

KEELOQ® Transponder Evaluation Kit



Lets you evaluate the capabilities of Microchip's Code Hopping transmitter and transponder devices.

The KEELOQ Transponder Evaluation Kit allows the user to fully evaluate the HCS410 and HCS412 Code Hopping Transmitters/Transponders. The HCS410 and HCS412 use the KEELOQ code hopping technology, which combines high security transmitter and transponder operation in a small, low-cost package.

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

The KEELOQ Transponder Evaluation Kit is supplied with software to let the user easily reprogram or modify the settings for the HCS410 and HCS412. The hardware includes a base station that functions as an HCS410 or HCS412 programmer/code hopping decoder and transponder reader unit.

Features:

- Base station with RF and inductive communication
- Allows full testing of the HCS410 and HCS412 in all its modes
- Allows programming of the HCS410 and HCS412
- Base station learns up to four transmitters/transponders
- Simple, normal, and secure learning schemes available
- Displays IFF challenge, responses, and decrypted responses
- Displays code hopping transmissions
- Windows® software includes
 - Selection of manufacturer's code
 - Selection of other key generation options
 - Selection of HCS410 and HCS412 options
 - HCS410 and HCS412 programming
 - Monitoring of IFF and code hopping transmissions
- Comprehensive User's Guide



MICROCHIP
The Embedded Control Solutions Company®

KEELOQ® Transponder Evaluation Kit

Ordering Information:

Model Name:

Transponder Evaluation Kit

Ordering Information:

DM303005

Devices Supported:

HCS410 Encoder

HCS412 Encoder

Host System Requirements:

PC-compatible computer: 386DX, 486 or Pentium® -based

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

Microsoft® Windows® 95, 98 or Windows NT®

4 MB RAM, 4 MB free disk space

3.5-inch diskette drive

One serial port (2400 baud)

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

System Description:

The KEELOQ Transponder Evaluation Kit Hardware consists of a base station, three transmitters/transponders, a batteryless transponder, and various HCS410 and HCS412 samples. The base station doubles as a programmer and decoder. The base station includes a coil used for generating a magnetic field used to communicate with a transponder inductively. The base station has an RF receiver for receiving KEELOQ code hopping transmissions.

The accompanying Windows software is supplied on a 3.5-inch diskette and includes all the necessary software for programming and testing the HCS410 and HCS412 in all its modes.

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	Universal PICmicro macro-assembler
MPLINK/MPLIB	Linker/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	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

Americas

Atlanta (770) 640-0034
Boston (508) 480-9990
Chicago (630) 285-0071
Dallas (972) 818-7423
Dayton (937) 291-1654
Detroit (248) 538-2250
Los Angeles (949) 263-1888
New York (631) 273-5305
San Jose (408) 436-7950
Toronto (905) 405-6279

Asia

China – Beijing 86-10-85282100
China – Shanghai 86-21-6275-5700
Hong Kong 852-2-401-1200
India 91-80-229-0061
Japan 81-45-471- 6166
Korea 82-2-554-7200
Singapore 65-334-8870
Taiwan 886-2-2717-7175

Europe

Denmark 45 4420 9895
France 33-1-69-53-63-20
Germany 49-89-627-144 0
Italy 39-039-65791-1
United Kingdom 44 118 921 5858



MICROCHIP

The Embedded Control Solutions Company®

Microchip Technology Inc. • 2355 W. Chandler Blvd. • Chandler, AZ 85224-6199 • (480) 786-7200 • Fax (480) 899-9210

Information subject to change. The Microchip name and logo, The Embedded Control Solutions Company, PIC, PICmicro, PICSTART, PRO MATE, MPLAB, and KEELOQ are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries. In-Circuit Serial Programming, ICSP, MXDEV, and microID are trademarks of Microchip in the U.S.A. SQTP is a service mark of Microchip Technology Inc. All other trademarks mentioned herein are the property of their respective companies. © 2000 Microchip Technology Inc. All rights reserved. Printed in the USA

DS51147E