

MiniCore® RCM6700 Series

High Performance Embedded Device Servers

An easily scalable cloud-computing infrastructure, extending remote device control and management with tremendous savings in development cost.



Overview

The ultra-compact MiniCore RCM6700 is ideal for today's smart energy initiatives as well as other applications that require a cost effective web-enabled device server. The RCM6700 series provides up to 6 serial ports, configurable I/O and control features such as PWM. Furthermore, the RCM 6700 series offers a much greater feature set than comparable device servers, while at a lower cost.

The RCM6700 series is fully programmable, taking advantage of processor peripherals. The programming environment, Dynamic C, is an ANSI C compatible development environment that provides a royalty free TCP/IP stack and Wi-Fi support. Various protocol support such as ZigBee, Modbus and BACnet are also available to help reduce development costs and time-to-market.

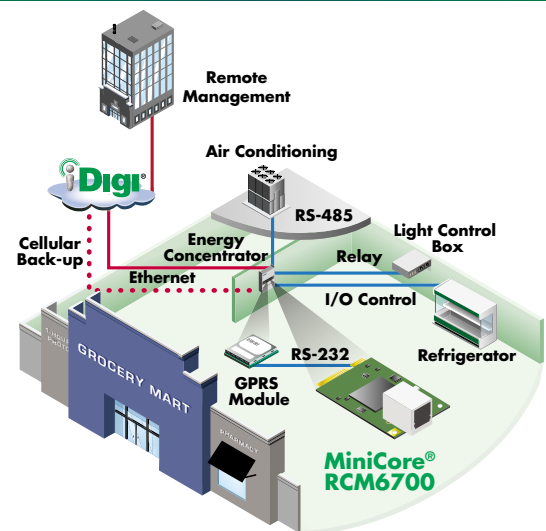
In addition to processor and protocol support, Dynamic C supports the iDigi® platform. The iDigi platform simplifies device deployment by allowing devices to easily pass through firewalls, eliminating server maintenance and costly on-site visits. The iDigi platform supports remote firmware updates and data storage for greater device control and monitoring.

Development Kit

The RCM6700 Development Kit includes everything you need to get started



Application Highlight



Potential Applications: Smart metering, energy management, building automation & security, point-of-sale, medical, motor control

Features/Benefits

- Rabbit® 6000 running up to 200 MHz
- 10/100 Ethernet and pin-compatible with MiniCore 802.11b/g wireless modules
- 1 MB of internal RAM for program storage
- Up to 4 MB of serial Flash for data logging or web page storage
- Flexible Interface Module (FIM) provides protocol support for CANbus or SD/SDIO
- iDigi platform provides cost-effective cloud computing for remote device management
- Seamless migration to chip level design
- 5X greater throughput performance



Specifications	RCM6700	RCM6710	RCM6750	RCM6760
Features				
Microprocessor	Rabbit® 6000 up to 200 MHz			
Network Interface	10/100Base-T (Ethernet signals only)	10/100Base-T RJ-45 connector	10/100Base-T (Ethernet signals only)	10/100Base-T RJ-45 connector
Flash Memory (Code and File system)	1 MB serial Flash		4 MB serial Flash	
Internal SRAM (Code and Data)	1 MB			
Battery-Backable SRAM	32 KB (Internal)		32 KB (Internal), 512 KB (External)	
Flexible Interface Module(FIM)	400 MHz DRPIC165X CPU 1k program/192 bytes data RAM			
Mass Storage	On-board serial Flash			
General-Purpose I/O	Up to 32 parallel digital I/O			
Serial Ports	6 high-speed, CMOS compatible ports, 4 configureable as clocked serial (SPI)			
Serial Rate	Maximum asynchronous baud rate = CLK/8			
Real-Time Clock	Yes			
Timers	Ten 8-bit timers (6 cascadable from the first) , one 10-bit timer with 2 match 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			
I²C	1 channel, standard (100 Kbits/s) and (400 Kbits/s) clock modes			
Quadrature Decoder	2-channel quadrature decoder accepts inputs from external incremental encoder modules			
Input Capture	2-channel input capture can be used to time input signals from various port pins			
Power - with Ethernet	210 mA @ 3.3V	250 mA @ 3.3V	250 mA @ 3.3V	260 mA @ 3.3V
Power - without Ethernet	120 mA @ 3.3V	130 mA @ 3.3V	130 mA @ 3.3V	140 mA @ 3.3V
Operating Temperature	-40° C to +85° C			
Supported Protocols	HTTP, HTTPS, SSLv3, DHCP, UDP, TCP, SNMP, Telnet, FTP, TFTP, SMTP, POP3			
Humidity	5% to 95%, non-condensing			
Connectors - Headers	52-pin Mini PCI Express	52-pin Mini PCI Express RJ-45 10/100Base-T connector	52-pin Mini PCI Express	52-pin Mini PCI Express RJ-45 10/100Base-T connector
Board Size	1.20" x 2.00" x 0.12" (30 mm x 51 mm x 3 mm)	1.20" x 2.00" x 0.70" (30 mm x 51 mm x 18 mm)	1.20" x 2.00" x 0.27" (30 mm x 51 mm x 7 mm)	1.20" x 2.00" x 0.73" (30 mm x 51 mm x 19 mm)
Part Number	20-101-1318	20-101-1319	20-101-1320	20-101-1321
Standard Development Kit	101-1327	N/A	N/A	N/A
Deluxe Development Kit	101-1326	N/A	N/A	N/A

Visit www.digi.com for part numbers.

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Digi International
877-912-3444
952-912-3444
info@digi.com

**Digi International
France**
+33-1-55-61-98-98
www.digi.fr

**Digi International
KK**
+81-3-5428-0261
www.digi-intl.co.jp

**Digi International
(HK) Limited**
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