



# RCM2200 RabbitCore™

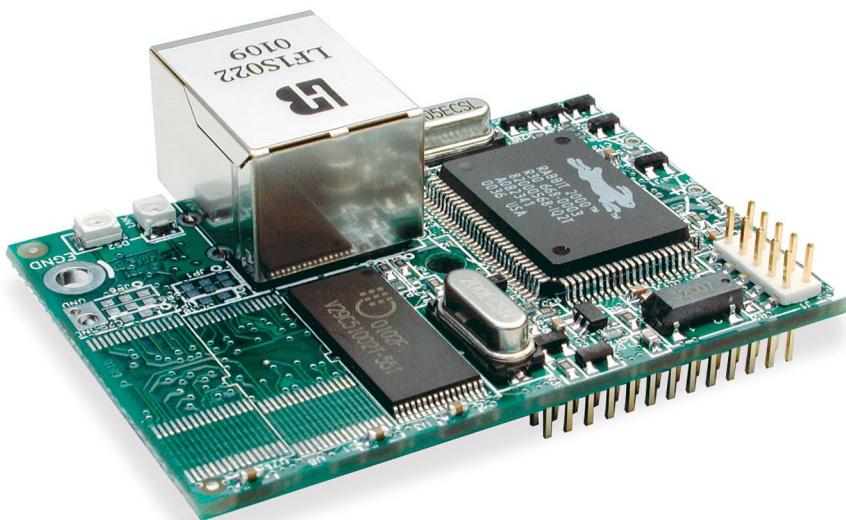
*Microprocessor Core Module*

Models RCM2200, RCM2210, RCM2250, RCM2260

Specifically designed for small applications, the award-winning RCM2200 RabbitCore microprocessor core module provides a complete embedded control solution in an area half the size of a credit card. Based on the powerful Rabbit 2000™ microprocessor, the RCM2000 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.

## 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



## Designing with RabbitCores

The RabbitCore family of microprocessor core modules is designed to facilitate rapid development and implementation of embedded systems. RabbitCores are powered by high-performance 8-bit Rabbit microprocessors with extensive integrated features and a C-friendly instruction set designed for use with the Dynamic C® development system. The RabbitCore mounts on a user-designed motherboard and acts as the controlling microprocessor for the user's system. Small in size but packed with powerful features, these core modules give designers a complete package for control and communication.

The integrated Ethernet port frees designers from the limitations of serial-port communications and control and also permits instant local or worldwide connectivity using low-cost networking hardware. Embedded systems using the Ethernet RabbitCore module can be controlled and monitored (as well as programmed and debugged when using appropriate accessory hardware) across any network or the Internet.

## Programming the RCM2200

Programs are developed using Z-World's 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.

## RCM 2200 RabbitCore Specifications

| Feature  | RCM2200   | RCM2210                        | RCM2250                   | RCM2260                        |  |  |
|--|---|--------------------------------|---------------------------|--------------------------------|--|--|
| <b>Microprocessor</b>                                  | Rabbit2000™ at 22.1 Mhz   |                                |                           |                                |  |  |
| <b>Ethernet Port</b>                                   | 10Base-T, RJ-45<br>2 LEDs   | 10Base-T<br>(raw signals only) | 10Base-T, RJ-45<br>2 LEDs | 10Base-T<br>(raw signals only) |  |  |
| <b>Flash</b>   | 256K  |                                | 512K                      |                                |  |  |
| <b>SRAM</b>  | 128K  |                                | 512K                      |                                |  |  |
| <b>Backup Battery</b>                                  | Connection for user-supplied battery (to support RTC and SRAM)  |                                |                           |                                |  |  |
| <b>General Purpose I/O</b>                             | 26 parallel I/O<br><ul style="list-style-type: none"> <li>• 16 configurable I/O</li> <li>• 7 fixed inputs</li> <li>• 3 fixed outputs</li> </ul>                   |                                |                           |                                |  |  |
| <b>Additional Inputs</b>                               | 2 Startup Mode, Reset   |                                |                           |                                |  |  |
| <b>Additional Outputs</b>                              | Status, Reset   |                                |                           |                                |  |  |
| <b>External I/O</b>                                    | 4 address, 8 data, I/O Read-Write   |                                |                           |                                |  |  |
| <b>Serial Ports</b>                                    | Four 5 V CMOS-compatible*<br><ul style="list-style-type: none"> <li>• 4 configurable as asynchronous</li> <li>• 2 configurable as clocked serial (SPI)</li> </ul> |                                |                           |                                |  |  |
| <b>Serial Rate</b>                                     | Max. burst rate = CLK/32<br>Max. sustained rate=burst/2   |                                |                           |                                |  |  |
| <b>Connectors</b>                                      | Two 2 x 13, 2 mm IDC headers  |                                |                           |                                |  |  |
| <b>Slave Interface</b>                                 | Slave Port permits use as master or as intelligent peripheral with Rabbit-based or other master controller  |                                |                           |                                |  |  |
| <b>Real-Time Clock</b>                                 | Yes   |                                |                           |                                |  |  |
| <b>Timers</b>  | Five 8-bit timers (four cascadable from the first) and one 10-bit timer with 2 match registers  |                                |                           |                                |  |  |
| <b>Watchdog/Supervisor</b>                             | Yes   |                                |                           |                                |  |  |
| <b>Power</b>   | 4.75-5.25 V DC, 134 mA  |                                |                           |                                |  |  |
| <b>Operating Temp.</b>                                 | -40°C to + 70°C   |                                |                           |                                |  |  |
| <b>Humidity</b>  | 5-95%, non condensing   |                                |                           |                                |  |  |
| <b>Board Size</b>                                      | 2.3" x 1.6" x 0.86"<br>(59 x 41 x 22 mm)  |                                |                           |                                |  |  |
| <b>Pricing (qty. 1/100/1000)</b><br><b>Part Number</b> | 101-0454  | 101-0488                       | 101-0494                  | 101-0955                       |  |  |
| <b>Development Kit Part Number</b>                     | U.S. 101-0475   |                                | Int'l 101-0478            |                                |  |  |