



Preliminary Datasheet

Machine-to-Machine (M2M) Application Kit

Device control through GSM/GPRS wireless network

M2M (machine-to-machine/mobile) brings together **machine control with wireless communications**. With 50 billion "machines" in the world, M2M allows a machine to be monitored or controlled from anywhere, anytime, using current wireless data technologies such as GSM, SMS (text messaging) and GPRS.

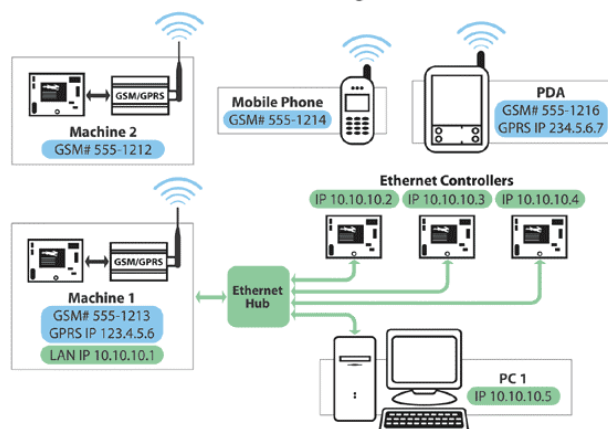
Rabbit Semiconductor's M2M Application Kit provides all the tools necessary to sample and design communications between a Rabbit-based device to a GSM/GPRS-enabled device (e.g. GSM modem/phone, PDA phone). The libraries and sample programs allow for a GSM modem/phone to send SMS (text) messages to a RabbitCore module (RCM) that can interpret messages as commands and in turn can execute control functions. The RCM can also send/receive email from any PC, device or phone. A menu system allows for easy interface on the keypad/display, as well as reading text messages and email. The M2M Application Kit includes Z-World's Dynamic C software with royalty-free TCP/IP stack and PPP module.

Machine2ME Node

Is a configuration involving an Ethernet-enabled Rabbit-based device at the heart of a Machine equipped with a GSM modem. The Rabbit-based device acts as a server/node to other Ethernet devices. So a single Rabbit device with a wireless modem can control a number of Ethernet devices.

Machine2ME: Machine to Machine with Ethernet

Communication & Control Through SMS, GPRS, Ethernet



M2M Applications Kit Highlights

- HW/SW for wireless RCM-to-GSM communication
- Dual Band GSM/GPRS modem and antenna
- Keypad/Display configuration menu system
- Royalty-free TCP/IP stack with source code & PPP
- Samples/Libraries including Machine2ME Node

Applications

- Wireless Embedded Control
- Alarms & Notification Systems
- Remote Device Monitoring
- Data and Event Logging
- Machine Communication

M2M Development Partner



One of the key challenges of M2M Embedded systems designers using GSM/Telecom technologies is the need for product certification. Rabbit Semiconductor has partnered with AIRDESK to provide modem hardware support and is a key resource in integration, testing and certification of a Rabbit-based embedded M2M solution.

AIRDESK is a leading provider of wireless data solutions and services focusing on machine-to-machine (M2M) and telemetry market segments. As a one-stop wireless resource, AIRDESK carries the top brands in wireless devices to deliver the best solution for a customer's needs, as well as to facilitate provisioning and account activation through the nation's leading wireless service providers.

M2M Application Kit Specifications

FEATURE	Control and Display System
Microprocessor Core Module	RCM3200 RabbitCore module
Microprocessor	Rabbit 3000 running at 44.2 MHz
Ethernet Connectivity	10/100Base-T, RJ-45
Memory	512K Flash, 512K SRAM (program). 256K SRAM (data)
General Purpose I/O	52 digital I/O, Auxiliary I/O Bus
Prototyping Board	RCM3200 Prototyping Board
Serial Ports	RS-232 (2 3-wire or 1 5-wire). Additional CMOS ports available on RCM3200
Display	122 x 32 Keypad/Display Unit with LCD menu system
GSM Modem	Dual Band GSM/GPRS modem (900/1900 MHz for US Kit, 900/1800 MHz for International Kit)
Antenna	½ Wave Device Antenna. 90° Adjustable Knuckle Antenna (1850-1990 MHz for US Kit, 870-960MHz for International Kit)
SIM Card (Sold Separately)	Available separately through wireless service provider or AIRDESK (requires wireless service subscription)
	Software Development System
Software Compiler	Z-World's Dynamic C 8.x with TCP/IP stack
Software Libraries	SMS/GPRS modes, Modem--specific Library
Additional Libraries	Dynamic C PPP module, Generic Modem Library, TCP/IP, SMTP, POP3, Telnet
Sample Programs	For SMS and GPRS communication and control Machine2ME components. FTP datalogging
Menuing System	For display of SMS and GPRS communications
	Included Accessories
Cables	Programming Cable for RCM DB15 → 10 pin Conversion Cable Ethernet Crossover Cable
Documentation	M2M Application Kit Getting Started Manual RCM3200 Getting Started Manual Full Documentation on CD
Power Supplies (US Kits Only)	9 V DC adapter for RCM3200 12 V DC, 1 Amp (min.) for GSM Modem. Power cable included.
Pricing	\$699
Part Number	U.S. 101-0721 Int'l 101-0722



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