



MiniCore™ RCM5600W

Mini-Microprocessor Wi-Fi Core Module



Description

The MiniCore line is Rabbit's smallest and lowest cost embedded solution. With an integrated hardware and software solution, Rabbit offers you an easy path to add reliable network connectivity enabling you to bring your product to market quickly.

The MiniCore RCM5600W module offers 802.11b/g Wi-Fi connectivity which includes WPA2, WPA and WEP security standards, allowing easy integration and interoperability within Wi-Fi networks. With six serial ports, four configurable as SPI, the RCM5600W can easily embed into any existing or new design and is pin compatible with current and future MiniCore products.

A Development Kit offers the essential hardware tools and includes the Dynamic C® software development system. The Kit contains a prototyping and interface board with USB connections that will allow you to evaluate and debug the RCM5600W.

Register for Free Phone Tech Support

Receive 1 year of free phone tech support by [registering your standard or deluxe RCM5600W development kit](#). If you have any questions or concerns regarding Wi-Fi deployment, now is the time to consult with our Wireless experts to enable a quick time-to-market for your products. Once you register your RCM5600W standard or deluxe development kit, an email notification will be sent to you concerning your 1 year free phone tech support activation. The email will also include details of how to contact our Wireless experts. Act now, this is a limited time offer.

Features and Benefits

- Rabbit® 5000 running at 74 MHz
- On-board single-chip 802.11b/g transceiver
- Up to 35 GP I/O lines and six serial ports
- 1 MB SRAM and 1 MB serial flash memory
- Built-in web server
- Certified to meet FCC and other international regulatory requirements
- Easy-to-use integrated design environment

Applications

- Data archiving
- Tank monitoring
- Automatic meter reading
- Remote energy management
- Security and surveillance



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MiniCore™ RCM5600W Specifications

Features	RCM5600W
Microprocessor	Rabbit® 5000 at 74 MHz
EMI Reduction	Spectrum spreader for reduced EMI (radiated emissions)
Serial Flash Memory (program)	1 MB
SRAM	1 MB
Backup Battery	Connection for user-supplied backup battery (to support RTC)
General-Purpose I/O	Up to 35 parallel digital I/O lines configurable with four layers of alternate functions
Additional Inputs	Reset in
Additional Outputs	Status, reset out
External I/O Bus	Can be configured for 8 data lines and 8 address lines (shared with parallel I/O lines), plus I/O read/write
Serial Ports	<ul style="list-style-type: none"> 6 high-speed, CMOS-compatible ports: • All 6 configurable as asynchronous (with IrDA), 4 as clocked serial (SPI), and 2 as SDLC/HDL • 1 clocked serial port shared with programming port
Serial Rate	Maximum asynchronous baud rate = CLK/8
Slave Interface	Slave port allows the RCM5600W to be used 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 or 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	2-channel quadrature decoder accepts inputs from external incremental encoder modules
Power	3.15 V DC (min.) – 3.45 V DC (max.) 625 mA @ 3.3 V while transmitting/receiving 85 mA @ 3.3 V while not transmitting/receiving
Operating Temperature	–30° C to +55° C
Humidity	5% to 95%, non-condensing
Connectors	Edge connectors for interface with 52-pin mini PCI Express socket
Board Size	1.20" × 2.00" × 0.40" (30 mm × 51 mm × 10 mm)
Wi-Fi Specifications	
Security	WEP 64-bit and 128-bit, WPA (TKIP), WPA2(AES/CCMP)
Network Access	Infrastructure, Ad-Hoc
Antennae	1 U.FL connector, 50 ohms
Compliance	802.11b/g, 2.4 GHz