Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us
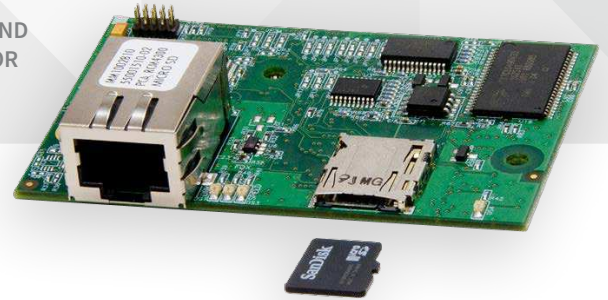
RABBITCORE®
RCM4300 SERIES

The RabbitCore RCM4300 series delivers larger mass storage by allowing you to implement up to 2 GB of hot swappable industry-standard microSD™ memory

The RabbitCore RCM4300 series offers larger memory for memory intensive applications. The microSD™ card slot has the ability to store up to 2 GB of data, making this an ideal module for data logging applications. In combination with our FAT file system, users can easily access data via the built-in web server or by simply using the hot-swappable feature. Dynamic C® also adds Megabyte Code Support™ (MCS), which allows the use of 1 MB of on-board SRAM for shared memory and code space.

The RCM4300 series is pin-compatible with other RCM4XXX core modules, enabling migration to other designs with specific requirements.

The RabbitCore RCM4300 Development Kit makes evaluation easy with all the hardware and software needed to get started quickly.

BENEFITS

- Rabbit 4000 running at 58.98 MHz
- Supports up to 2 GB microSD memory card, 1 MB SRAM for shared code, 512K of battery-backed SRAM, FAT file organization
- 10/100Base-T Ethernet, 36 GPIO, 6 serial ports
- 8 channel 12-bit resolution (RCM4300 only)
- Embedded web server
- Easily implement secure embedded devices with client side SSL or AES encryption
- Includes Remote Program Update allowing for firmware updates from anywhere in the world

APPLICATION EXAMPLE

INVENTORY AND
TRACKING COMPANY

Ethernet

Internet
Gateway

DIGI REMOTE MANAGER™

SERVICE VEHICLE

Wireless/Telco/VPN

RABBITCORE® RCM4300
Inside Vehicle Tracking
Interface Unit

On-Board
Diagnostics
System

CAN Bus

Ethernet

DIGI TRANSPORT®
WR11

GPS unit

RFID Tags

RELATED PRODUCTS

RabbitCore®
RCM3000
Series

RabbitCore®
RCM4000
Series

RabbitCore®
RCM4200
Series

Rabbit
MiniCore®
RCM6700

Dynamic C®
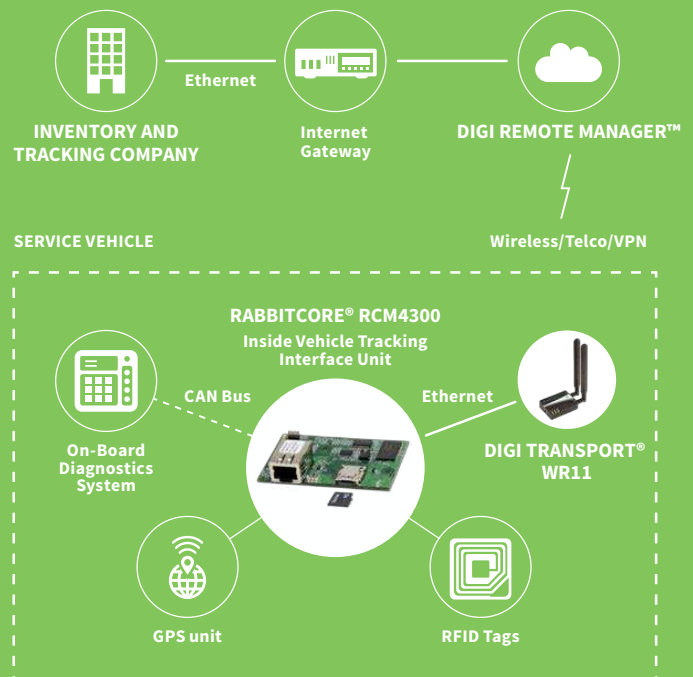
SPECIFICATIONS	RCM4300		RCM4310
FEATURES			
MICROPROCESSOR	Rabbit® 4000 at 58.98 MHz		
EMI REDUCTION	Spectrum spreader for reduced EMI (radiated emissions)		
ETHERNET PORT	10/100Base-T, RJ-45, 3 LEDs		
DATA SRAM	512K (8-bit)		
PROGRAM EXECUTION FAST SRAM	1 MB (8-bit)		512K (8-bit)
SERIAL FLASH MEMORY (PROGRAM)	2 MB		1 MB
MEMORY (DATA STORAGE)	microSD™ Card 128 MB–2 GB		microSD™ Card 128 MB–2 GB
LED INDICATORS	LINK/ACT (link/activity) FDX/COL (full-duplex/collisions) SPEED (on for 100Base-T Ethernet connection) SD (microSD™ mounted status)		
BACKUP BATTERY	Connection for user-supplied backup battery (to support RTC and data SRAM)		
GENERAL-PURPOSE I/O	28 parallel digital I/O lines: Configurable with 4 layers of alternate functions		36 parallel digital I/O lines: Configurable with 4 layers of alternate functions
ADDITIONAL INPUTS	2 startup mode, reset in, CONVERT		2 startup mode, reset in
ADDITIONAL OUTPUTS	Status, reset out, analog VREF		Status, reset out
ANALOG INPUTS:	8 channels single-ended or 4 channels differential Programmable gain 1, 2, 4, 5, 8, 10, 16, and 20 V/V		N/A
	12 bits (11 bits single-ended)		
	180 µs		
AUXILIARY I/O BUS	Can be configured for 8 data lines and 5 address lines (shared with parallel I/O lines), plus I/O read/write		
SERIAL PORTS	5 shared high-speed, CMOS-compatible ports: • All 5 configurable as asynchronous (with IrDA), • 4 as clocked serial (SPI), and 1 as SDLC/HDLC • 1 clocked serial port shared with programming port • 1 clocked serial port shared with A/D converter, serial flash, and microSD™ card		6 shared high-speed, CMOS-compatible ports: • All 6 configurable as asynchronous (with IrDA), • 4 as clocked serial (SPI), and 2 as SDLC/HDLC • 1 clocked serial port shared with programming port • 1 clocked serial port shared with serial flash and microSD™ card
SERIAL RATE	Maximum asynchronous baud rate = CLK/8		
SLAVE INTERFACE	Slave port allows the RCM4300 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 PWM registers with 10-bit free-running counter and priority interrupts		
INPUT CAPTURE	2 input capture channels 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 (PINS UNLOADED)	3.0–3.6 VDC, 350 mA (typ.) @ 3.3V, 385 mA @ 3.6V and 85° C (max.)		
OPERATING TEMPERATURE	-20° C to +85° C		
HUMIDITY	5% to 95%, non-condensing		
CONNECTORS	One 2 × 25, 1.27 mm pitch IDC signal header; One microSD™ Card socket; One 2 × 5, 1.27 mm pitch IDC programming header		
BOARD SIZE	1.84" × 2.85" × 0.84" (47 mm × 72 mm × 21 mm)		

PART NUMBERS	DESCRIPTION
20-101-1138	RCM4300
20-101-1139	RCM4310

91001546
D1/915

DIGI INTERNATIONAL WORLDWIDE HQ
877-912-3444 / 952-912-3444 / www.digi.com

DIGI INTERNATIONAL FRANCE
+33-1-55-61-98-98 / www.digi.fr

DIGI INTERNATIONAL JAPAN
+81-3-5428-0261 / www.digi-intl.co.jp

DIGI INTERNATIONAL SINGAPORE
+65-6213-5380

DIGI INTERNATIONAL CHINA
+86-21-50492199 / www.digi.com.cn

DIGI