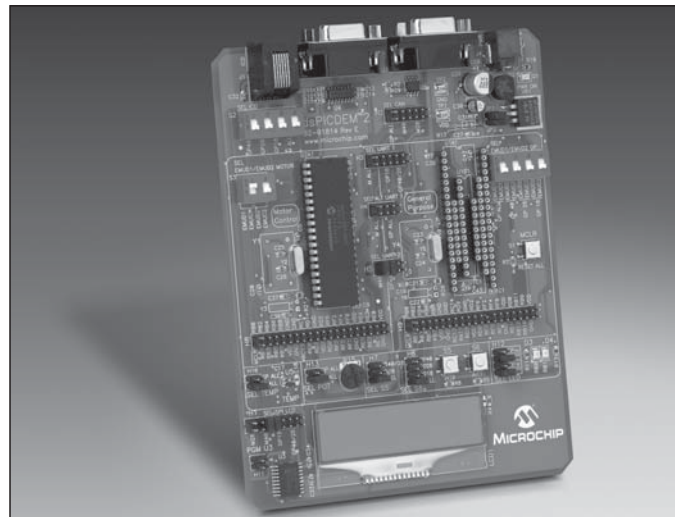# dsPICDEM™ 2
Development Board

Summary

The dsPICDEM 2 Development Board is a development and evaluation tool that helps create embedded applications using dsPIC® Digital Signal Controllers (DSCs). Sockets are provided for 28- and 40-pin devices in the dsPIC30F Motor Control Family and 18-, 28- and 40-pin devices in the dsPIC30F General Purpose and Sensor Family. The supported devices are shown in the table below.

The board includes a sample dsPIC30F4011 in the 40-pin motor control socket, a power supply regulator, crystal oscillators for each set of sockets, an ICD connector for the MPLAB® ICD 2 In-Circuit Debugger and both RS-232 and CAN ports for external communication. In addition, the board is populated with prototyping hardware, including LED indicators, push button switches, a potentiometer, a temperature sensor and a 2x16 LCD screen. All pins on all the device sockets are accessible through headers.

dsPIC30F Device	Supported Packages
Motor Control Family	
dsPIC30F2010	28-pin SPDIP
dsPIC30F3010	28-pin SPDIP
dsPIC30F4012	28-pin PDIP
dsPIC30F3011	40-pin PDIP
dsPIC30F4011	40-pin PDIP
Sensor Family	
dsPIC30F2011	18-pin PDIP
dsPIC30F3012	18-pin PDIP
dsPIC30F2012	28-pin SPDIP
dsPIC30F3013	28-pin SPDIP
General Purpose Family	
dsPIC30F3014	40-pin PDIP
dsPIC30F4013	40-pin PDIP

Minimum Requirements

- MPLAB IDE v7.40 or later
- MPLAB ICD 2
- MPLAB C30 v2.02 or later
- dsPICDEM 2 Development Board (DM300018)

Features

Key features of the dsPICDEM 2 Development Board include:

- Multiple sockets for 18-, 28- and 40-pin PDIP and SPDIP devices
- Sample application programs complete with MPLAB IDE workspace and project files provided for supported dsPIC30F devices
- A dsPIC30F4011 40-pin PDIP sample device installed on board
- 5V regulator provides V_{DD} and AV_{DD} from a 9V DC power supply
- MPLAB ICD 2 in-circuit debugger ready
  - Options for selecting alternate debugging channels
- RS-232 interface
- Controller Area Network (CAN) interface
- Temperature sensor and analog potentiometer to simulate A/D inputs
- 2 push button switches and 2 LED indicators to simulate digital input and output
- 2x16 ASCII character LCD with SPI interface
- Access to all pins on the dsPIC30F device sockets via 2x40-pin headers
- CD with documentation and ample application programs
- A sample pack containing dsPIC30F3012 and dsPIC30F4013 devices

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