

RCM2000 RabbitCore®

MODELS | RCM2000 | RCM2010 | RCM2020 |

Microprocessor Core Module

Key Features

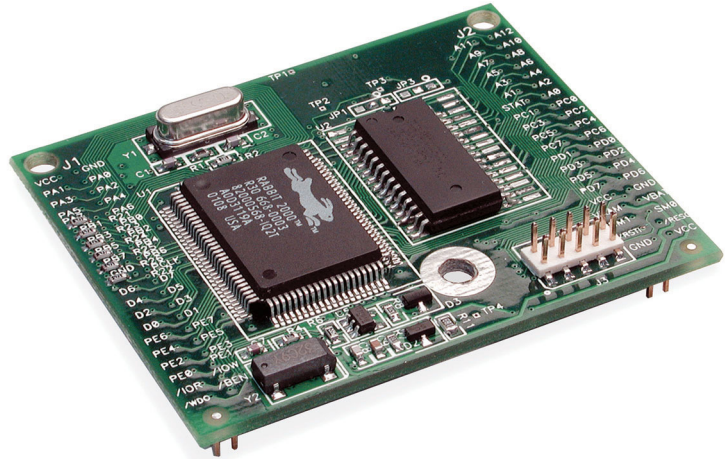
- Rabbit® 2000 up to 25.8 MHz
- Up to 512K SRAM
- 256K Flash
- 40 general-purpose I/O

Design Advantages:

- 5 V design
- Plug-in module
- Low-cost

Applications

- Industrial Control
- Industrial Automation
- Process Control



RCM2000 – The Veteran of the RabbitCore Modules

The RCM2000 RabbitCore is a compact and powerful microprocessor core module that has all the basics for your board design. Measuring just 2.30" x 1.90" (58 x 48 mm), 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 is a core module designed to be the heart of your own controller built around the plug-in module. Data processing is done by a Rabbit 2000 microprocessor operating at up to 25.8 MHz (RCM2000 and RCM2010).

The RCM2000 has a Rabbit 2000 microprocessor, a static RAM, a flash memory, two quartz crystals (main oscillator and timekeeping), and the circuitry necessary for reset and management of battery backup of the Rabbit 2000's

internal real-time clock and the static RAM. Two 40-pin headers bring out the Rabbit 2000 I/O bus, address lines, data lines, parallel ports, and serial ports. The RCM2000 receives its +5 V power from the user board on which it is mounted. The RCM2000 can interface with all kinds of digital devices through the user board.

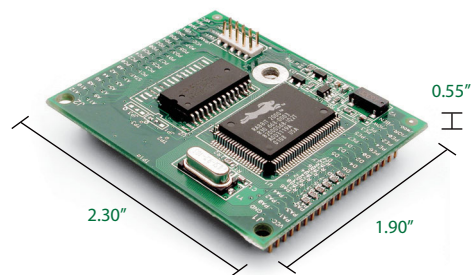
Developing with the RCM2000

The RCM2000 Development Kit has the essentials that you need to design your

own microprocessor-based system. The kit comes complete with a RabbitCore module, a prototyping board, accessory parts and all development tools specifically designed to get you up and running in minutes. Development kits come with our industry-proven Dynamic C® integrated development software that includes an editor, compiler, and in-circuit debugger. Programming is easy with hundreds of samples and libraries that can be used as building blocks to your code.

RCM2000 Development Kit Comes Complete with:

- RCM2020 RabbitCore Module
- Prototyping board
- Serial cable for programming and debugging
- Dynamic C integrated development software
- Getting Started Instructions
- Complete product documentation on CD including the Rabbit 2000 reference manual
- AC adapter (U.S. only)
- Rabbit 2000 pin specifications poster



RCM2000 RabbitCore Specifications				
Features	RCM2000		RCM2010	RCM2020
Microprocessor	Rabbit® 2000 @ 25.8 MHz			Rabbit® 2000 @ 18.432 MHz
Flash EPROM	256K (supports 128K–512K)			
SRAM	512K	128K		
Backup Battery	Connection for user-supplied backup battery (to support RTC and SRAM)			
General-Purpose I/O	40 parallel I/O lines grouped in five 8-bit ports (and shared with serial ports): • 26 configurable I/O • 8 fixed inputs • 6 fixed outputs			
Additional Inputs	2 startup mode (for master/slave), reset in			
Additional Outputs	Status, clock, watchdog, reset out			
Memory, I/O Interface	13 address lines, 8 data lines, I/O read/write, buffer enable			
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 RCM2000 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, 130 mA			4.75 V to 5.25 V DC, 98 mA
Standby Current	10 µA (typical)			
Operating Temperature	–40°C to +85°C			
Humidity	5% to 95%, non-condensing			
Connectors	Two IDC headers 2 × 20, 2 mm pitch			
Board Size	1.90" × 2.30" × 0.55" (48.3 mm × 58.4 mm × 14 mm)			
Pricing				
Pricing (qty. 1/100)	\$69 / \$55	\$49 / \$39	\$39 / \$31	
Part Number	20-101-0404	20-101-0405	20-101-0383	
Development Kit	\$169			
Part Number	U.S. 101-0398		Int'l. 101-0399	