MCP2510 CAN Development Kit



The MCP2510 Controller Area Network (CAN) Developer's Kit is ideal for CAN system developers as well as for CAN beginners.

MCP2510 software development is made easy by offering a variety of features to manipulate the functionality of the MCP2510. The MCP2510 CAN Developer's Kit provides the ability to read, display, and modify all registers of the MCP2510 on a bit-by-bit or a byte-by-byte basis. Included on the target board are PICmicro® sockets, a header to access the required MCP2510 pins, and a prototype area for the user to quickly build and test his own CAN node. Also included are on-board transceivers that have jumper-configureable options to allow different bus setups. In addition, this tool provides the user with an expansion connector for connecting a user-created CAN network. By using this expansion connector in this manner, the PC interface can be used as a simple bus monitor for CAN message traffic.

For CAN beginners, the MCP2510 CAN Developer's Kit can be used as a lowcost method of demonstrating basic input and output functionality by transmitting and receiving CAN messages. Transmitted messages are set up via an easy-to-use Windows® interface. LEDs connected to the MCP2510 transmit and receive pins toggle to show message traffic. Both analog and digital signals can be generated on the target board. These signals are then received by the host PC and displayed in a de-stuffed format for easy identification of message contents. In this manner, basic CAN communication can be demonstrated and understood.

An application note has been created to get users familiar with the MCP2510 Developer's Kit and how to begin using this tool quickly and easily.

Features:

- On-board features speed understanding:
 - Ability to read, display, and modify all registers
 - Ability to manipulate message
 - mask and message filter functions
 Modifications can be done on a bit-
 - by-bit basis or a byte-by-byte basis
- Aids in development of users' CAN network:
 - On-board industry-standard CAN transceivers
 - Prototype area for user-defined transceivers that are jumper selectable
 - Expansion connector enables users to connect external CAN network and use PC interface as a basic bus monitor
 - PICmicro sockets, access to MCP2510 signals and prototype area for quick CAN mode development
- CAN messages demonstration capability for CAN beginners:
 - Easy to create and send CAN messages
 - Displays received messages in de-stuffed format
 - Target board contains switches and dials to vary message contents
 - LEDs toggle on and off to signify CAN message traffic
 - Familiar user interface

Related Application Notes:

AN733 Using the MCP2510 CAN
 Developer's Kit



MCP2510 CAN Developer's Kit (Continued)

Ordering Information:

See the Microchip Development Systems Ordering Guide (DS30177) or www.microchip.com for specific part numbers. To order or obtain more information about the MCP2510 CAN Developer's Kit or any other Microchip product, contact the Microchip Sales Office, representative or distributor nearest you.

Host System Requirements:

- PC with 486 or higher processor. Pentium® recommended
- 4 MB Memory, 8 MB recommended 2 MB hard disk space, 5 MB recommended VGA or Super VGA Monitor Microsoft® Windows 3.1 or greater Parallel Port

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

Development Tools from Microchip				
MPLAB® IDE	Integrated Development Environment			
MPASM [™] Assembler	Universal PICmicro macro-assembler			
MPLINK [™] Object Linker/	Linker/Librarian			
MPLIB™ Object 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			
KEELog [®] Evaluation Kit	Encoder/Decoder evaluator			
KEELog [®] Transponder Evaluation Kit	Transmitter/Transponder evaluator			
microID [™] Developer's Kit	125 kHz and 13.56 MHz RFID development tools			
MCP2510 CAN Developer's Klt	MCP2510 CAN evaluation/development tool			
MXDEV [™] 1 Analog Evaluation System	Evaluation kit for MCP devices			

Americas		Asia		Europe	
Atlanta	(770) 640-0034	China – Beijing	86-10-85282100	Denmark	45 4420 9895
Boston	(978) 692-3848	China – Shanghai	86-21-6275-5700	France	33-1-69-53-63-20
Chicago	(630) 285-0071	Hong Kong	852-2-401-1200	Germany	49-89-627-144 0
Dallas	(972) 818-7423	India	91-80-2290061	Italy	39-039-65791-1
Dayton	(937) 291-1654	Japan	81-45-471- 6166	United Kingdom	44 118 921 5869
Detroit	(248) 538-2250	Korea	82-2-554-7200	0	
Los Angeles	(949) 263-1888	Singapore	65-334-8870		
New York	(631) 273-5305	Taiwan	886-2-2717-7175		
San Jose	(408) 436-7950				
Toronto	(905) 673-0699				



Microchip Technology Inc. • 2355 W. Chandler Blvd. • Chandler, AZ 85224-6199 • (480) 792-7200 • Fax (480) 792-9210

Information subject to change. The Microchip name and logo, The Embedded Control Solutions Company, PIC, PICmicro, PICSTART, PRO MATE, MPLAB, and KEELoo are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries. In-Circuit Serial Programming, ICSP, MXDEV, MPASM, MPLINK, MPLIB, ICEPIC 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. DS51199C © 2000 Microchip Technology Inc. All rights reserved. Printed in the USA 8/00