Rabbit Semiconductor - 101-1284 Development Kit

Product Overview:

The RCM5600W MiniCore module provides a compact module in a mini PCI Express form factor with integrated Wi-Fi/802.11b/g functionality to allow you to create a low-cost, low-power Wi-Fi based control and communications solution for your embedded system.

This standard development kit, 101-1284, is available with the essentials that you need to design your own microprocessor-based system, and includes a complete Dynamic C software development system. The Development Kit also contains an Interface Board with a USB connection that will allow you to evaluate the RCM5600W, and a Prototyping Board to help you to develop your own applications. You will also be able to write and test software for the RCM5600W modules, including Wi-Fi applications.

The RCM5600W has a Rabbit 5000 microprocessor operating at up to 73.73 MHz, flash memory, two clocks (main oscillator and real-time clock), and the circuitry necessary to reset and manage the Rabbit 5000. An edge connector brings out the RCM5600W user interface to a 52-pin mini PCI Express socket on the motherboard the RCM5600W is mounted on.

Kit Contents:

The RCM5600W Standard Development Kit contains the hardware essentials you will need to use your RCM5600W module. These items are supplied in the standard version of the Development Kit.

- RCM5600W module.
- 2.4 GHz dipole antenna with mounting bracket and U.FL to RP-SMA connector cable.
- Interface Board with standoffs/connectors.
- Prototyping Board with standoffs/connectors.
- USB cable to program RCM5600W via Interface Board.

- Dynamic C CD-ROM, including product documentation on disk.
- Getting Started instructions.
- Registration card.

Key Features:

- Small size: 1.20" × 2.00" × 0.40" (30 mm × 51 mm × 10 mm)
- Microprocessor: Rabbit 5000 running at 73.73 MHz
- Up to 35 general-purpose I/O lines each configurable with up to four alternate functions
- 3.3 V I/O lines
- Six CMOS-compatible serial ports — four ports are configurable as a clocked serial port (SPI), and two ports are configurable as SDLC/HDLC serial ports.
- Airoha single-chip 802.11b/g transceiver
- External I/O bus can be configured for 8 data lines, 8 address lines (shared with parallel I/O lines), and I/O read/write
- 1MB SRAM and 1MB serial flash memory
- Battery-backable real-time clock
- Watchdog supervisor

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
101-1284	Rabbit Semiconductor	1706344	08R6008

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
IS62WV51216BLL	ISSI	512K x 16 Ultra Low Power SRAM	NA	43M5479
AT45DB081D	Atmel	DATAFLASH, 8MB,	1455038	58M3836
ADC081S021	Atmel	8bit ADC	1250030	69K1478

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
101-1285	Rabbit Semiconductor	RCM5600 Deluxe Development Kit	Rabbit 5000	1706345	08R6009
DC-WEM-02T-S	Digi International	Dev Kit of WiFi	Digi NS7520 Processor	NA	1552652

<u>Document List:</u>

Datasheets:

Part Number	Description	Size
RCM5600	MiniCore RCM5600W Data Sheet	1.68MB
IS62WV51216BLL	512K x 16 LOW VOLTAGE, ULTRA LOW POWER CMOS STATIC RAM	190KB
AT45DB081D	8-megabit 2.5-volt or 2.7-volt DataFlash	1.7MB
ADC081S021	Single Channel, 50 to 200 ksps, 8-Bit A/D Converter	1248KB
AL2236	2.4GHz RF Transceiver	285KB
uPG2179TB	L, S-BAND SPDT SWITCH	71KB

Application Notes:

File Name	Size
Getting the Most Out of the New AT45DBxxxC DataFlash® Family	158KB
Configuring High-density FPGAs using Atmel's Serial DataFlash® and an AVR® Microcontroller	87KB
Using Atmel's DataFlash	192KB

Hardware & Software:

File Name	Size
MiniCore RCM5600W Schematic	402KB
MiniCore Interface Board Schematic	2228KB
MiniCore Prototyping Board Schematic	338KB
Digital I/O Accessory Board Schematic	198KB

Serial Communication Accessory Board Schematic	171KB
Dynamic C 10 User's Manual	4.4MB
Dynamic C Function Reference Manual	4.6MB
Dynamic C TCP/IP User's Manual Vol. 1	2.8MB
Dynamic C TCP/IP User's Manual Vol. 2	3.6MB
An Introduction to TCP/IP	931KB