MICROPROCESSOR **CORE MODULE** 

## **DIGI RABBITCORE RCM3209** SERIES

Ideal for engineers who want to rapidly develop and implement embedded systems with optional 10/100Base-T Ethernet connectivity

Based on the Rabbit<sup>®</sup> 3000, the RabbitCore RCM3209 series provides the capability to integrate real-time control and Ethernet connectivity into your design. Engineers are freed from the limitations of serial port communications, allowing worldwide connectivity using low-cost networking hardware. The RCM3209 series replaces the previous RCM3200 versions as it adds the full industrial temperature spec.

The RCM3209 series and Dynamic C<sup>®</sup> are designed in a complementary fashion for maximum performance and easeof-use. Rabbit's industry-proven Dynamic C is a C language

environment that includes an editor, compiler and in-circuit debugger; no in-circuit emulator is required. An extensive library of drivers, sample programs and royalty-free TCP/IP stack with source code is included.

## **BENEFITS**

- Rabbit 3000 microprocessor at 44 MHz
- Optional 10/100Base-T Ethernet

DIGI

- 512K Flash / 256K SRAM / 512K Program **Execution SRAM**
- 52 digital I/O and 6 serial ports for multiple device connecvity options
- Software debugging directly on target hardware



## **RELATED PRODUCTS**











oitCore RCM3700 RCM4300

Dynamic C<sup>®</sup>

ConnectCore 9P 9215

SPECIFICATIONS	RCM3209
FEATURE	
MICROPROCESSOR	Rabbit® 3000 at 44 MHz
EMI REDUCTION	Spectrum spreader for reduced EMI (radiated emissions)
ETHERNET PORT	10/100Base-T, RJ-45, 3 LEDs
FLASH MEMORY	512K
DATA SRAM	256K
PROGRAM EXECUTION SRAM	512K
BACKUP BATTERY	Connection for user-supplied backup battery (to support RTC and data SRAM)
GENERAL-PURPOSE I/O	52 parallel digital I/0 lines: • 44 configurable I/O • 4 fixed inputs • 4 fixed outputs
ADDITIONAL INPUTS	Startup mode (2), 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	<ul> <li>6 shared high-speed, CMOS-compatible ports:</li> <li>All 6 configurable as asynchronous (with IrDA), 4 as clocked serial (SPI), and 2 as SDLC/HDLC (with IrDA)</li> <li>1 asynchronous serial port dedicated for programming</li> <li>Support for MIR/SIR IrDA transceiver</li> </ul>
SERIAL RATE	Maximum asynchronous baud rate = CLK/8
SLAVE INTERFACE	A slave port allows the RCM3209/RCM3229 to be used as an intelligent peripheral device slaved to a master processor, which may either be another Rabbit 3000 or any other type of processor
REAL-TIME CLOCK	Yes
TIMERS	Ten 8-bit timers (6 cascadable), one 10-bit timer with 2 match registers
WATCHDOG/SUPERVISOR	Yes
PULSE-WIDTH MODULATORS	10-bit free-running counter and four pulse-width registers
INPUT CAPTURE	2- channel input capture can be used to time input signals from various port pins
POWER	3.15V to 3.45 VDC 325 mA @ 3.3V
QUADRATURE DECODER	Edge connectors for interface with 52-pin mini PCI Express socket
OPERATING TEMPERATURE	-40° C to +85° C
HUMIDITY	5% to 95%, non-condensing
CONNECTORS	Two 2 × 17, 2 mm pitch
BOARD SIZE	1.850" × 2.725" × 0.86" (47 mm × 69 mm × 22 mm)
PRODUCT WARRANTY	3 years





## PART NUMBERS

DESCRIPTION

20-101-1179

RCM3209

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