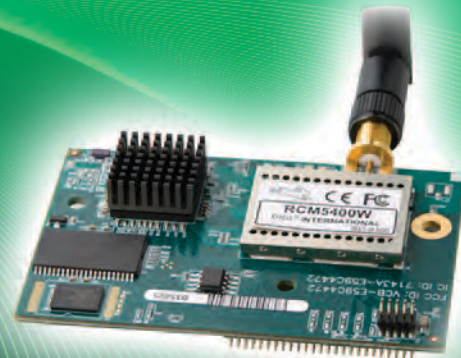


RabbitCore[®] RCM5400W Series

Microprocessor Core Module

Provides Wi-Fi 802.11b/g functionality for I/O intensive applications requiring multiple device communication and control.

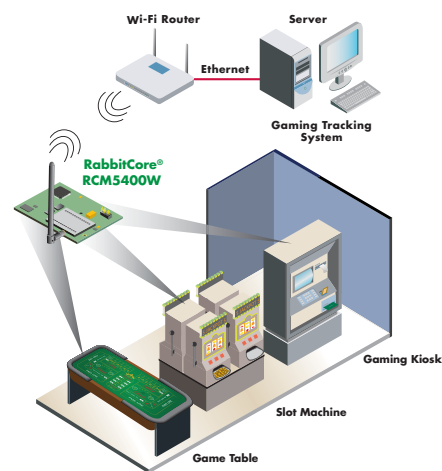


Overview

The RabbitCore RCM5400W series is ideal for applications that are I/O intensive and require secure wireless connectivity. The RCM5400W series offers a unique solution which not only delivers faster data throughput, but also allows users to have improved control and monitoring capabilities with an embedded web server. The included software libraries such as RabbitWeb[™] and Remote Program Update greatly reduce the time needed to write complex CGI web applications and enable remote firmware updates from anywhere in the world. Other popular web development languages such as AJAX, Javascript and XML can be supported by the embedded web server.

The RabbitCore RCM5400W development kit provides all the necessary hardware and software to evaluate the module and quickly get started with your design.

Application Highlight



Potential Applications: Industrial control, gaming (player tracking), building automation, remote monitoring and communications, security and surveillance

Features/Benefits

- Rabbit 5000 running at 74 MHz
- Up to 2 MB of serial Flash for data intensive applications utilizing FAT file system
- 39 digital I/O lines and up to 6 serial ports
- Integrated IEEE 802.11b/g Wi-Fi
- 802.11i security compliance supporting WPA and WPA2 enterprise authentication
- Wireless web server capability
- Easy C-language program development and debugging
- Low design risk – deploy with confidence into any Wi-Fi network, reduce development time by 50%

Development Kit

Development kit includes everything you need to get started

\$299



Specifications		RCM5400W		RCM5450W	
Features					
Microprocessor	Rabbit® 4000 at 59 MHz				
Data SRAM	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 configurable with 4 layers of alternate functions				
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: • All 6 configurable as asynchronous (with IrDA), 4 as clocked serial (SPI), and 2 as SDLC/HDLC • 1 asynchronous clocked serial port shared with programming port • 1 clocked serial port shared with serial flash				
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 (6 cascadable from the first), one 10-bit timer with 2 match registers, and one 16-bit timer with 4 outputs and 8 set/reset registers				
Watchdog/Supervisor	Yes				
Pulse-Width Modulators	4 channels synchronized PWM with 10-bit counter 4 channels variable-phase or synchronized PWM with 16-bit counter				
Input Capture	2-channel input capture can be used to time input signals from various port pins				
Quadrature Decoder	Incremental encoder modules				
Power (pins unloaded)	3.3VDC ±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%, non-condensing				
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)				
Wi-Fi					
	Region	802.11b		802.11g	
Typical Average Antenna Output Power	Americas, Japan	19 dBm		15 dBm	
	Other Regions	18 dBm			
Compliance	802.11b/g, 2.4 GHz				
Price (qty. 1); Part Number	\$119; 20-101-1246		\$134; 20-101-1247		
Development Kit; Part Number	\$299; U.S. and International (non-Japan): 101-1262; Japan: 101-1263				



RabbitWeb
Easily create web interfaces to monitor and control embedded applications



Fat File System
Popular, network-accessible file system for flash memories



Secure Socket Layer
Industry standard web security for embedded applications



Rabbit Program Update
Allows for remote firmware updates from anywhere in the world using an Internet connection



Wi-Fi Authentication
Provides strongest Wi-Fi security available via WPA-2 and 802.11i

Visit www.digiembedded.com for part numbers.

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