MiniCore™ RCM5700

Ultra-Compact Ethernet Module

The MiniCore RCM5700 offers a low-cost, ultra-compact, pin-compatible Ethernet control and communications solution for your embedded design.



Overview

The MiniCore line is Rabbit's smallest and most affordable embedded solution. Combined with reliable hardware and software, low-risk design features, and full web server capabilities, Rabbit offers an easy path to add reliable network connectivity and control to any system you design.

The MiniCore RCM5700 offers 10/100Base-T Ethernet connectivity for reliable wired network communications. With six serial ports, four configurable as SPI, the RCM5700 can easily embed into any existing or new design and is pin-compatible with current and future MiniCore products.

The Development Kit offers the essential tools and a complete Dynamic C° software development system to get you started quickly. It also contains an interface board with USB connections that will allow you to evaluate the RCM5700, and a prototyping board for application development.

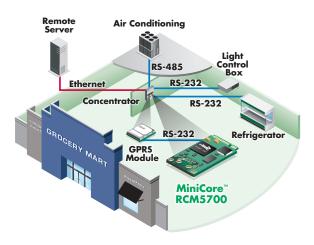
Standard Development Kit

This affordable development kit includes everything you need to get started.

\$99



Application Highlight



Potential Applications: Data archiving, tank monitoring, automatic meter reading, remote energy management, security and surveillance

Features and Benefits

- Rabbit® 5000 running at 50 MHz
- 10/100Base-T Ethernet
- · 128 KB SRAM and 1 MB serial flash memory
- Up to 32 GP I/O lines and 6 serial ports
- Small size: 1.20" × 2.00" × 0.12"
- Web server functionality
- Low-profile form factor
- Easy-to-use integrated design environment



MiniCore™ RCM5700 Specifications	
Features	RCM5700
Microprocessor	Rabbit® 5000 @ 50 MHz
EMI Reduction	Spectrum spreader for reduced EMI (radiated emissions)
Ethernet Port	10/100Base-T
Flash Memory	1 MB
SRAM	128 KB (Rabbit® 5000 on-chip)
Backup Battery	Connection for user-supplied backup battery (to support RTC)
General-Purpose I/O	Up to 35 parallel digital I/0 lines configurable with 4 layers of alternate functions
Additional Inputs	Reset in
Additional Outputs	Status, reset out
External I/O Bus	Can be configured for 8 data lines and 6 address lines (shared with parallel I/O lines), plus I/O read/write
Serial Ports	 6 high-speed, CMOS-compatible ports: All 6 configurable as asynchronous (with IrDA), 4 as clocked serial (SPI), and 2 as SDLC/HDLC 1 asynchronous clocked serial port shared with programming port
Serial Rate	Maximum asynchronous baud rate = CLK/8
Slave Interface	Slave port allows the RCM5700 to be used as an intelligent peripheral device slaved to a master processor
Real-Time Clock	Yes
Timers	Ten 8-bit timers (6 cascadable from the first), one 10-bit timer with 2 match registers, and one 16-bit timer with 4 outputs and 8 set/reset registers
Watchdog/Supervisor	Yes
Pulse-Width Modulators	4 channels synchronized PWM with 10-bit counter 4 channels variable-phase or synchronized PWM with 16-bit counter
Input Capture	2-channel input capture can be used to time input signals from various port pins
Quadrature Decoder	2-channel quadrature decoder accepts inputs from external incremental encoder modules
Power	3.15 - 3.45V DC 70mA @ 3.3V (without Ethernet) 200mA @ 3.3V (with Ethernet)
Operating Temperature	−40° C to +85° C
Humidity	5% to 95%, noncondensing
Connectors	Edge connectors for interface with 52-pin mini PCI Express socket
Board Size	1.20"×2.00"×0.12" (30 mm×51 mm×3 mm)
	Pricing
(Qty. 1/100) Part Number	\$35 / \$29.50 20-101-1235
Standard Development Kit Part Number	\$99 101-1274
Deluxe Development Kit Part Number	\$199 101-1275

Dynamic C Add-on Module



Rabbit Embedded Security ModuleAES encryption for transfer of sensitive data, and SSL/TLS for web security

