



Wi-Fi Add-On-Kit

Application Kit

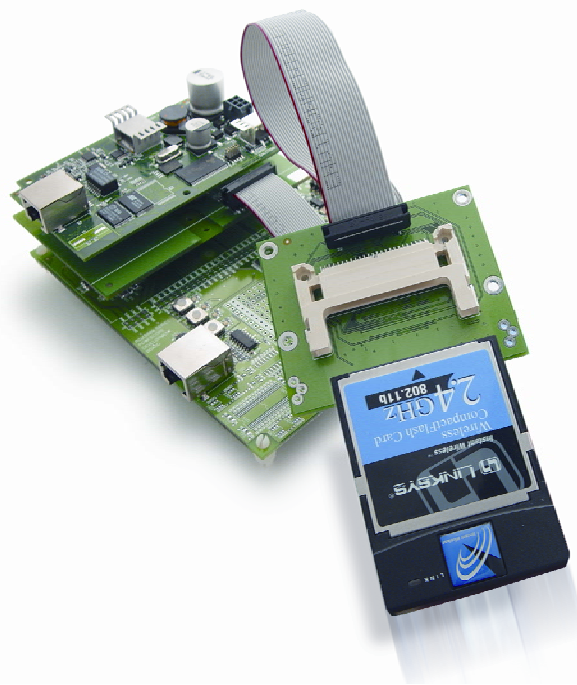
To add more flexibility to your embedded network, Rabbit Semiconductor offers Wi-Fi Add-On Kits for use with many of its RabbitCore Microprocessor Core Modules (RCMs). These kits provide integrated Wi-Fi (IEEE 802.11b) capability for existing and new Rabbit-based applications.

Rabbit Semiconductor has created a kit that minimizes the effort required to add Wi-Fi capability to Rabbit-based applications. The kit consists of an interposer card specifically designed to fit between an RCM and a motherboard or prototyping board, a CompactFlash Wi-Fi Board, a LinkSys Wi-Fi CompactFlash Card, a 12" ribbon cable to allow remote placement of the Wi-Fi board and card, necessary connection hardware, and software including sample programs and Dynamic C upgrade.

Wi-Fi Add-On Kits are available for the following RCM families:

- RCM3000
- RCM3100
- RCM3200
- RCM3300
- RCM3400
- RCM3600
- RCM3700
- PowerCore FLEX

To further expand the capabilities of your embedded network, the optional RabbitWeb Software Module provides a mechanism by which Rabbit-based applications can serve web pages including reading and writing program variables remotely. In addition, correctly implementing other optional software modules, such as SSL and AES, will make your embedded network and critical machine information more secure. Other optional software modules that may be of interest include FAT File System, PPP, SNMP, and the μ C/OS-II Real Time Kernel.



LINKSYS

Z-World has partnered with LinkSys to provide Wi-Fi hardware support. LinkSys is the leader in networking solutions for the home and small business particularly in wireless LAN equipment, broadband routers, network adapters for desktop and notebook computers, and hubs and switches.

Rabbit Security and Connectivity

RabbitWeb — The RabbitWeb module web-enables your Rabbit-based application. RabbitWeb lets you create web-page HTML forms that interface with C variables in embedded networked applications. RabbitWeb can reduce weeks or months of complex Common Gate Interface (CGI) programming to hours. RabbitWeb enhances the Dynamic C compiler and extends the Dynamic-C HTTP server. 101-0910 \$149 Web Download/101-0900 \$159 Shipped CD

Secure Sockets Layer (SSL) — The SSL module provides a small footprint implementation of SSL allowing SSL security to be added to your web-enabled embedded applications with just a few lines of code. The SSL module also includes a utility program for generating the security certificates needed to use SSL. The SSL module is for use with products based on Rabbit 3000A and later microprocessors including the RCM3700 and RCM3300 families of RabbitCores. The unique block arithmetic instructions of those microprocessors speed encryption and decryption making SSL fast and economical for embedded systems. 101-0895 \$289 Web Download/101-0896 \$299 Shipped CD

www.rabbitsemiconductor.com

FAT File System — Rabbit-based applications with serial flash memories including the RCM3300 and RCM3700 families of RabbitCores can now use the common FAT file System. This module allows the file system to be integrated with HTTP upload and FTP for run-time updates of web pages and graphics, security access lists, embedded help files, or any file that needs to be changeable in the field. RCM3300, RCM3700, and PowerCore FLEX families only. PowerCore FLEX requires FAT File System Version 2.06. 101-0984 \$149 Web Download/101-0979 \$159 Shipped CD.

SNMP Source Code & Sample Programs — Originally intended to gather statistics for network management and capacity planning, the Simple Network Management Protocol (SNMP) can also be used for data gathering in embedded systems. Known applications include monitoring thermostat temperatures, tool revolution speed, and status of physical components such as doors. The Rabbit SNMP module is based upon RFCs 1155-1157. 101-0982 \$149 Web Download/101-0977 \$159 Shipped CD.

PPP Source Code & Sample Programs — This module includes a Point-to-Point Protocol driver for serial and PPPoE links, which allows a serial or modem connection to use TCP/IP. The PPP module is based upon RFC2516 Method for Transmitting PPP over Ethernet. 101-0983 \$149 Web Download/101-0659 \$159 Web Download

AES Source Code & Sample Programs — The AES module allows you to encrypt sensitive data for greater security. This module is an implementation of the Rijndael Advanced Encryption Standard cipher with a 128-bit key. 101-0646 \$149 Web Download/101-0658 \$159 Shipped CD

µC/OS-II Real-Time Kernel Source Code & Sample Programs — This module implements Jean LaBrosse's popular real-time kernel. This is a pre-emptive, prioritized kernel that allows 63 different tasks, flags, semaphores, mutex semaphores, queues, and message mail boxes. Purchasers of this module also receive Jean J. Labrosse's book MicroC/OS-II: The Real-Time Kernel. 101-0644 \$159

Wi-Fi Interposer Board				
Parameter	RCM3000-RCM3300	RCM3400	RCM3600-RCM3700	PowerCore
Current	285 mA @ 3.3 V	285 mA @ 3.3 V	300 mA @ 5 V	300 mA @ 5 V
Operating Temperature	0°C to +55°C			
Storage Temperature	-20°C to +65°C			
Humidity	10% to 90%, noncondensing			
Wi-Fi Compact Flash Card Certifications	FCC Class B, CE			
Wi-Fi Compact Flash Card Channels	1-11 (Canada, U.S.A) 1-13 (Europe except France, Spain) 10-13 (France) 10-11 (Spain) 14 (Japan)			
Protocol	IEEE 802.11b (Wi-Fi) 11 Mbits/s, 2.4 GHz			
CompactFlash Wi-Fi Board Compact Flash Connector	Type 1 Compact Flash Adapter: <ul style="list-style-type: none"> CF based 802.11b I/O Dual 2 x 10, 2 mm pitch header 			

Wi-Fi Add-On Kit Contents <ul style="list-style-type: none"> Interposer Board – Interposer boards are not interchangeable between RCMs with different footprints. See below for the appropriate part numbers. CompactFlash Wi-Fi Board LinkSys Wi-Fi CompactFlash Card 20-pin to 20-pin IDC header connection ribbon cable 	<ul style="list-style-type: none"> 10-pin IDC header to DE9F serial cable Sample programs and software related specifically to the Wi-Fi Add-On Kits on CD Dynamic C upgrade to 9.21 or higher on CD Getting Started instructions Miscellaneous connection and mounting hardware including standoffs, if necessary
Wi-Fi Add-On Kit (RCM3000 – RCM3300 Footprint) – 101-0997	Wi-Fi Add-On Kit (RCM3600 – RCM3700 Footprint) – 101-0999
Wi-Fi Add-On Kit (RCM3400 Footprint) – 101-0998	Wi-Fi Add-On Kit (PowerCore FLEX Footprint) – 101-1000

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