



### GPRS/GSM Application Kit

This Kit provides all the tools necessary to sample and develop applications that combine a Rabbit based control device with a GSM/GPRS modem. The libraries and sample programs allow for a device connected to the cellular network to send SMS (text) messages to a RabbitCore module (RCM) that can interpret messages as commands and in turn execute control function. The RCM can also send/receive GPRS e-mail wirelessly to/from and PC, GSM device or cell phone.

**Highlights:** • Hardware/Software for wireless RCM communication and control via GPRS/GSM • Enfora™ Spider SA-GL Quad Band wireless modem and antenna • GUI and Keypad configuration menu system • Royalty-free TCP/IP stack in source code • Sample programs/libraries for generic modem operation • Fully integrated development software: compiler, editor and debugger for control applications

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### Rabbit Cloning Board



The Rabbit Cloning Board copies designated portions of flash memory from one Rabbit-based controller (the master) to another (the clone). Dynamic C® version 6.50 or later is needed to use the cloning board.

**Benefits:**

- The Rabbit Cloning Board replaces a PC or EPROM burner as the primary tool to load programs, thus reducing costs and workspace
- Programs may be loaded quickly onto blank, soldered on flash devices
- High-speed transfers at 57,600 bps or 115,200 bps
- Higher-speed data transfer of up to 921,600 bps starting with Dynamic C version 7.05
- Ideal for low-volume cloning production

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
Cloning Board	316-1101-ND	64.61	20-101-0589



### Rabbit 3000A™ Microprocessor



**Programming the Rabbit 3000A:** Microprocessor hardware and software development is easy for Rabbit users. The Rabbit 3000A is programmed using the industry-proven Dynamic C® software development system from sister division Z-World.

**Key Features:** • Low-EMI: typically <10 dB µV/m @ 3m • Ultra-low power modes • 1.8-3.6V (5V tolerant I/O) • 55.5MHz clock speed • 56+ digital I/O • 6 serial ports supporting IrDA and ASync (4 of which support SPI; 2 support SDLC/HDLC) • Pulse capture and measurement • Quadrature encoder inputs • PWM outputs

**Standard Features:** • Glueless memory and I/O interface • Direct support for 1MB code/data space (up to 6MB with glueless interface) • Battery-backable real-time clock • Watchdog timer • Remote boot/program • Slave port interface

**Design Advantages:** • Extensive Ethernet/Internet support and royalty-free TCP/IP stack with source and sample programs • Dynamic C® development environment for real-time development and debugging • Exceptionally fast performance for math, logic and I/O

Description	Digi-Key Part No.	Price Each			Rabbit Part No.
		2	10	100	
Rabbit 3000A 55.5MHz, 128LQFP	316-1061-ND	10.53	9.53	9.08	20-668-0011

#### Rabbit 3000A/RCM3000 Development Kit

Digi-Key Part No. 316-1017-ND (101-0523) Only **217.07**

The Rabbit 3000A/RCM3000 Development Kit includes an RCM3010 Ethernet core module (with Rabbit 3000A microprocessor, Flash, SRAM, Ethernet hardware), a prototyping board, complete Dynamic C SE software development system (not a trial version) with TCP/IP stack and documentation on CD-ROM, power supply and serial cable for programming and debugging.

### RabbitCore™ RCM3400 Analog Core Module



**Features:**

- 3.3V operation • Powerful Rabbit 3000 microprocessor • Low-EMI (typically <10dB µV/m@3m) • RCM3400: 512K Flash/512K SRAM, RCM3410: 256K Flash/256K SRAM • 8 channel 12-bit A/D with programmable gain • 47 digital I/O, Auxiliary I/O bus • 5 serial ports (IrDA, SDLC/HDLC, Async, SPI) • MAC ID installed

**Design Advantages:**

- Ready-made platform for fast time-to-market • Compact size simplifies integration
- Dynamic C development environment for real-time development and debugging
- Exceptionally fast performance for math, logic, and I/O

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
RCM3400	316-1099-ND	50.09	20-101-0561
RCM3410	316-1100-ND	42.83	20-101-0562

#### Rabbit RCM3400 RabbitCore Development Kit

Digi-Key Part No. 316-1027-ND (101-0587) Only **289.67**

The RCM3400 Development Kit includes an RCM3400 core module, a prototyping board, AC adapter (U.S. only), 10-pin header to DE9 programming cable with integrated level-matching circuitry, complete Dynamic C SE software development system (not a trial version) with documentation on CD-ROM and a bag of accessory parts for use on the Prototyping Board.

#### RabbitCore Wi-Fi Add On Kit

Digi-Key Part No. 316-1067-ND (101-0998) Only **144.47**

The Wi-Fi Add On Kit includes Interposer Board (boards are not interchangeable between RCMs with different footprints, CompactFlash Wi-Fi Board, LinkSys Wi-Fi CompactFlash Card, 20-pin to 20-pin IDC header connection ribbon cable, 10-pin IDC header to DE9F serial cable, Sample Programs and software related specifically to the Wi-Fi Add on Kits on CD, Dynamic C upgrade to 9.21 or higher on CD, Getting Started instruction and Miscellaneous connection and mounting hardware including standoffs, if necessary.

### RabbitCore™ RCM3100 Core Module



The RCM3100 features a battery-backable real-time clock, glueless memory and I/O interfacing, and ultra-low power "sleepy" modes. A fully enabled 8-bit slave port permits easy master-slave interfacing with another processor-based system, and an alternate I/O bus can be configured for 8 data lines and 6 address lines (shared with parallel I/O).

**Features:**

- Actual Size: 1.85" x 1.65" x 0.55" (47mm x 42mm x 14mm) • 29.4MHz clock speed • 3.3V operation • Powerful Rabbit 3000™ microprocessor • Low-EMI (typically <10 dB µV/m @ 3m) • RCM3100: 512K Flash/512K SRAM • RCM3110: 256K Flash and 128K SRAM • 54 digital I/O • 6 serial ports (IrDA, SDLC/HDLC, Async, SPI) • Auxiliary I/O bus • Ultra-low power "sleepy" modes • Pulse capture and measurement • Quadrature encoder inputs • PWM outputs

**Design Advantages:**

- Ready-made platform for fast time-to-market • Compact size simplifies integration • Pin compatible with Ethernet RCM3000 for parallel product development • Dynamic C® development environment for real-time development and debugging • Exceptionally fast performance for math, logic, and I/O

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
RCM3100	316-1095-ND	47.19	20-101-0517
RCM3110	316-1096-ND	32.67	20-101-0518

#### Rabbit RCM3100 RabbitCore Development Kit

Digi-Key Part No. 316-1020-ND (101-0533) Only **173.51**

The RCM3100 Development Kit includes an RCM3110 core module (with Rabbit 3000 microprocessor, Flash, SRAM, serial ports, and I/O ports), a prototyping board, complete Dynamic C SE software development system (not a trial version) with documentation on CD-ROM, AC adapter (U.S. only) and serial cable for programming and debugging.

### RabbitCore™ RCM3000 Core Module



**Features:**

- Actual Size: 2.73" x 1.85" x .086" (69mm x 47mm x 22mm) • 29.4MHz clock speed • 10Base-T • Powerful Rabbit 3000™ microprocessor • Low-EMI (typically <10 dB µV/m @ 3m) • Built-in Ethernet for simplified connectivity • 3.3V operation • RCM3000: Up to 512K Flash/512K SRAM • RCM3010: 256K Flash and 128K SRAM • 52 digital I/O • 6 serial ports (IrDA, SDLC/HDLC, Async, SPI) • Auxiliary I/O bus • Ultra-low power "sleepy" modes • Pulse capture and measurement • Quadrature encoder inputs • PWM outputs

**Design Advantage:**

- Ready-made platform for fast time-to-market • Dynamic C® development environment for real-time development and debugging

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
RCM3000	316-1093-ND	57.35	20-101-0507
RCM3010	316-1094-ND	42.83	20-101-0508

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## Rabbit 2000™ 8-Bit Microprocessor



### Rabbit 2000 Advantages:

- Architecture for enhanced math performance
- Glueless memory and I/O interface
- Remote cold boot
- Slave interface
- 4 serial ports
- 40-plus multifunctional I/O pins
- Battery-backable real-time clock
- Watchdog timer
- Five 8-bit cascadable timers and one 10-bit timer with match registers
- 488 microsecond periodic interrupt
- Clocking options for low power applications

### Rabbit 2000 Development Kit

Digi-Key Part No. 316-1003-ND (101-0359) Only **100.91**

Kit includes Jackrabbit single board computer, manual, schematics, AC adapter, prototyping board, programming cable, documentation on CD-ROM, additional parts and complete Dynamic C SE software development system (not a trial version).

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
Rabbit 2000	316-1062-ND	8.96	20-668-0003

## Rabbit 2000™ 8-Bit Microprocessor with TCP/IP Support

### Features:

- 18.432 MHz Rabbit 2000 Processor
- 10Base-T Ethernet Interface
- 4 High-Current Outputs (200 mA @ 40VDC)
- 4 Digital Input Points (0 - 5 VDC Nominal)
- RS-232 Serial Port
- RS-485 Serial Port
- 512K Flash Memory (2 x 256K)
- 128K SRAM
- 7 Built-in Timers
- Time/Date Real-Time Clock
- Watchdog Timer

### Rabbit 2000 TCP/IP Development Kit

Digi-Key Part No. 316-1005-ND (101-0401) Only **187.82**

Kit includes Rabbit 2000™ TCP/IP development board (with Rabbit 2000 microprocessor, flash, SRAM, Ethernet hardware, 8 digital I/O), demonstration board, power supply, PC serial cable for real-time debugging and complete Dynamic C SE software development system (not a trial version) with TCP/IP on CD-ROM.

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
Rabbit 2000 TCP/IP Toolkit	316-1006-ND	71.87	101-0403

## RabbitCore 2000™ Microprocessor Core Module



### RABBITCORE 2000

- **Board Size:** 1.90" x 2.30" x 0.55" (48.3mm x 58.4mm x 14.0mm)
  - **Input Voltage:** 4.75-5.25VDC
  - **Current:** 98mA at 18.432 MHz, 5VDC (130mA at 25.8 MHz, 5VDC)
  - **Processor:** Rabbit 2000 at 25.8MHz (18.432MHz for 2010 and 2020)
  - **General Purpose I/O:** 40 parallel I/O lines grouped in five 8-bit ports (shared with serial ports)
  - **Memory, I/O Interface:** 13 Address lines, 8 data lines, I/O read/write, buffer enable, status, clock
  - **Additional Digital Inputs:** (2), start up mode (for master/slave), reset in
  - **Additional Digital Outputs:** Watchdog output, reset out
  - **Clock:** 25.8 Mhz
  - **SRAM:** 512K (128K for 2010 and 2020)
  - **Flash:** 256K
  - **Timers:** Five 8-bit cascadable timers, one 10-bit timers with 2 match registers
  - **Serial Ports:** 4 CMOS-compatible ports. Max asynchronous baud rate is 806,400bps, maximum synchronous is 6.45Mbps. Two ports are configurable as clocked ports
  - **Slave Interface:** Allows the RabbitCore 2000 to be used as an intelligent peripheral device slaved to a master processor
- Additional Features:** Watchdog supervisor, time/date clock, backup battery circuitry and connections for user-supplied battery. Mates to your board via dual 40-pin male connectors.

### RabbitCore 2000 Development Kit

Digi-Key Part No. 316-1007-ND (101-0398) Only **122.69**

Kit includes a model RCM2020, manual with schematics and documentation on CD-ROM, getting started guide, AC adapter, prototyping board, programming cable and complete Dynamic C SE software development system (not a trial version) on CD-ROM.

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
RCM2020	316-1082-ND	28.31	20-101-0383
RCM2000	316-1083-ND	50.09	20-101-0404
RCM2010	316-1084-ND	35.57	20-101-0405

## RabbitLink™ EG2110

Rabbit-based embedded systems are normally programmed using a direct connection between a PC and the programming port of the Rabbit-based system.

The RabbitLink provides an indirect connection between the two for remote downloading and debugging.

- Features:**
- Rabbit 2000™ microprocessor operating at 22.1 MHz
  - RJ-45 Ethernet port compliant with IEEE 802.3 standard for 10 Base-T Ethernet protocol
  - 2 Serial Ports
  - 3 Status LED's, labeled USER, ACT and LINK
  - 128K static RAM and 512K flash memory
  - Firmware installed
  - Easy setup with DHCP or simple console commands
  - Password protection
  - Remote program downloading and debugging

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
EG2110 RabbitLink Board	316-1049-ND	93.65	101-0580

## RabbitCore™ RCM2100 Series Microprocessor Core Module



### Features:

- Ethernet Port for 2100 and 2110 series only
- 512K SRAM (128K for 2110 and 2130)
- 512K Flash (256K for 2110 and 2130)

### Specifications:

- **Microprocessor:** Rabbit 2000 at 22.1 MHz
- **General Purpose I/O:** 34 parallel I/O (20 configurable I/O, 8 fixed inputs, and 6 fixed outputs) (40 parallel I/O with 26 configurable I/O for 2120 and 2130)
- **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 5V CMOS-compatible; 2 configurable as clocked ports
- **Serial Rate:** Max. burst rate = CLK/32 Maximum sustained rate = Burst/2
- **Connectors:** Two 2 x 20, 2mm IDC headers
- **Slave Interface:** Allows use as master or intelligent peripheral with Rabbit-based or other master controller
- **Real-Time Clock:** Yes
- **Timers:** Five 8-bit timers (4 cascadable from the first) and one 10-bit timer with 2 match registers
- **Watchdog/Supervisor:** Yes
- **Power:** 4.75-5.25VDC, 140mA
- **Operating Temperature:** -40°C - 70°C (-40°C - 85°C for 2120 and 2130)
- **Humidity:** 5-95%, non-condensing
- **Board Size:** 3.5" x 2.0" x 0.86" (89 x 51 x 22mm); 3.5" x 2.0" x 0.5" (89 x 51 x 13mm) for 2120 and 2130

### RabbitCore 2000/RCM2100 Low-Cost Development Kit

Digi-Key Part No. 316-1028-ND (101-0451) Only **202.55**

Jumpstart your evaluation and design efforts with a complete development kit, which includes RCM2100 microprocessor core module, prototyping board, Dynamic C SE software development system (not a trial version) and complete documentation on CD-ROM, serial cable for programming and debugging, Getting Started manual, and AC adapter (U.S./Canada only).

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
RCM2110	316-1086-ND	42.83	20-101-0435
RCM2120	316-1087-ND	50.09	20-101-0436
RCM2130	316-1088-ND	35.57	20-101-0446

## RabbitCore™ RCM2200 Microprocessor Core Module



- **Board Size:** 1.60" x 2.30" x 0.86" (41 mm x 59 mm x 22 mm)
- **Input Voltage:** 4.75-5.25VDC
- **Current:** 134 mA at 5VDC
- **Processor:** Rabbit 2000
- **General Purpose I/O:** 26 parallel I/O lines grouped in five 8-bit ports (shared with serial ports)
- **Memory, I/O Interface:** 4 address lines, 8 data lines, I/O Read-Write
- **Additional Digital Inputs:** Startup mode, reset
- **Additional Digital Outputs:** Status, reset
- **Clock:** 22.1 MHz
- **SRAM:** 128K (512K for 2250)
- **Flash:** 256K (512K for 2250)
- **Timers:** Five 8-bit timers, one 10-bit timer. Five timers are cascadable in pairs
- **Serial Ports:** 4 CMOS-compatible ports. Max asynchronous baud rate is 691,000 bps, max synchronous is 5.53 Mbps. Two ports are configurable as clocked ports
- **Slave Interface:** Allows the RCM2200 to be used as an intelligent peripheral device slaved to a master processor
- Ethernet Port: 10Base-T, RJ-45, 2 LEDs (10Base-T, No RJ-45 for 2210)

**Additional Features:** Watchdog/supervisor, time/date clock, backup battery circuitry, and connection for user-supplied battery

### RabbitCore RCM2200 Development Kit

Digi-Key Part No. 316-1012-ND (101-0475) Only **173.51**

Kit includes RCM2200 core module (Ethernet, 256K Flash, 128K SRAM), Getting Started manual with schematics, DC power supply (U.S. only), prototyping board, PC serial cable, and complete Dynamic C SE software development system (not a trial version) and complete documentation on CD-ROM.

Description	Digi-Key Part No.	Price Each	Rabbit Part No.
RCM2200	316-1090-ND	39.93	20-101-0454
RCM2210	316-1091-ND	42.83	20-101-0488
RCM2250	316-1092-ND	57.35	20-101-0494

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