

RABBIT Microprocessors, Core Modules & Dev. Kits



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RABBIT 2000™ MICROPROCESSOR (30 MHz)

The Rabbit 2000™ is a high-performance 8-bit microprocessor designed expressly to power a new generation of embedded systems. Its extensive integrated feature set and glueless architecture facilitate rapid hardware design, and its C-friendly instruction set permits efficient development of complex applications. For embedded systems, the Rabbit 2000 out-performs most 16 and some 32-bit processors without losing the efficiency of an 8-bit architecture. With clock speeds of up to 30 MHz and numerous on-chip peripherals including memory and I/O control signals for glueless interface, four serial ports, over forty digital I/O pins, 8 and 10-bit timer systems, watchdog timer, real-time clock and flexible clocking options, the Rabbit 2000 packs a hardware punch that system designers will appreciate. Our Dynamic C® development environment provides an integrated C compiler with debugger and linker for efficient and powerful applications development.

Design Advantages:

- 8-Bit Architecture
High-performance architecture with integrated peripherals permit efficient and cost effective hardware design.
- Enhanced Instruction Set
Brings new power and speed to 8-bit systems with numerous one-byte opcodes and 16-bit logical, arithmetic, and data transfer instructions.
- Exceptional Math Performance
Based on highly optimized math libraries.
- Dynamic C® Development Environment
For real-time development and debugging of Rabbit-based systems using C or Assembly language.
- TCP/IP stack with source code is provided royalty free in Dynamic C.

Feature List:

- On-board slave port allows the Rabbit to be configured as an intelligent peripheral device.
- Control of clock speed by software allows dynamic trading of power vs. speed.
- Excellent math performance with 16 x 16 multiply in 12 clocks.
- Three levels of interrupt priority allow fast response to real-time events.
- 40 parallel I/O lines.
- 4 serial ports
- Five 8-bit timers and one 10-bit timer with two match registers
- Battery-backable time/date clock
- Watchdog Timers

* Software available à la carte. See www.mouser.com/rabbitsemi For quantities of 500 and up, call for quote.

MOUSER STOCK NO.		Package	Price Each			
Mfr.	Mfr. Part No.		1	25	100	250
694	20-668-0003	PQFP-100 (Lead Free)	12.75	11.50	10.45	9.85

Kits

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694	101-0398	RCM2000 Development Kits	169.00
694	101-0475	RCM2200 Development Kits	239.00
694	101-0480	RCM2300 Development Kits	199.00

Available Options and Accessories

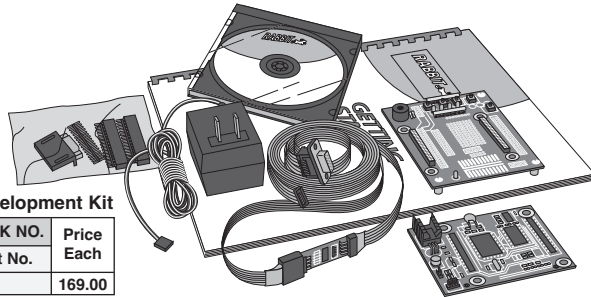
MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694	20-101-0589	Rabbit Cloning Board	89.00
694	20-101-0467	8MB Serial Flash Expansion Boards	89.00

RCM2000 RABBIT 2000™ DEVELOPMENT KIT

The RCM2000/Rabbit 2000 Development Kit includes a core module (model RCM2020 with Rabbit 2000® microprocessor, flash, SRAM, serial ports, digital I/O), Dynamic C® SE development software and documentation on CD-ROM (not a trial version!), prototyping board, power supply and serial programming cable. The RabbitCore 2000 is the foundation around which you can build a custom board based on the Rabbit 2000 microprocessor. It includes all the components that will jump-start your board design; general-purpose I/O, memory I/O interface, battery backup interface, master-slave control pins, five 8-bit timers (cascadable in pairs) and one 10-bit timer with two match registers, four CMOS-compatible serial ports, and up to 25.8MHz (see versions) clock for fast number crunching. Flash and SRAM are on-board, providing a development-ready memory interface.

Development Software:

The RCM2000/Rabbit 2000 Development Kit is ready for immediate software development. User programs are created using Dynamic C® SE a C language environment that includes an editor, compiler and debugger. Dynamic C SE is an enhanced version of the industry standard C programming language that is specifically tailored for control and embedded systems. Dynamic C SE includes Fast Fourier Transform functions, supports up to one megabyte of code and data and includes software drivers specific for the development kit. Programs can be compiled and executed using the Dynamic C software and a serial programming cable. No in-circuit emulator is required.



RCM 2000 Development Kit

MOUSER STOCK NO.		Price Each
Mfr.	Mfr. Part No.	
694	101-0398	169.00

* Software available à la carte. See www.mouser.com/rabbitsemi

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694	20-101-0404	RCM 2000 Core - 25.8 MHz, 512K SRAM	69.00
694	20-101-0405	RCM 2010 Core - 25.8 MHz, 128K SRAM	49.00
694	20-101-0383	RCM 2020 Core - 18.4 MHz, 128K SRAM	39.00

Available Options and Accessories

694	20-101-0580	RabbitLink Card	129.00
694	20-101-0589	Rabbit Cloning Board	89.00
694	20-101-0467	8MB Serial Flash Expansion Board	89.00
694	540-0070	RS-232-to-USB Converter Cable	39.00

RCM2200 RABBIT 2000™ DEVELOPMENT KIT

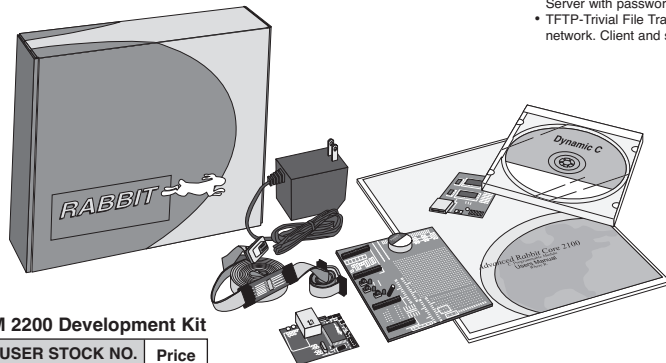
Jump start your design efforts with our most compact Ethernet core module. The RCM2200/Rabbit 2000 Development Kit includes a RCM2200 RabbitCore (with a Rabbit 2000® microprocessor with 22.1 MHz clock, 256K flash memory, 128K SRAM, Ethernet and serial ports, and digital I/O), prototyping board, power supply (U.S. sales only), Dynamic C® SE development software with TCP/IP stack and documentation on CD-ROM (not a trial version!), a PC serial cable, and a Getting Started manual. The RabbitCore RCM2200 is the foundation around which you can build a custom board based on the Rabbit 2000 microprocessor. It includes all the components that you need for fast and easy board design-26 parallel I/O lines, a memory-I/O interface, a battery-backup interface, master/slave control pins, five 8-bit timers (cascadable in pairs) and one 10-bit timer with two match registers, and four CMOS-compatible serial ports. Flash and SRAM are on-board and provide a development-ready memory interface. Full TCP/IP source code is provided in addition to the Dynamic C software on CDROM. ICMP, HTTP (includes facilities for SSI, CGI routines, cookies, and basic authentication), SMTP, FTP and TFTP (client and server) capabilities are provided. Ethernet drivers for the RealTek Ethernet chip are also included. Users can directly write to TCP or UDP sockets to develop custom applications. In addition, extensive demo programs are provided to assist with development. No run-time royalties are required, saving OEMs significant cost over the life of their application.

Key Benefits:

- Ethernet ready-port to an Ethernet chip is done for the Rabbit 2000 chip.
- Cost-effective-no run-time royalties.
- Simplified development-a complete Dynamic C® SE software package (with integrated editor, compiler and debugger) is provided. No in-circuit emulator required!
- A head start-sample demo programs, including HTTP web server and SMTP mail client, provide an advanced starting point for development.
- Quick development time-full hardware reference schematics help reduce development efforts.

TCP/IP Capability:

- Socket Level TCP-Transmission Control Protocol. Provides reliable full-duplex data transmission.
- Socket Level UDP-User Datagram Protocol. Simple protocol that exchanges datagrams without acknowledgements or guaranteed delivery.
- ICMP-Internet Control Message Protocol. Network layer Internet protocol reports errors and provides information relevant to IP packet processing.
- HTTP-Hypertext Transfer Protocol. The protocol used by Web browsers and Web servers to transfer files, such as text and graphic files. Includes facilities for Server Side Includes (SSI) and CGI routines.
- SMTP-Simple Mail Transfer Protocol. Internet protocol providing e-mail services.
- FTP-File Transfer Protocol. Application protocol, part of the TCP/IP protocol stack, used for transferring files between network nodes. Server with password support for file transfers between network nodes available on Rabbit 2000.
- TFTP-Trivial File Transfer Protocol. Simplified version of FTP that allows files to be transferred from one computer to another over a network. Client and server available on Rabbit 2000.



RCM 2200 Development Kit

MOUSER STOCK NO.		Price Each
Mfr.	Mfr. Part No.	
694	101-0475	239.00

* Software available à la carte. See www.mouser.com/rabbitsemi

MOUSER STOCK NO.		Description	Price Each
Mfr.	Mfr. Part No.		
694	20-101-0454	RCM 2200 Core - 256K Flash, 128K SRAM, RJ-45	55.00
694	20-101-0488	RCM 2210 Core - 256K Flash, 128K SRAM	59.00
694	20-101-0494	RCM 2250 Core - 512K Flash, 512K SRAM, RJ-45	79.00

Available Options and Accessories

694	20-101-0580	RabbitLink Card	129.00
694	20-101-0589	Rabbit Cloning Board	89.00
694	20-101-0467	8MB Serial Flash Expansion Board	89.00
694	540-0070	RS-232-to-USB Converter Cable	39.00
694	151-0113	Connector Adapter Board	15.00