# RCM2100 RabbitCore™

Microprocessor Core Module

Models RCM2100, RCM2110, RCM2120, RCM2130

The RCM2100 is a full-featured RabbitCore microprocessor core module, available in four different models—two with integrated Ethernet and two without. The RCM2100 features up to 512K of Flash memory and 512K of SRAM, as well as buffered external memory-addressing capability. The 34 parallel user I/O (40 for non-Ethernet) shared with 4 serial ports make local control and communication a breeze.

Features

- With or without Ethernet
- 3.5" x 2.0" x 0.86"
- Up to 512K SRAM
- Up to 512K Flash
- 34 or 40 general-purpose I/O
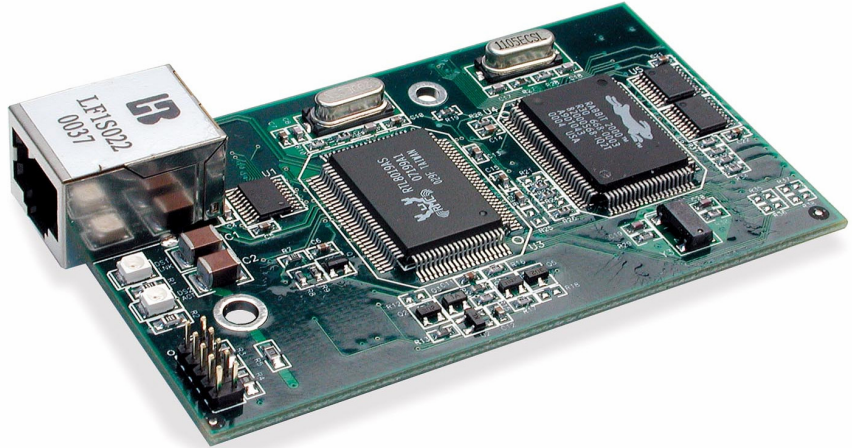
Designing with RabbitCores

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 RCM2100

Programs are developed using Z·World's industry-proven Dynamic C software development system. An extensive library of drivers and sample programs is provided.

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RCM2100 RabbitCore Specifications

Features	RCM2100	RCM2110	RCM2120	RCM2130
Microprocessor	Rabbit 2000T at 22.1 MHz			
Ethernet Port	10Base-T, RJ-45, 2 LEDs		None	
Flash	512K	256K	512K	256K
SRAM	512K	128K	512K	128K
Backup Battery	Connection for user-supplied battery (to support RTC and SRAM)			
General Purpose I/O	34 parallel I/O include • 20 configurable I/O • 8 fixed inputs • 6 fixed outputs (grouped in five 8-bit ports and shared with serial ports)		40 parallel I/O include • 26 configurable I/O • 8 fixed inputs • 6 fixed outputs (grouped in five 8-bit ports and shared with serial ports)	
Additional Inputs	2 Startup Mode, Reset In			
Additional Outputs	Status, Clock, Watchdog Out, Reset Out			
Memory I/O	13 buffered address, 8 buffered data, plus I/O Read-Write and Buffer Enable			
Serial Ports	Four 5 V CMOS-compatible, 2 configurable as clocked ports			
Serial Rate	Max. burst rate = CLK/32 Max. sustained rate = burst/2			
Connectors	Two 2 x 20, 2 mm IDC headers			
Slave Interface	Slave port permits use as master or as intelligent peripheral with Rabbit-based or other master controller			
Real-Time Clock	Yes			
Timers	Five 8-bit timers (four cascadable from the first) and one 10-bit timer with 2 match registers			
Watchdog/Supervisor	Yes			
Power	4.75-5.25 V DC, 140 mA			
Operating Temp.	-40° to +70°C		-40° to +85°C	
Humidity	5-95%, non-condensing			
Board Size	3.5" x 2.0" x 0.86" (89 x 51 x 22 mm)		3.5" x 2.0" x 0.5" (89 x 51 x 13 mm)	