

Rabbit RIO®

Intelligent I/O Expansion Chip

The Rabbit RIO chip is an intelligent I/O processor ideally equipped for industrial automation and control.



Overview

The Rabbit RIO chip offers both I/O expansion and peripheral features that easily integrate into new or existing designs. It interfaces to any microcontroller with an available SPI or parallel port. Multiple peripheral features offer a distinct advantage for motor control applications. The Rabbit RIO simply takes the load off the processor, making it ideal for applications with demanding networking requirements.

The Rabbit RIO is also ideal for machine control applications. I/Os are 5V tolerant, which also includes pin-pair protection for applications such as H-bridge drivers. Since multiple status bits are set from a single match register, pins are easily configurable for higher drive current operations. The same signal could be output on multiple pins for applications that require a higher current. It also provides push pull protection for sink and source drivers.

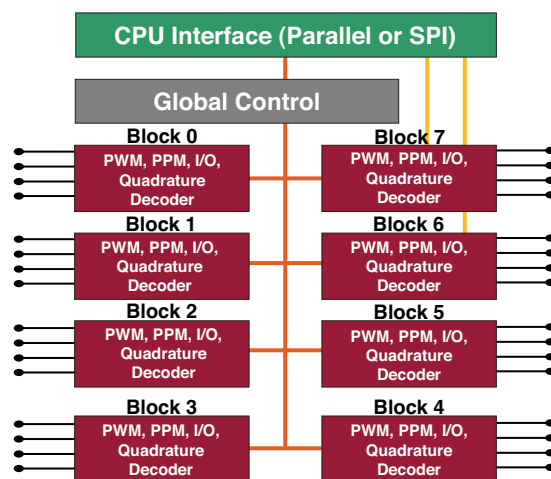
Application Kit

This low-cost application kit includes everything you need to begin development

\$299



Block Diagram



Ideal Applications : Industrial control and automation, instrumentation, motion control

Features/Benefits

- Easily interface to any CPU via an available SPI or parallel port
- Instantly add up to 32 digital I/O lines
- 8 independent functional channels with 4 ports each
- Functional channels configurable as:
Bi-directional I/O, PWM or PPM outputs, TRIAC signal generators, input capture, counter, Quadrature decode peripheral
- Add I/O and peripheral features to any new or existing design
- Use multiple Rabbit RIO devices for large I/O requirements



Specifications Rabbit RIO® Expansion Chip	
Features	
Clock Speed	Up to 40 MHz
Operating Voltage	3.0-3.6VDC
Maximum I/O Input Voltage	5.0VDC (3.3VDC typ.)
Core Current	22 MHz @ 31.3 mA, 25° C
I/O Ring	22 MHz @ 1.1 mA, 25° C
Output Drive	8 mA
CPU Interfaces	SPI or 8-bit parallel
Fixed Digital Inputs	4
Configurable I/O	8 independent channels, each with 4 ports: <ul style="list-style-type: none"> • Up to 32 bi-directional I/O lines • Up to 32 PWM outputs • Up to 16 PPM outputs • Up to 32 TRIAC signal generators • Up to 8 input capture peripherals • Up to 8 counters • Up to 8 quadrature decode peripherals
Package Type	64-pin TQFP 10 mm x 10 mm x 1.4 mm
Pricing	
Price (qty. 1/1K/10K) Part Number	\$5.00 / \$3.75 / \$3.00 20-668-0030
Price (2-Pack) Part Number	\$10 20-101-1187

AMEYA360

Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit www.ameya360.com

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd
Minhang District, Shanghai , China

➤ Sales :

Direct +86 (21) 6401-6692

Email amall@ameya360.com

QQ 800077892

Skype ameyasales1 ameyasales2

➤ Customer Service :

Email service@ameya360.com

➤ Partnership :

Tel +86 (21) 64016692-8333

Email mkt@ameya360.com