



# RCM2000 RabbitCore™

*Microprocessor Core Module*  
Models RCM2000, RCM2010, RCM2020

Measuring just 2.30" x 1.90" (58 x 48 mm), the RCM2000 RabbitCore is a compact and powerful microprocessor core module that has all the basics for your board design. The RCM2000 provides I/O, memory, and other features that make bringing the power of the Rabbit 2000 microprocessor to your application easy. The RCM2000 comes in three available models and includes 40 general-purpose I/O, 4 CMOS-compatible serial ports, five 8-bit timers and one 10-bit timer with two match registers, and a fast number-crunching clock. Flash and SRAM are onboard, providing a development-ready memory interface.

## Features

- Low-cost, high-memory, high I/O
- 2.3" x 1.9" x 0.5"
- Up to 512K SRAM
- 256K Flash
- 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.

## Programming the RCM2000

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

## RCM2000 RabbitCore Specifications

Feature	RCM2000	RCM2010	RCM2020		
<b>Microprocessor</b>	Rabbit 2000 at 25.8 MHz		Rabbit 2000 at 18.432 MHz		
<b>Flash</b>	256K				
<b>SRAM</b>	512K	128K			
<b>Backup Battery</b>	Connection for user-supplied battery (to support RTC and SRAM)				
<b>General Purpose I/O</b>	40 parallel I/O includes				
	<ul style="list-style-type: none"> <li>• 26 configurable I/O</li> <li>• 8 fixed inputs</li> <li>• 6 fixed outputs</li> </ul> <p style="text-align: center;">(grouped in five 8-bit ports and shared with serial ports)</p>				
<b>Additional Inputs</b>	2 Startup Mode, Reset In				
<b>Additional Outputs</b>	Status, Clock, Watchdog, Reset Out				
<b>Memory I/O</b>	13 address, 8 data. I/O Read-Write, Buffer Enable				
<b>Serial Ports</b>	Four 5 V CMOS-compatible, 2 configurable as clocked ports				
<b>Serial Rate</b>	Max. burst rate = CLK/32 Max. sustained rate = burst/2				
<b>Connectors</b>	Two 2 x 20, 2mm IDC headers				
<b>Slave Interface</b>	Slave port permits use as master of 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)				
<b>Watchdog/Supervisor</b>	Yes				
<b>Power</b>	4.75-5.25 V DC, 130 mA		4.75-5.25 V DC, 98 mA		
<b>Operating Temp.</b>	-40C to +85C				
<b>Humidity</b>	5-95%, non-condensing				
<b>Board Size</b>	2.3" x 1.9" x 0.55" (58 x 48 x 14 mm)				
<b>Pricing</b> (qty. 1/100/1000) Part Number	\$69 / 55 / 48 101-0404	\$49 / 39 / 34 101-0405	\$39 / 31 / 25 101-0383		
<b>Development Kit</b> Part Number	\$169 U.S. 101-0398	\$169 Int'l 101-0399			