rfPIC™ Development Kit 1

Summary

The rfPIC Development Kit provides design engineers with an easy way to evaluate unidirectional remote sense and control wireless links based on the rfPIC12F675 and rfRXD0420 devices. The kit is based on the popular PICkit™ 1 FLASH Starter Kit and consists of modular building blocks for different transmitters and receivers that can be utilized for prototype systems or to evaluate different options using Microchip products.

The receiver modules are based on the rfRXD0420 device and are available in two options supporting 315 MHz ASK and 433 MHz ASK. These modules plug directly into the PICkit 1 Development board offering an easy way to evaluate the different receiver modules with Microchip's 8- and 14-pin FLASH PIC® microcontrollers as well as a USB interface to a PC. The modules are also available for sale separately to allow a number of prototypes based on the same module without having to do an actual RF design. The design files for these modules are available to allow easy integration of the designs into a system.

The transmitter modules are based on the rfPIC12F675 devices and support the same frequency and modulation formats as the receivers. The transmitter modules feature button inputs for remote control functions as well as analog input to allow evaluation of the A/D and comparator peripherals on the rfPIC12F675. Code development is achieved with Microchip's MPLAB Integrated Development Environment (IDE). The microcontroller is easily programmed using the PICkit 1, with modules plugging into the PICkit in a similar manner as the receiver modules.

Features

Key features of the rfPIC Development Kit 1 include:
* Small 3" x 4.5" circuit board with snap-off prototyping board
* Easy to use Windows® programming interface for programming Microchip's 8/14 pin FLASH family of microcontrollers
* Microchip's Tips 'n Tricks Booklet provides efficient, low-cost design techniques using Microchip FLASH microcontrollers
* PICkit 1 User Guide (included on CD ROM)
* Firmware and instruction provided to set up a PC remote controller for PC-compatible Powerpoint presentations.

Package Contents
* PICkit™ 1 FLASH Starter Kit
* rfPIC Transmitter Module (433.92 MHz)
* rfPIC Transmitter Module (315 MHz)
* rfRXD Receiver Module (433.92 MHz)
* rfRXD Receiver Module (315 MHz)
* rfPIC Software and Complete Documentation (on CD)

Host System Requirements
* PC-compatible system with an Intel Pentium® class or higher processor, or equivalent
* A minimum of 16 MB RAM
* A minimum of 40 MB available hard drive space
* CD-ROM drive
* Available USB port
* Microsoft Windows® 98, Windows NT® 4.0, Windows 2000 or Windows XP
* Supports 8/14-pin FLASH PICmicro® products, including: PIC12F629, PIC12F675, PIC16F630, PIC16F676, rfPIC12F675 and rfRXD0420/0920.

![Microchip logo]

MICROCHIP

Development Systems

Microchip Technology Incorporated

Part Numbers and Ordering Information:

The rfPIC Development Kit 1 includes everything needed to program, evaluate and develop applications using Microchip's 8/14-pin FLASH family of microcontrollers.

rfPIC™ Development Kit 1 Products and Accessories

Part Number	Description	Availability
DV164102	rfPIC Development Kit 1	Now
AC164101	rfPIC Transmitter Module (433.92 MHz)	Now
AC164102	rfPIC Transmitter Module (315 MHz)	Now
AC164103	rfRXD Receiver Module (433.92 MHz)	Now
AC164104	rfRXD Receiver Module (315 MHz)	Now
AC164105	rfRXD Receiver Module - 5 Pack (433.92 MHz)	Now
AC164106	rfRXD Receiver Module - 5 Pack (315 MHz)	Now

Development Tools from Microchip

MPLAB® IDE	Integrated Development Environment (IDE)
MPASM™ Assembler	Universal PICmicro macro-assembler
MPLINK™ Linker/MPLIB™ Librarian	Linker/Librarian
MPLAB C17	C compiler for PIC17CXXX MCUs
MPLAB C18	C compiler for PIC18CXXX MCUs
MPLAB SIM Simulator	Software Simulator
MPLAB ICD 2	In-Circuit Debugger
MPLAB ICE 2000	Full-featured modular in-circuit emulator
PICSTART® Plus Programmer	Entry-level development kit with programmer
PRO MATE® II Device Programmer	Full-featured, modular device programmer
KEELOQ® Evaluation Kit	Encoder/Decoder evaluator
KEELOQ Transponder Evaluation Kit	Transmitter/Transponder evaluator
microID™ Developer's Kit	125 kHz and 13.56 MHz RFID development tools
MCP2510 CAN Developer's Kit	MCP2510 CAN evaluation/development tool

Americas		Asia/Pacific		Europe	
Atlanta	(770) 640-0034	Australia	61-2-9868-6733	Austria	43-7242-2244-399
Boston	(978) 692-3848	China – Beijing	86-10-85282100	Denmark	45-4420-9895
Chicago	(630) 285-0071	China – Chengdu	86-28-86766200	France	33-1-69-53-63-20
Dallas	(972) 818-7423	China – Fuzhou	86-591-7503506	Germany	49-89-627-144-0
Detroit	(248) 538-2250	China – Hong Kong SAR	852-2401-1200	Italy	39-0331-742611
Kokomo	(765) 864-8360	China – Qingdao	86-532-5027355	Netherlands	31-416-690399
Los Angeles	(949) 263-1888	China – Shanghai	86-21-6275-5700	United Kingdom	44-118-921-5869
Phoenix	(480) 792-7966	China – Shenzhen	86-755-82901380		
San Jose	(408) 436-7950	China – Shunde	86-765-8395507		As of 9/1/03
Toronto	(905) 673-0699	India	91-80-2290061		
		Japan	81-45-471- 6166		
		Korea	82-2-554-7200		
		Singapore	65-6334-8870		
		Taiwan	886-2-2717-7175		
		Taiwan – Kaohsiung	886-7-536-4818		

Microchip Technology Inc. • 2355 W. Chandler Blvd. • Chandler, AZ 85224-6199 USA • (480) 792-7200 • FAX (480) 792-7277