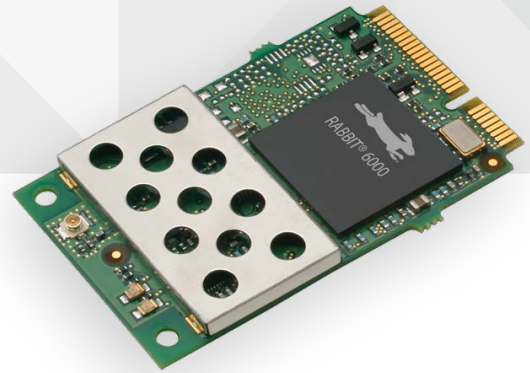




ULTRA COMPACT  
ETHERNET TO WI-FI  
BRIDGE



# RABBITCORE<sup>®</sup> RCM6600W

Embedded module with integrated 802.11 b/g Wi-Fi and 10/100 Ethernet, utilizing Digi Device Cloud<sup>SM</sup> to manage firmware updates and eliminate device deployment issues

The RCM6600W is a fully customizable, ultra compact embedded cloud module with an integrated 802.11b/g and 10/100 Ethernet interface. The dual networking interfaces software supports not only Ethernet to Wi-Fi bridging but also provides secure 802.11i - WPA2 support. The RCM6600W is easily programmable with royalty-free networking libraries, available in the comprehensive software environment Dynamic C. In addition, with up to six serial ports available the RCM6600W can connect to a host of devices such as XBee<sup>®</sup> ZigBee modules, GPRS and GPS devices, all of which have fully supported libraries within Dynamic C.

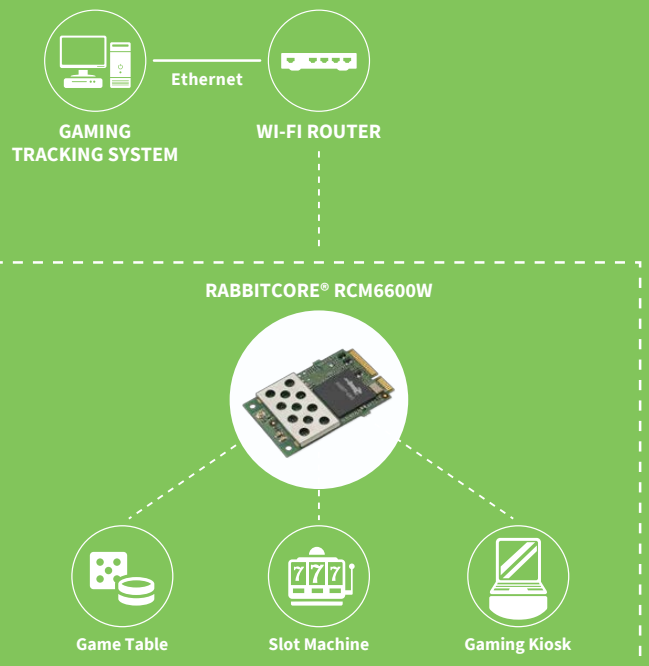
The RCM6600W supports Digi Device Cloud, an easy-to-use platform for device control and monitoring. In addition, Device Cloud provides scalability for managing firmware updates to literally thousands of devices with the click of a button.

The capabilities and features of the RCM6600W address many common device deployment concerns ultimately reducing development costs and time to market.

## BENEFITS

- Integrated 802.11b/g and 10/100 Ethernet networking
- 4 A/D inputs 12-bit resolution
- Clock speed up to 180 MHz
- Up to 32 GPIO line and 6 serial ports
- Manage firmware updates with Device Cloud
- Lightweight web server for monitoring and control
- ZigBee and GPS/3G cellular connectivity support
- FCC and CE certified

## APPLICATION EXAMPLE



## RELATED PRODUCTS



Rabbit  
MiniCore<sup>®</sup>  
RCM6700



Digi Connect  
Wi-ME 9210



Development  
Kits



Dynamic C<sup>®</sup>



Digi Device  
Cloud<sup>SM</sup>

<b>SPECIFICATIONS</b>	<b>RCM6600W</b>	<b>RCM6650W</b>
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FEATURES	
<b>MICROPROCESSOR</b>	Rabbit® 6000 @ 162.5 MHz
<b>NETWORK PERIPHERALS</b>	10/100Base-T (Ethernet Signals only)
<b>EMI REDUCTION</b>	Spectrum spreader for reduced EMI (radiated emissions)
<b>SERIAL FLASH MEMORY (PROGRAM)</b>	1 MB
<b>SRAM</b>	1 MB
<b>BATTERY-BACKABLE SRAM</b>	32 KB (Internal)
<b>BACKUP BATTERY</b>	32 KB (Internal), 1 MB (External)
<b>GENERAL PURPOSE I/O</b>	Connection for user-supplied backup battery (to support RTC)
<b>ANALOG INPUTS</b>	Up to 35 parallel digital I/O lines configurable with 4 layers of alternate functions, plus FIM (Flexible Interface Module) control
<b>ADDITIONAL INPUTS</b>	0, 2 or 4-inputs shared with PE0, 1 or PE2, 3.12 bit resolution, 11 bits performance at up to 1 M sample/sec (125 k sample/sec for any one input with no CPU overhead). Input range 100 mV to VCC-100 mV typical.
<b>ADDITIONAL OUTPUTS</b>	Reset in
<b>EXTERNAL I/O BUS</b>	Status, reset out
<b>SERIAL PORTS</b>	Can be configured for 8 data lines 8 address lines (shared with parallel I/O lines), plus I/O read/write
<b>SERIAL RATE</b>	6 high-speed, CMOS-compatible ports: All 6 configurable as asynchronous (with IrDA), 4 as clocked serial (SPI), and 2 as SDLC/HDLC 1 clocked serial port shared with programming port
<b>SLAVE INTERFACE</b>	Maximum asynchronous baud rate = CLK/8
<b>REAL-TIME CLOCK</b>	Slave port allows the module to be used as an intelligent peripheral device slaved to a master processor
<b>TIMERS</b>	Yes
<b>WATCHDOG/SUPERVISOR</b>	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
<b>PULSE-WIDTH MODULATOR</b>	Yes
<b>INPUT CAPTURE</b>	4 channels synchronized PWM with 10-bit counter or 4 channels variable-phase or synchronized PWM with 16-bit counter
<b>QUADRATURE DECODER</b>	2-channel input capture can be used to time input signals from various port pins
<b>POWER</b>	2-channel quadrature decoder accepts inputs from external incremental encoder modules
<b>OPERATING TEMPERATURE</b>	3.15 VDC (min.) - 3.45 VDC (max.) 625 mA @ 3.3 V while transmitting/receiving 85 mA @ 3.3 V while not transmitting/receiving
<b>HUMIDITY</b>	-30° C to +55° C
<b>CONNECTORS</b>	5% to 95%, non-condensing
<b>BOARD SIZE</b>	Edge connectors for interface with 52-pin mini PCI Express socket
<b>WI-FI SPECIFICATIONS</b>	
<b>TYPICAL AVERAGE ANTENNA OUTPUT POWER</b>	1.20 in × 2.00 in × 0.40 in (30 mm × 51 mm × 10 mm)
<b>COMPLIANCE</b>	Americas, Japan: 802.11b: 19 dBm; 802.11g: 15 dBm Other Regions: 802.11b: 18 dBm; 802.11g: 15 dBm
	802.11b/g, 2.4 GHz

PART NUMBERS	DESCRIPTION
20-101-1322	RCM6600W
20-101-1323	RCM6650W
101-1324	RCM6600W Deluxe Development Kit
101-1325	RCM6600W Standard Development Kit

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