Rabbit® 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® development environment provides an integrated C compiler with debugger and linker for efficient and powerful applications development.



Hardware and/or software support for TCP/IP, IrDA,

TCP/IP connectivity allows for programming and debugging Rabbit processor-based systems over

registers

SDLC/HDLC, Async, SPI, I2C

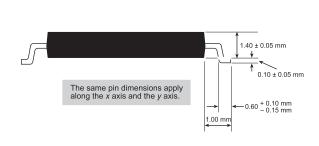
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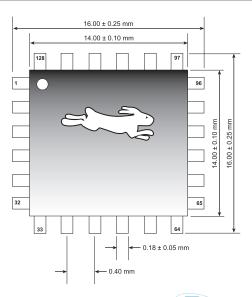
Watchdog timer

Extended low-power "sleepy" modes



| 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 | 1×, 2×, /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 |





Visit www.digi.com for part numbers.

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