

# Rabbit<sup>®</sup> 3000

Low EMI, High Performance Microprocessor

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



## Overview

The Rabbit 3000 runs up to 55 MHz with compact code and direct software support for 1 MB of code/data space. Typically operating at 3.3 V (with 5 V tolerant I/O), the Rabbit 3000 boasts 6 serial ports with IrDA, 56+ digital I/O, quadrature decoder, PWM outputs, and pulse capture and measurement capabilities.

This high performance microprocessor also features a battery-backable real-time clock, glueless memory, I/O interfacing and ultra-low power modes. Four levels of interrupt priority allow fast response to real-time events. Its compact instruction set and high clock speeds give the Rabbit 3000 exceptionally fast math, logic and I/O performance.

Our Dynamic C<sup>®</sup> development environment provides an integrated C compiler with debugger and linker for efficient and powerful applications development.

### Complete Solutions



Modules



SBCs

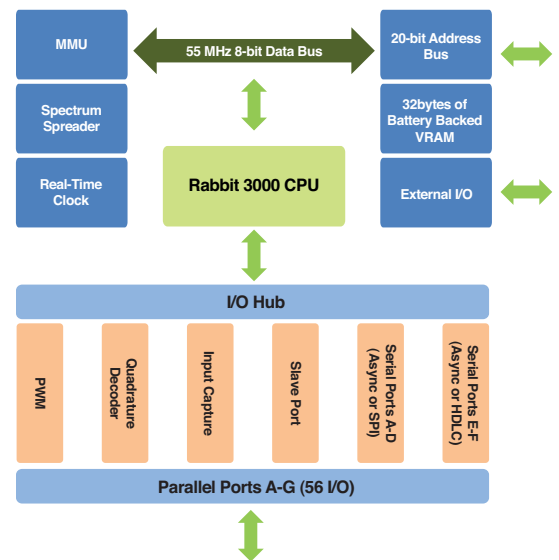


Development Kits

## Dynamic C<sup>®</sup>

Supported Software Platforms

### Application Highlight



### Features/Benefits

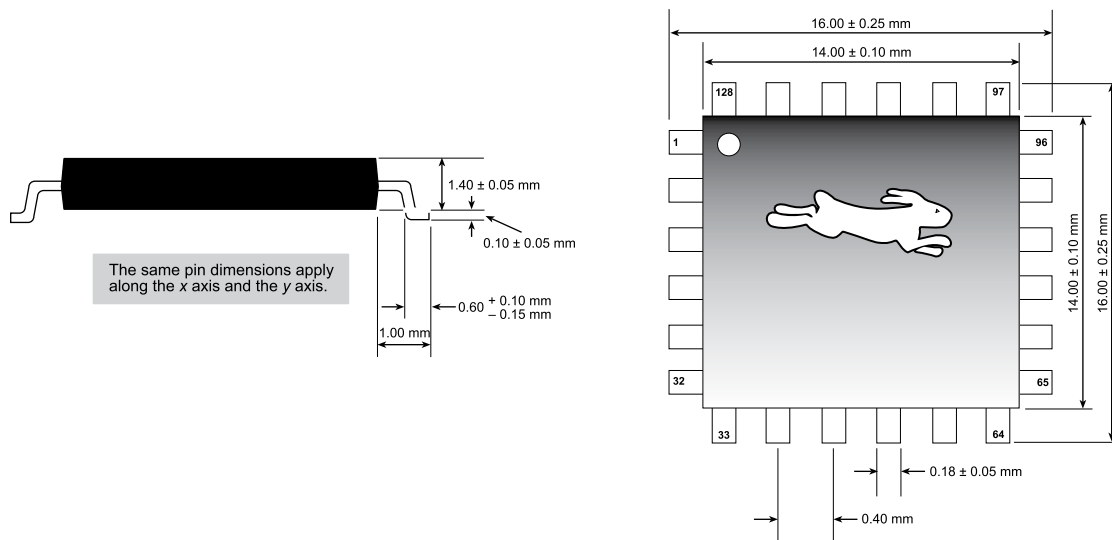
- 55 MHz max clock speed
- 56+ I/O lines and 6 CMOS-compatible serial ports
- Ten 8-bit timers and one 10-bit timer with 2 match registers
- Hardware and/or software support for TCP/IP, IrDA, SDLC/HDLC, Async, SPI, I<sup>2</sup>C
- Extended low-power "sleepy" modes
- Watchdog timer
- TCP/IP connectivity allows for programming and debugging Rabbit processor-based systems over intranets or the Internet



# Specifications

# Rabbit® 3000

Package	128-pin LQFP
Package Size	16 mm × 16 mm × 1.5 mm
Operating Voltage	1.8–3.6VDC
Operating Current	2 mA/MHz @ 3.3V
Operating Temperature	-55° C to +85° C
Maximum Clock Speed	55 MHz
Digital I/O	56+ (arranged in seven 8-bit ports)
Serial Ports	6 CMOS-compatible
Baud Rate	Clock speed/8 max. asynchronous
Address Bus	20-bit
Data Bus	8-bit
Timers	Ten 8-bit and one 10-bit with 2 match registers
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)
External I/O Bus	8 data, 8 address lines
Part Number (2 Pack)	20-101-1185
Part Number	20-668-0011



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