

# KEELOQ® Evaluation Kit



## Lets you evaluate the capabilities of Microchip's code hopping devices.

The KEELOQ Evaluation Kit demonstrates the capabilities of Microchip Technology's code hopping technology. The KEELOQ Code Hopping Encoder devices are designed to be the transmitter portion. The KEELOQ Decoder devices are used in the receiver portion of secure RKE\* systems. The devices use the KEELOQ code hopping algorithm, which combines high security, a small package outline, and a very low cost to make this an ideal solution for unidirectional RKE systems.

Primary applications for the KEELOQ devices include automobile keyless entry and security systems, garage door openers, home security systems, central locking systems, gate openers, vehicle immobilizers, identity tokens, and a growing list of other applications.

The KEELOQ Evaluation Kit includes all the necessary hardware to evaluate a code hopping system, as well as a basic demonstration software program, which is supplied on a PC-compatible 3.5-inch diskette.

\*Remote Keyless Entry

### Features:

- Transmit hopping code messages using KEELOQ encoders
- Display the fixed and changing parts of hopping code messages on a PC
- Receive and decode hopping code transmissions using a PIC16C56/93C46 decoder or HCS512 decoder
- Learn new encoders onto the HCS512 decoders or PIC16C56/93C46 EEPROM-based decoder
- Program KEELOQ encoders
- Comprehensive User's Guide
- Schematics for transmitter and receiver
- Supports HCS200, HCS300, HCS301, HCS360, and HCS361 encoders
- License disk containing source code and application notes describing a software decoder.



**MICROCHIP**  
The Embedded Control Solutions Company®

# KEELOQ® Evaluation Kit

## Ordering Information:

### Model Name:

KEELOQ Evaluation Kit

### Ordering Part Number:

DM303002

### Devices Supported:

HCS200 Encoder

HCS300 Encoder

HCS301 Encoder

HCS360 Encoder

HCS361 Encoder

HCS512 Decoder

PIC16C56 Decoder

### Host System Requirements:

PC-compatible computer: 386DX, 486 or Pentium® -based with ISA or EISA bus

Serial Port

EGA, VGA, 8514/A, Hercules graphic card (EGA or higher recommended)

Microsoft® Windows® 3.1 or greater in 386 enhanced mode

4 MB RAM, 4 MB free disk space

3.5-inch diskette drive

## Customer Support:

Microchip maintains a worldwide network of distributors, representatives, local sales offices, Field Application Engineers, and Corporate Application Engineers. Microchip's Internet home page can be reached at: [www.microchip.com](http://www.microchip.com)

## Systems Description:

- HCS512 and PIC16C56/93C46 EEPROM-based decoders
- RF Receiver module
- On-board +5V regulator and filtered rectifier for direct input from 9V AC/DC wall adapter
- Two radio frequency transmitters using HCS300 hopping code encoders
- RS-232 socket and associated hardware for direct connection to RS-232 interface
- Six bright LEDs connected to decoder outputs
- Supports HCS200, HCS300, HCS301, HCS360, and HCS361 samples

Also includes all necessary software to program transmitters and to display codes or messages.

To order or obtain more information about KEELOQ or any other Microchip product, contact the Microchip sales office nearest you.

Development Tools from Microchip	
MPLAB® IDE	Integrated Development Environment
MPASM™ Assembler	Universal PICmicro macro-assembler
MPLINK™ Object Linker	Linker
MPLIB™ Object Librarian	Librarian
MPLAB® C17	C compiler for PIC17CXXX MCUs
MPLAB® C18	C compiler for PIC18CXXX MCUs
C compilers	Sold by third-party vendors (HI-TECH, IAR, CCS)
MPLAB® SIM	Software Simulator
MPLAB® ICD	In-circuit Debugger
ICEPIC™ Emulator	Low-cost in-circuit emulator
MPLAB® ICE 2000	Full-featured modular in-circuit emulator
PICSTART® Plus	Entry-level development kit with programmer
PRO MATE® II	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
MXDEV™ 1 Analog Evaluation System	Evaluation kit for MCP devices

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