Microchip - MCP2515DM - BM - CAN BUS - Evaluation Kit

Product Overview:

The MCP2515 CAN Bus Monitor Demo Board kit demonstrates the MCP2515 Stand-Alone CAN Controller interfacing to a CAN bus. The MCP2515 CAN Bus Monitor Demo Board kit consists of two identical boards which, when connected together, create a small, 2-node CAN bus. This bus can be interfaced to a PC by connecting one of the two boards to the PC (USB) and running the custom software. The two nodes are identical in form, however, the function is determined by the connection to each other and the PC. One node (connected to the PC) will become the monitor and the other one will become the Traffic Generator. The boards are reversible (i.e., they can take either role, depending on the connection scheme). Additionally, the board(s) can be connected to an existing CAN bus where the software can monitor the traffic and the user can interact with the bus as needed. The software allows some of the MCP2515 registers to be modified, as well as allows messages to be received and transmitted.

The user can gain an understanding of the capabilities of the MCP2515

Kit Content:

The MCP2515 CAN Bus Monitor Demo Board Kit includes:

- Two MCP2515 CAN Bus Monitor Demo Board boards, 102-00108
- PIC18F4550 Firmware
- Connector cable to connect the two boards together
- Analog and Interface Products Demonstration Boards CD-ROM (DS21912)

  - MCP2515 CAN Bus Monitor Demo Board User's Guide, DS51757)

  - PC software for interfacing with the bus and the MCP2515

Key Features:

The MCP2515 CAN Bus Monitor Demo Board kit has the following features:

- Two identical boards and a CAN cable for creating a small CAN bus
- USB interface and PC software to interface to the CAN bus
- CAN bus PC software
- Button for changing the bus load on the Traffic Generator node
- Headers (test points) for monitoring the MCP2515 pins (CAN, SPI, and status/ interrupt pins)

- PIC18F4550 PIC® Microcontroller (MCU) with ICD2 interface/header for in-circuit programming.

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
MCP2515DM-BM	Microchip	1676254	07P9512

Associated Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
ABM3B-20.000MHZ-B2-T	Abracon	Crystal	ABM3B-20.000MHZ-B2-T	7941365	13J1742
MCP2551-I/SN	Microchip	HI SPEED CAN TRANSCEIVER, SMD, 2551	MCP2551	9758569	69K7604
MCP2515-I/ST	Microchip	CAN CONTROLLER, SMD, 2515, TSSOP20	MCP2515	1196851	61K2946
PIC18F4550-I/PT	Microchip	8BIT FLASH MCU, 18F4550, TQFP44	PIC18F4550	9321365	08J9633
1658621-1	Tyco	CONN IDC SKT 10POS W/POL 15	Connector Type: Wire-to-Boar	1098498	73K0102

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499252-5	Tyco	STRAIN RELIEF 10POS SOCKET CONN	Novo Receptacles	131544	90F4184
3365/10(300SF)	3M	Flat / Ribbon Cable		1334099	19M8487

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
DV250501	Microchip	DEVELOPMENT KIT, CAN	1 MCP250XX	1112779	24M1628
MCP2515DM-PCTL	Microchip	KIT, PICTAIL PLUS, MCP2515 DB	MCP2515, MCP25020	1332096	34M7444
DM163011	Microchip	PICDEM CAN-LIN 1 2 and 3 Demonstration Boards	PIC18F258, PIC18F458, PIC16C432 and more	NA	61H5075
DV251001	Microchip	DEVELOPMENT KIT, CAN,	MCP2510	3154853	68C9633
EKC-LM3S2965	Luminary Micro	EVALUATION KIT, CODESOURCERY, CAN	LM3S2965	1494125	45P3397
EKC-LM3S6965	Luminary Micro	EVALUATION KIT, CODESOURCERY, CAN	LM3S6965	1494126	45P3399
EKC-LM3S2965	Texas Instruments	LM3S2965 CAN Evaluation Kit w/ CodeSourcery Sourcery G++GNU	LM3S2000	1743666	45P3397

Document List:

Datasheets:

Part Number	Description	Size
MCP2515	MCP2515 Data Sheet	885KB
MCP2551	MCP2551 Datasheet	263KB
MCP2515	MCP2515 CAN Bus Monitor Demo Board User's Guide	734KB
MCP2502X/5X	MCP2502X/5X Datasheet	1MB

Application Notes:

File Name	Size
AN228 - A CAN Physical Layer Discussion	258KB
AN713 - An introduction to the CAN protocol that discusses the basics and key features.	141KB
AN754 - Understanding Microchip?s CAN Module Bit Timing	248KB
AN815 - Understanding the MCP250XX Devices	342KB
DG9 - Analog Solutions for Automotive Applications Design Guide	288KB
AN816 - A CAN System Using Multiple MCP25050 I/O Expanders	415KB

Hardware & Software:

File Name	Size
MCP2515 CAN Bus Monitor Demo Board Firmware	191KB
MCP2515 CAN Bus Monitor Demo Board Gerbers	145KB
MCP2515DM-BM PC Software Rev 1.0	191KB
AN816 Source Code	38KB

Others Resources:

File Name	Size
Low Cost Development Tools Guide	1313KB
Stand-Alone Analog and Interface Solutions Brochure - English	488KB
ADN004 Ease into the Flexible CANbus Network	-