# RCM2200 RabbitCore®

MODELS | RCM2200 | RCM2210 | RCM2250 | RCM2260 |

Microprocessor Core Module

#### **Key Features**

- Compact size (2.3" x 1.6" x 0.86")
- 10Base-T Ethernet
- Up to 512K Flash
- Up to 512K SRAM
- 26 general-purpose I/O



The RCM2200 RabbitCore module is designed to be the heart of an embedded control system. The RCM2200 features an integrated Ethernet port and provides for LAN and Internet-enabled systems to be built as easily as serial-communication systems.

Based on the powerful Rabbit® 2000 microprocessor, the RCM2200 includes features for embedded control such as Flash memory, SRAM, serial ports, I/O, real-time clock, and integrated Ethernet. To permit parallel development and cost-effective implementation of both Ethernet-enabled and non-Ethernet systems, our pin-compatible RCM2300 model is also available.

### **Developing with RabbitCores**

RabbitCores mount directly onto a user-designed motherboard, and can interface with CMOS-compatible

digital devices via the user's motherboard. Programs are developed with our industry-proven Dynamic C® development system, a C language environment that includes an editor, compiler, and in-circuit debugger. Programming is easy with hundreds of samples and libraries that are pre-developed, for a user to be up and running in no time. No in-circuit emulator is required, no third party tools needed. Dynamic C ensures optimal support for Rabbit 2000-based solutions. Dynamic C enhanced compiler generates smaller code, support for far pointers and far data for easy access to external memory



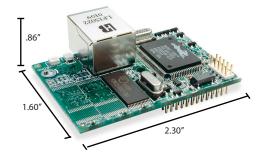
devices, improvements to AES encryption libraries, and a new I/O configuration utility that helps assign pin functions and guides those selections so that conflicts can be avoided.

### **Programming the RCM2200**

Programs are developed using the industry-proven Dynamic C® software development system, which is included in low-cost development kits. An extensive library of drivers and sample programs is provided.

## **Development Kit**

Jumpstart your evaluation and design efforts with a complete development kit, which includes RCM2200 RabbitCore (with Ethernet, 256K Flash, and 128K SRAM), prototyping board, AC adapter (U.S. only), Dynamic C development system and complete documentation on CD-ROM, serial cable for programming and debugging, and Getting Started manual.



RCM2200 RabbitCore® Specifications				
Features	RCM2200	RCM2210	RCM2250	RCM2260
Microprocessor	Rabbit* 2000 @ 22.1 MHz			
Ethernet Port (10/100Base-T compatible with 10Base-T interface)	RJ-45, 2 LEDs	Raw signals only	RJ-45, 2 LEDs	Raw signals only
Flash Memory	One 256K Two 256K		o 256K	
SRAM	128K 512K			
Backup Battery	Connection for user-supplied backup battery (to support RTC and SRAM)			
General-Purpose I/O	<ul> <li>26 parallel I/0 lines grouped in five 8-bit ports (shared with serial ports):</li> <li>16 configurable I/O</li> <li>7 fixed inputs</li> <li>3 fixed outputs</li> </ul>			
Additional Inputs	2 startup mode, reset			
Additional Outputs	Status, reset			
Memory, I/O Interface	4 address lines, 8 data lines, I/O read/write			
Serial Ports	Four 5 V CMOS-compatible ports. Two ports are configurable as clocked ports, one is a dedicated RS-232 programming port.			
Serial Rate	Maximum burst rate = CLK/32 Maximum sustained rate = CLK/64			
Slave Interface	A slave port allows the RCM2200 to be used as an intelligent peripheral device slaved to a master processor, which may either be another Rabbit 2000 or any other type of processor			
Real-Time Clock	Yes			
Timers	Five 8-bit timers cascadable in pairs, one 10-bit timer with 2 match registers that each have an interrupt			
Watchdog/Supervisor	Yes			
Power	4.75 V to 5.25 V DC, 134 mA			
Operating Temperature	−40° C to +70° C			
Humidity	5% to 95%, non-condensing			
Connectors	Two IDC headers 2 × 13, 2 mm pitches			
Board Size	1.60" × 2.30" × 0.86" (41 mm × 59 mm × 22 mm)			
		Pricing		
Price (qty. 1/100/1000) Part Number	\$55 / \$44 / \$39 20-101-0454	\$59 / \$49/ \$42 20-101-0488	\$79 / \$62 / \$55 20-101-0494	\$73 / \$60/ \$51 101-0955
Development Kit Part Number	\$239 U.S. 101-0475 Int'l 101-0478			

