## Rabbit<sup>®</sup> 4000

Low-EMI, High-Performance Microprocessor

High-performance, low-EMI microprocessor designed specifically for embedded control, communications and Ethernet connectivity.

## Overview

The Rabbit 4000 offers a host of industrial peripherals along with 1 MB of code support to meet the most demanding applications. The Rabbit 4000 offers on chip Ethernet which reduces overall component costs and optimizes communication performance. Its compact instruction set and high clock speeds give the Rabbit 4000 exceptionally fast math, logic and I/O performance.

The Rabbit 4000 is programmed using the industry-proven Dynamic C<sup>®</sup> development system. Dynamic C is easy to use, allowing developers to write, compile and test both C and Assembly code without leaving the Dynamic C environment, and no costly in-circuit emulators are required. Full TCP/IP stack with source code is provided royalty-free.





## Application Highlight 10 Base-T Ethernet MAC Spectrum Spreader Real-Time Clock Real-Time Clock AES Accelerator PMU Deceder PMU Deceder PMU Deceder Deceder

## **Features/Benefits**

- 60 MHz max clock speed
- Integrated 10Base-T Ethernet
- Supports 8-bit or 16-bit Flash and SRAM memories
- Extended low-power "sleepy" modes
- Watchdog timer
- Battery backed option for protected data storage



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Specifications	Rabbit® 4000
Feature	
Packaging	128-pin LQFP
Package Size	16 x 16 x 1.5 mm
Maximum Clock Speed	60 MHz
Operating Voltage	1.8V Core (3.3V I/O) or 1.8V Core and I/O
Ethernet	Integrated 10Base-T Ethernet controller
DMA	8 independent channels with 2 external DMA request inputs
Operating Temperature	-55° C to +85° C
Digital I/O	40+ (arranged in five 8-bit ports)
Serial Ports	6 CMOS-compatible
Baud Rate	Clock speed/8 max asynchronous
Address Bus	24-bit
Data Bus	8/16-bit
Timers	Ten 8-bit, one 10-bit with two match registers, one 16-bit timer
Real-Time Clock	Yes, battery-backable
RTC Oscillator Circuitry	External
Watchdog Timer/Supervisor	Yes
Clock Modes	1x, 2x, /2, /3, /4, /6, /8
Power Down Modes	Sleepy (32 kHz) Ultra-Sleepy (16, 8, 2 kHz)
Auxiliary I/O Bus	8 data, 8 address lines
Pricing	
Part Number (Sample 2-pack)	20-101-1186
Part Number	20-668-0024



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