# MCP402X Non-Volatile Digital Potentiometer Evaluation Board   Buy Now

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Part Number: MCP402XEV

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The MCP402xEV is a low cost evaluation board that quickly enables the user to exercise all of the features of the MCP402X Non-Volatile Digital Potentiometer. This kit includes 2 PCBs, one populated & one unpopulated. The populated PCB has an MCP4021-103E/SN digital pot configured as a "windowed" potentiometer using a 2.5kΩ pull-up and a 2.5kΩ pull-down resistor. The PCB supports the 8 pin SOIC, SOT-23-6 and SOT-23-5 MCP402X package variations. A 6 pin PIC10F206-I/OT with FLASH memory is utilized to generate all of the Low-Voltage (LV) and High-Voltage (HV) MCP402X serial commands when the 2 momentary switches are depressed in various sequences. This enables the user to Increment and Decrement the wiper, save the setting to EEPROM & exercise the WiperLocktm feature. The PCB also supports the standard ICSP programming header used by the Microchip BFMP low cost programming tool. The second PCB included in the kit is unpopulated to allow the user to build up the exact combination of components that their application would require.
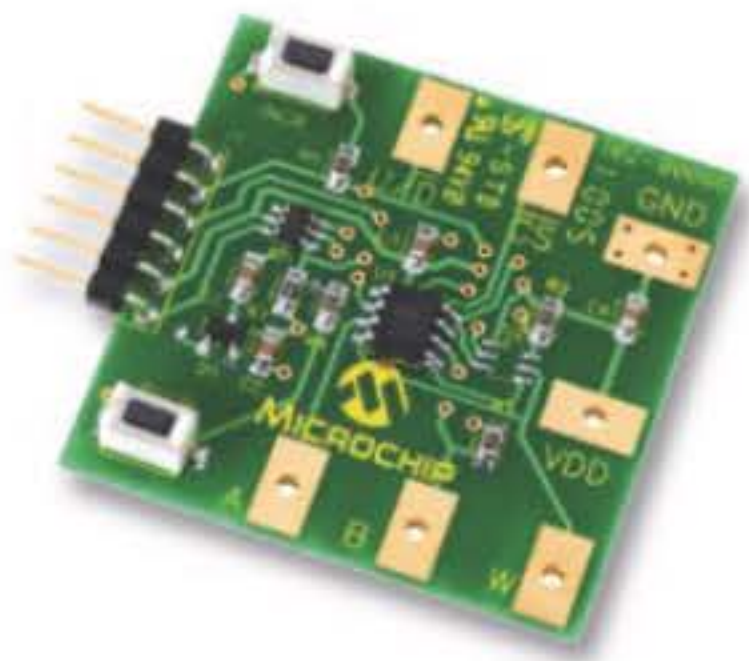
Features   Package Contents

- MCP4021/4022/4023/4024 support
- Small PCB (1.5"x1.5")
- One populated PCB:

  - *MCP4021-103E/SN configured as a "windowed" potentiometer*
  - *PIC10F206-I/OT with firmware*

- Sample firmware to interface the PIC10F206 with push buttons & the MCP402X:

  - *Interprets momentary switch inputs to determine what serial command to execute*
  - *Uses a high-speed oscillator output to create a low-cost charge pump for HV commands*
  - *PCB supports In-Circuit Serial Programming using the BFMP programming header*

- One un-populated PCB for rapid prototyping of an MCP402X application
- Sample kit with 1 PIC10F206-I/OT and 2ea of theMCP4021-I/SN (2.1kΩ, 5kΩ,10kΩ & 50kΩ)

Documentation & Software   Back To Top

AppNotes	Last Updated	Size	
AN1080 - Understanding Digital Potentiometers Resistor Variations	7/27/2009 1:45:44 PM	565KB	📄
Documents	**Last Updated**	**Size**	
Digital Potentiometer Design Guide	1/3/2011 9:16:34 PM	706KB	📄
Low-Cost NV Digital POT w/WiperLock Technology	12/19/2006 1:51:34 PM	3MB	📄
Low-Cost 64-Step Volatile Digital POT	12/19/2006 1:49:10 PM	3MB	📄
MCP402X Non-Volatile Digital Potentiometer Evaluation Board Gerbers	1/13/2006 3:57:03 PM	133KB	📄
MCP402X Non-Volatile Digital Potentiometer Evaluation Board Firmware	1/13/2006 3:53:36 PM	78KB	📄
MCP401x/2x Digital Potentiometer Evaluation Board User's Guide	1/13/2006 3:51:09 PM	725KB	📄