

DEVELOPMENT SYSTEMS

MPLAB® ICE Emulator Systems and PRO MATE® II Programmer Socket Modules

MPLAB ICE 2000 Emulator System

How Do I Order MPLAB ICE?

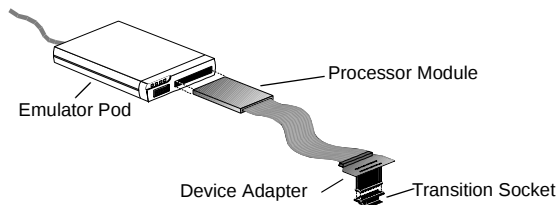
Ordering MPLAB ICE is as easy as 1, 2, and 3!

1. Choose your PICmicro MCU.
2. Choose your PICmicro package.
3. Find the right line on the next few pages for MPLAB ICE part numbers. You're ready to order.

A COMPLETE MPLAB ICE SYSTEM

MPLAB ICE is a modular emulator system with interchangeable components allowing the system to be easily configured to emulate different PICmicro MCUs. Since this emulator supports package-specific emulation, customers need to know which device and package they intend to emulate. Then, the customer can use the *MPLAB ICE Cross Reference Parts List* below to identify the part numbers required to complete an MPLAB ICE system. A complete system consists of:

1. An emulator pod (including among other things the host-to-pod parallel cable and power supply)
2. A processor module (including the flex cable circuit)
3. A device adapter
4. An optional transition socket



An MPLAB ICE emulator system is ordered as separate components. Knowing the terms will make it easy to order and use the MPLAB ICE emulator system. Read more about each component.

1. Emulator Pod

The MPLAB ICE 2000 is the full-featured emulator pod containing a main board and an additional board for expanded trace memory and complex control logic. The pod comes with a standard parallel interface cable that connects the pod to the parallel port of the PC and a power supply.

2. Processor Module

The processor module is a PICmicro, device-specific module that is inserted into the emulator pod. The processor module contains the emulator chip, logic, and low-voltage circuitry. A flex cable extends from the processor module and is connected to the device adapter at the target application.

3. Device Adapter

The device adapter provides a common interface for the PICmicro MCU being emulated. This adapter contains a special device that provides an oscillator clock allowing the user to accurately emulate the RC characteristics of the PICmicro MCU. The device adapter provides emulation support for standard DIP and PLCC styles. For emulation support of other packages, a transition socket is needed along with the device adapter.

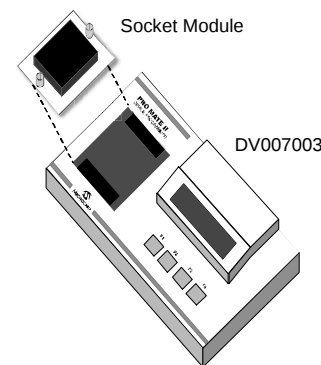
4. Transition Socket

The transition sockets are available in various styles to allow the common device adapter to be translated to support surface-mount packages, such as SOIC, SSOP, PQFP, and TQFP.

PRO MATE® II Programmer

The PRO MATE II Programmer (DV007003) is Microchip's production rated programmer which can be operated stand alone or with a PC using MPLAB IDE (included free). It comes complete with accessories needed to connect to a host system including a power supply and cables, and it gives the developer complete control over the programming session. Each PRO MATE II Programmer requires a socket module (to be purchased separately) which can be selected from the following chart by identifying the devices for programming and then picking the appropriate part number from the PRO MATE II Programmer Socket Modules column.

In-Circuit Serial Programming™ (ICSP™) can also be added to the PRO MATE II Programmer by ordering Socket Module AC004004.



DEVELOPMENT SYSTEMS

MPLAB® ICE Emulator Systems and PRO MATE® II Programmer Socket Modules

Model Name/ Part Number	Lead Count/ Package Type	Emulator Pod	Processor Module	Device Adapters	Transition Sockets	PRO MATE II Programmer (DV007003) Socket Modules**
MCP250XX	14P, 14SO	N/A	N/A	N/A	N/A	AC254001
PIC12C508	8P, 8JW 8SM	ICE2000 ICE2000	PCM16XA0 PCM16XA0	DVA12XP080 DVA12XP080	– XLT08SO	AC124001 AC124001
PIC12C508A	8P, 8JW 8SM 8SN	ICE2000 ICE2000 ICE2000	PCM16XA0 PCM16XA0 PCM16XA0	DVA12XP080 DVA12XP080 DVA12XP080	– XLT08SO XLT08SO	AC124001 AC124001 AC164026
PIC12C509	8P, 8JW 8SM	ICE2000 ICE2000	PCM16XA0 PCM16XA0	DVA12XP080 DVA12XP080	– XLT08SO	AC124001 AC124001
PIC12C509A	8P, 8JW 8SM 8SN	ICE2000 ICE2000 ICE2000	PCM16XA0 PCM16XA0 PCM16XA0	DVA12XP080 DVA12XP080 DVA12XP080	– XLT08SO XLT08SO	AC124001 AC124001 AC164026
PIC12C671	8P, 8JW 8SM	ICE2000 ICE2000	PCM12XA0 PCM12XA0	DVA12XP081 DVA12XP081	– XLT08SO	AC124001 AC124001
PIC12C672	8P, 8JW 8SM	ICE2000 ICE2000	PCM12XA0 PCM12XA0	DVA12XP081 DVA12XP081	– XLT08SO	AC124001 AC124001
PIC12CE518	8P, 8JW 8SM 8SN	ICE2000 ICE2000 ICE2000	PCM16XA0 PCM16XA0 PCM16XA0	DVA12XP080 DVA12XP080 DVA12XP080	– XLT08SO XLT08SO	AC124001 AC124001 AC164026
PIC12CE519	8P, 8JW 8SM 8SN	ICE2000 ICE2000 ICE2000	PCM16XA0 PCM16XA0 PCM16XA0	DVA12XP080 DVA12XP080 DVA12XP080	– XLT08SO XLT08SO	AC124001 AC124001 AC164026
PIC12CE673	8P, 8JW	ICE2000	PCM12XA0	DVA12XP081	–	AC124001
PIC12CE674	8P, 8JW	ICE2000	PCM12XA0	DVA12XP081	–	AC124001
PIC14000	28SP, 28JW 28SO 28SS	ICE2000 ICE2000 ICE2000	PCM14XA0 PCM14XA0 PCM14XA0	DVA14XP280 DVA14XP280 DVA14XP280	– XLT28SO XLT28SS	AC144001 AC144002 AC144002
PIC16C52	18P 18SO	ICE2000 ICE2000	PCM16XA0 PCM16XA0	DVA16XP180 DVA16XP180	– XLT18SO	AC164001 AC164002
PIC16C54/ PIC16C54A/ PIC16C54C	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XA0 PCM16XA0 PCM16XA0	DVA16XP180 DVA16XP180 DVA16XP180	– XLT18SO XLT20SS	AC164001 AC164002 AC164015
PIC16C55/ PIC16C55A	28P, 28JW 28SP 28SO 28SS	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XA0 PCM16XA0 PCM16XA0 PCM16XA0	DVA16XP280 DVA16XP280 DVA16XP280 DVA16XP280	XLT28XP – XLT28SO XLT28SS2	AC164001 AC164001 AC164002 AC164015
PIC16C56/ PIC16C56A	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XA0 PCM16XA0 PCM16XA0	DVA16XP180 DVA16XP180 DVA16XP180	– XLT18SO XLT20SS	AC164001 AC164002 AC164015
PIC16C57/ PIC16C57C	28P, 28JW 28SP 28SO 28SS	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XA0 PCM16XA0 PCM16XA0 PCM16XA0	DVA16XP280 DVA16XP280 DVA16XP280 DVA16XP280	XLT28XP – XLT28SO XLT28SS2	AC164001 AC164001 AC164002 AC164015
PIC16C58A/ PIC16C58B	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XA0 PCM16XA0 PCM16XA0	DVA16XP180 DVA16XP180 DVA16XP180	– XLT18SO XLT20SS	AC164001 AC164002 AC164015
PIC16C62A	28SP, 28JW 28SO 28SS	ICE2000 ICE2000 ICE2000	PCM16XB1 PCM16XB1 PCM16XB1	DVA16XP282 DVA16XP282 DVA16XP282	– XLT28SO XLT28SS	AC164012 AC164017 AC164021

Model Name/ Part Number	Lead Count/ Package Type	Emulator Pod	Processor Module	Device Adapters	Transition Sockets	PRO MATE II Programmer (DV007003) Socket Modules**
PIC16C62B	28SP, 28JW 28SO 28SS	ICE2000 ICE2000 ICE2000	PCM16XE1 PCM16XE1 PCM16XE1	DVA16XP282 DVA16XP282 DVA16XP282	– XLT28SO XLT28SS	AC164012 AC164017 AC164021
PIC16C63	28SP, 28JW 28SO	ICE2000 ICE2000	PCM16XB1 PCM16XB1	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017
PIC16C63A	28SP, 28JW 28SO 28SS	ICE2000 ICE2000 ICE2000	PCM16XE1 PCM16XE1 PCM16XE1	DVA16XP282 DVA16XP282 DVA16XP282	– XLT28SO XLT28SS	AC164012 AC164017 AC164021
PIC16C64A	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XB1 PCM16XB1 PCM16XB1 PCM16XB1	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	– – XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16C65A	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XB1 PCM16XB1 PCM16XB1 PCM16XB1	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	– – XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16C65B	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XE1 PCM16XE1 PCM16XE1 PCM16XE1	DVA16XP400 DVA16XL441 DVA16PQ441 DVA16PQ441	– – XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16C66	28SP, 28JW 28SO	ICE2000 ICE2000	PCM16XE1 PCM16XE1	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017
PIC16C67	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XE1 PCM16XE1 PCM16XE1 PCM16XE1	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	– – XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16C71	18P, 18JW 18SO	ICE2000 ICE2000	PCM16XF0 PCM16XF0	DVA16XP180 DVA16XP180	– XLT18SO	AC164010 AC164010
PIC16C72	28SP, 28JW 28SO 28SS	ICE2000 ICE2000 ICE2000	PCM16XB1 PCM16XB1 PCM16XB1	DVA16XP282 DVA16XP282 DVA16XP282	– XLT28SO XLT28SS	AC164012 AC164017 AC164021
PIC16C72A	28SP, 28JW 28SO 28SS	ICE2000 ICE2000 ICE2000	PCM16XE1 PCM16XE1 PCM16XE1	DVA16XP282 DVA16XP282 DVA16XP282	– XLT28SO XLT28SS	AC164012 AC164017 AC164021
PIC16C73A	28SP, 28JW 28SO	ICE2000 ICE2000	PCM16XB1 PCM16XB1	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017
PIC16C73B	28SP, 28JW 28SO 28SS	ICE2000 ICE2000 ICE2000	PCM16XE1 PCM16XE1 PCM16XE1	DVA16XP282 DVA16XP282 DVA16XP282	– XLT28SO XLT28SS	AC164012 AC164017 AC164021
PIC16C74A	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XB1 PCM16XB1 PCM16XB1 PCM16XB1	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	– – XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16C74B	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XE1 PCM16XE1 PCM16XE1 PCM16XE1	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	– – XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16C76	28SP, 28JW 28SO	ICE2000 ICE2000	PCM16XE1 PCM16XE1	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017

Model Name/ Part Number	Lead Count/ Package Type	Emulator Pod	Processor Module	Device Adapters	Transition Sockets	PRO MATE II Programmer (DV007003) Socket Modules**
PIC16C77	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XE1 PCM16XE1 PCM16XE1 PCM16XE1	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	— — XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16C432	20P, 20JW 20SS	ICE2000 ICE2000	PCM16YB0* PCM16YB0*	DVA16XP201* DVA16XP201*	— XLT20SS1	AC164029 AC164029
PIC16C433	18P, 18JW 18SS	ICE2000 ICE2000	PCM16YC0* PCM16YC0*	DVA16XP185* DVA16XP185*	— XLT18SO	AC164030 AC164030
PIC16C505	14P, 14JW 14SL	ICE2000 ICE2000	PCM16XA0 PCM16XA0	DVA16XP140 DVA16XP140	— XLT14SO	AC124001 AC164026
PIC16C554	18P, 18JW 18SO 18SS	ICE2000 ICE2000 ICE2000	PCM16XC0 PCM16XC0 PCM16XC0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C558	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XC0 PCM16XC0 PCM16XC0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C620/ PIC16C620A	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XC0 PCM16XC0 PCM16XC0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C621/ PIC16C621A	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XC0 PCM16XC0 PCM16XC0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C622/ PIC16C622A	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XC0 PCM16XC0 PCM16XC0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C642	28SP, 28JW 28SO	ICE2000 ICE2000	PCM16XD0 PCM16XD0	DVA16XP282 DVA16XP282	— XLT28SO	AC164012 AC164017
PIC16C662	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XD0 PCM16XD0 PCM16XD0 PCM16XD0	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	— — XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16C710	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XF0 PCM16XF0 PCM16XF0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C711	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XF0 PCM16XF0 PCM16XF0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C712	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XE1 PCM16XE1 PCM16XE1	DVA16XP182 DVA16XP182 DVA16XP182	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C715	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XG0 PCM16XG0 PCM16XG0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C716	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XE1 PCM16XE1 PCM16XE1	DVA16XP182 DVA16XP182 DVA16XP182	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C717	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XN0 PCM16XN0 PCM16XN0	DVA16XP184 DVA16XP184 DVA16XP184	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16C745	28SP, 28JW 28SO	ICE2000 ICE2000	PCM16XQ0 PCM16XQ0	DVA16XP282 DVA16XP282	— XLT28SO	AC164012 AC164017
PIC16C765	40P 44L 44PT	ICE2000 ICE2000 ICE2000	PCM16XQ0 PCM16XQ0 PCM16XQ0	DVA16XP401 DVA16XL441 DVA16PQ441	— — XLT44PT	AC164012 AC164013 AC164020
PIC16C770 PIC16C771	20P 20SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XN0 PCM16XN0 PCM16XN0	DVA16XP200 DVA16XP200 DVA16XP200	— XLT20SO1 XLT20SS1	AC164028 AC164028 AC164018

Model Name/ Part Number	Lead Count/ Package Type	Emulator Pod	Processor Module	Device Adapters	Transition Sockets	PRO MATE II Programmer (DV007003) Socket Modules**
PIC16C773	28SP, 28JW 28SO 28SS	ICE2000 ICE2000 ICE2000	PCM16XL0 PCM16XL0 PCM16XL0	DVA16XP282 DVA16XP282 DVA16XP282	— XLT28SO XLT28SS	AC164012 AC164017 AC164021
PIC16C774	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XL0 PCM16XL0 PCM16XL0 PCM16XL0	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	— — XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16C781	20P, 20JW 20SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XW0 PCM16XW0 PCM16XW0	DVA16XP202 DVA16XP202 DVA16XP202	— XLT20SO1 XLT20SO1	AC164028 AC164028 AC164018
PIC16782	20P, 20JW 20SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XW0 PCM16XW0 PCM16XW0	DVA16XP202 DVA16XP202 DVA16XP202	— XLT20SO1 XLT20SO1	AC164028 AC164028 AC164018
PIC16C923 PIC16C924	64SP 64PT 68L, 68CL	ICE2000 ICE2000 ICE2000	PCM16XJ0 PCM16XJ0 PCM16XJ0	DVA16XP640 DVA16PQ640 DVA16XL680	— XLT64PT1 —	AC164025 AC164023 AC164022
PIC16C925 PIC16C926	64PT, 68L	ICE2000 ICE2000	PCM16XT0 PCM16XT0	DVA16PQ640 DVA16XL680	XLT64PT1 —	AC164023 AC164022
PIC16CE623	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XC0 PCM16XC0 PCM16XC0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16CE624	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XC0 PCM16XC0 PCM16XC0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16CE625	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XC0 PCM16XC0 PCM16XC0	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16F73	28SP 28SS 28SO	ICE2000 ICE2000 ICE2000	PCM16XS1 PCM16XS1 PCM16XS1	DVA16XP282 DVA16XP282 DVA16XP282	— XLT28SS XLT28SO	AC164012 AC164021 AC164017
PIC16F74	40P 44L 44PT	ICE2000 ICE2000 ICE2000	PCM16XS1 PCM16XS1 PCM16XS1	DVA16XP401 DVA16XL441 DVA16PQ441	— — XLT44PT	AC164012 AC164013 AC164020
PIC16F76	28SP, 28JW 28SO	ICE2000 ICE2000	PCM16XS1 PCM16XS1	DVA16XP282 DVA16XP282	— XLT28SO	AC164012 AC164017
PIC16F77	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XS1 PCM16XS1 PCM16XS1 PCM16XS1	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	— — XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16F83	18P 18SO	ICE2000 ICE2000	PCM16XH1 PCM16XH1	DVA16XP180 DVA16XP180	— XLT18SO	AC164010 AC164010
PIC16F84	18P 18SO	ICE2000 ICE2000	PCM16XH1 PCM16XH1	DVA16XP180 DVA16XP180	— XLT18SO	AC164010 AC164010
PIC16F84A	18P 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XH1 PCM16XH1 PCM16XH1	DVA16XP180 DVA16XP180 DVA16XP180	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16F627	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XP0 PCM16XP0 PCM16XP0	DVA16XP183 DVA16XP183 DVA16XP183	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16F628	18P, 18JW 18SO 20SS	ICE2000 ICE2000 ICE2000	PCM16XP0 PCM16XP0 PCM16XP0	DVA16XP183 DVA16XP183 DVA16XP183	— XLT18SO XLT20SS	AC164010 AC164010 AC164018
PIC16F870	28SP, 28JW 28SO 28SS	ICE2000 ICE2000 ICE2000	PCM16XR0 PCM16XR0 PCM16XR0	DVA16XP282 DVA16XP282 DVA16XP282	— XLT28SO XLT28SS	AC164012 AC164017 AC164021

Model Name/ Part Number	Lead Count/ Package Type	Emulator Pod	Processor Module	Device Adapters	Transition Sockets	PRO MATE II Programmer (DV007003) Socket Modules**
PIC16F871	40P 44L 44PT	ICE2000 ICE2000 ICE2000	PCM16XR0 PCM16XR0 PCM16XR0	DVA16XP401 DVA16XL441 DVA16PQ441	– – XLT44PT	AC164012 AC164013 AC164020
PIC16F872	28SP 28SO 28SS	ICE2000 ICE2000 ICE2000	PCM16XK1 PCM16XK1 PCM16XK1	DVA16XP282 DVA16XP282 DVA16XP282	– XLT28SO XLT28SS	AC164012 AC164017 AC164021
PIC16F873	28SP 28SO	ICE2000 ICE2000	PCM16XK1 PCM16XK1	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017
PIC16F874	40P 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XK1 PCM16XK1 PCM16XK1 PCM16XK1	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	– – XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC16F876	28SP 28SO	ICE2000 ICE2000	PCM16XK1 PCM16XK1	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017
PIC16F877	40P 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM16XK1 PCM16XK1 PCM16XK1 PCM16XK1	DVA16XP401 DVA16XL441 DVA16PQ441 DVA16PQ441	– – XLT44PT XLT44PT	AC164012 AC164013 AC164014 AC164020
PIC17C42A	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM17XA0 PCM17XA0 PCM17XA0 PCM17XA0	DVA17XP401 DVA17XL441 DVA17PQ441 DVA17PQ441	– – XLT44PT XLT44PT	AC174001 AC174002 AC174004 AC174005
PIC17C43	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM17XA0 PCM17XA0 PCM17XA0 PCM17XA0	DVA17XP401 DVA17XL441 DVA17PQ441 DVA17PQ441	– – XLT44PT XLT44PT	AC174001 AC174002 AC174004 AC174005
PIC17C44	40P, 40JW 44L 44PQ 44PT	ICE2000 ICE2000 ICE2000 ICE2000	PCM17XA0 PCM17XA0 PCM17XA0 PCM17XA0	DVA17XP401 DVA17XL441 DVA17PQ441 DVA17PQ441	– – XLT44PT XLT44PT	AC174001 AC174002 AC174004 AC174005
PIC17C752	68L 64PT	ICE2000 ICE2000	PCM17XA0 PCM17XA0	DVA17XL681 DVA17PQ641	– XLT64PT2	AC174007 AC174008
PIC17C756/ PIC17C756A	68L, 68CL 64PT	ICE2000 ICE2000	PCM17XA0 PCM17XA0	DVA17XL681 DVA17PQ641	– XLT64PT2	AC174007 AC174008
PIC17C762	84L 80PT	ICE2000 ICE2000	PCM17XA0 PCM17XA0	DVA17XL841 DVA17PQ801	– XLT80PT	AC174012 AC174011
PIC17C766	84L, 84CL 80PT	ICE2000 ICE2000	PCM17XA0 PCM17XA0	DVA17XL841 DVA17PQ801	– XLT80PT	AC174012 AC174011
PIC18C242	28SP, 28JW 28SO	ICE2000 ICE2000	PCM18XA0 PCM18XA0	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017
PIC18C252	28SP, 28JW 28SO	ICE2000 ICE2000 ICE2000	PCM18XA0 PCM18XA0 PCM18XA0	DVA16XP282 DVA16XP282 DVA16XP282	– XLT28XP XLT28SO	AC164012 AC164012 AC164017

Model Name/ Part Number	Lead Count/ Package Type	Emulator Pod	Processor Module	Device Adapters	Transition Sockets	PRO MATE II Programmer (DV007003) Socket Modules**
PIC18C442	40P, 40JW 44L 44PT	ICE2000 ICE2000 ICE2000	PCM18XA0 PCM18XA0 PCM18XA0	DVA16XP401 DVA16XL441 DVA16PQ441	– – XLT44PT	AC164012 AC164013 AC164020
PIC18C452	40P, 40JW 44L 44PT	ICE2000 ICE2000 ICE2000	PCM18XA0 PCM18XA0 PCM18XA0	DVA16XP401 DVA16XL441 DVA16PQ441	– – XLT44PT	AC164012 AC164013 AC164020
PIC18C601	68L 64PT	ICE2000 ICE2000	PCM18XG0 PCM18XG0	DVA18XL680 DVA18PQ640	– XLT64PT2	AC174007 AC174008
PIC18C658	68L 64PT	ICE2000 ICE2000	PCM18XB0 PCM18XB0	DVA18XL680 DVA18PQ640	– XLT64PT2	AC174007 AC174008
PIC18C801	80PT 84L	ICE2000 ICE2000	PCM18XG0 PCM18XG0	DVA18PQ801 DVA18XL841	XLT80PT –	AC174011 AC174012
PIC18C858	84L 80PT	ICE2000 ICE2000	PCM18XB0 PCM18XB0	DVA18XL840 DVA18PQ800	– XLT80PT	AC174012 AC174011
PIC18F242	28SP 28SO	ICE2000 ICE2000	PCM18XC0 PCM18XC0	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017
PIC18F248	28SP 28SO	ICE2000 ICE2000	PCM18XD0 PCM18XD0	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017
PIC18F252	28SP 28SO	ICE2000 ICE2000	PCM18XC0 PCM18XC0	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017
PIC18F258	28SP 28SO	ICE2000 ICE2000	PCM18XD0 PCM18XD0	DVA16XP282 DVA16XP282	– XLT28SO	AC164012 AC164017
PIC18F442	40P 44L 44PT	ICE2000 ICE2000 ICE2000	PCM18XC0 PCM18XC0 PCM18XC0	DVA16XP401 DVA16XL441 DVA16PQ441	– – XLT44PT	AC164012 AC164013 AC164020
PIC18F448	40P 44L 44PT	ICE2000 ICE2000 ICE2000	PCM18XD0 PCM18XD0 PCM18XD0	DVA16XP401 DVA16XL441 DVA16PQ441	– – XLT44PT	AC164012 AC164013 AC164020
PIC18F452	40P 44L 44PT	ICE2000 ICE2000 ICE2000	PCM18XC0 PCM18XC0 PCM18XC0	DVA16XP401 DVA16XL441 DVA16PQ441	– – XLT44PT	AC164012 AC164013 AC164020
PIC18F458	40P 44L 44PT	ICE2000 ICE2000 ICE2000	PCM18XD0 PCM18XD0 PCM18XD0	DVA16XP401 DVA16XL441 DVA16PQ441	– – XLT44PT	AC164012 AC164013 AC164020
PIC18F6620	64PT	ICE2000	PCM18XE0*	DVA18PQ800*	–	AC174008
PIC18F6720	64PT	ICE2000	PCM18XE0*	DVA18PQ800*	–	AC174008
PIC18F8620	80PT	ICE2000	PCM18XE0*	DVA18PQ800*	–	AC174011
PIC18F8720	80PT	ICE2000	PCM18XE0*	DVA18PQ800*	–	AC174011
rfPIC12C509	18SO 20SS	ICE2000 ICE2000	PCM16XA0 PCM16XA0	DVA12XP080 DVA12XP080	XLT18SO XLT20SS	AC124002 AC124002

*Contact Microchip Technology Inc. for availability.

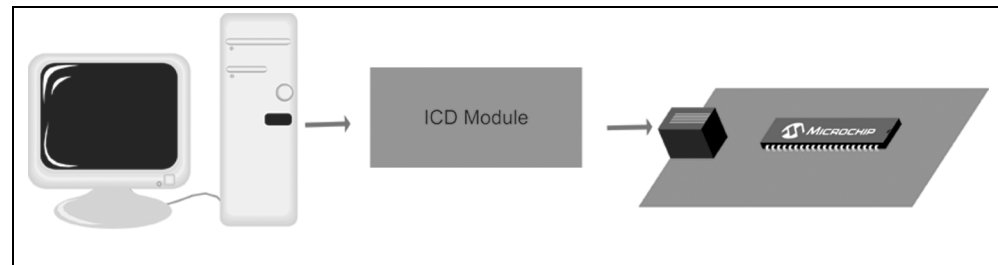
** PRO MATE II Programmer (DV007003) sold separately.

DEVELOPMENT SYSTEMS

MPLAB® In-Circuit Debugger (ICD)

The **MPLAB ICD** uses the in-circuit debugging capability of selected microcontrollers available from Microchip. It utilizes the In-Circuit Serial Programming™ (ICSP™) to debug source code in the application. Operating under Microchip's MPLAB Integrated Development Environment (IDE), MPLAB ICD offers real-time code execution, in-circuit debugging, built-in programmer⁽²⁾ and 3.0 to 5.5 volt operating range. See the selection chart below for the microcontroller devices supported and the various debugger kits available.

Device	MPLAB ICD ⁽¹⁾	MPLAB ICD 2 ⁽²⁾
PIC16F870	X	
PIC16F871	X	
PIC16F872	X	
PIC16F873	X	
PIC16F874	X	
PIC16F876	X	
PIC16F877	X	
PIC18C601		X
PIC18C801		X
PIC18F242		X
PIC18F248		X
PIC18F258		X
PIC18F442		X
PIC18F448		X
PIC18F452		X
PIC18F458		X



Part Number

DV164001(1)
 DV164002(1)
 DV164003(1)
 DV164005(2)*
 DV164006(2)*
 DV164007(2)*

Description of Debugger Kits

MPLAB In-Circuit Debugger Evaluation Kit includes ICD Module, ICD Demo Board, ICD Header, ICD Cable, and Serial Cable.
 MPLAB In-Circuit Debugger Module includes ICD Module and ICD Cable.
 MPLAB In-Circuit Debugger Deluxe Evaluation Kit includes ICD Module, ICD Demo Board, ICD Header, ICD Cable, Serial Cable and Power Supply.
 MPLAB In-Circuit Debugger 2 Module includes ICD 2 Module, USB Cable and ICD Cable.
 MPLAB In-Circuit Debugger 2 Evaluation Kit includes ICD 2 Module, USB Cable, ICD Cable, Serial Cable, and PICDEM™ 2 Plus and Power Supply.
 MPLAB In-Circuit Debugger 2 Module includes ICD 2 Module, USB Cable, ICD Cable, Serial Cable and Power Supply.

*Contact Microchip Technology Inc. for availability date.

ICEPIC™ Emulator Systems

The ICEPIC Emulator System is a low cost In-Circuit Emulation System manufactured for Microchip by RF Solution LTD. The modular system consists of a common POS and interchangeable daughter board, which is device specific driven. Select the POD and daughter board from the chart below by determining the part number of the device being used and selecting the appropriate numbers. Ordering a complete system requires two part numbers (POD and daughter board).

Model Name/ Part Number	ICEPIC	
	Pod	Daughter Board
PIC12C508*	EM167200	AC165201
PIC12C509*	EM167200	AC165201
PIC14000	EM167200	N/A
PIC16C52	EM167200	AC165201
PIC16C54	EM167200	AC165201
PIC16C54A	EM167200	AC165201
PIC16C55	EM167200	AC165201
PIC16C554	EM167200	AC165208
PIC16C558	EM167200	AC165208
PIC16C56	EM167200	AC165201
PIC16C57	EM167200	AC165201
PIC16C58A	EM167200	AC165201
PIC16C84	EM167200	AC165212
PIC16C620	EM167200	AC165202
PIC16C621	EM167200	AC165202
PIC16C622	EM167200	AC165202
PIC16C62A	EM167200	AC165207
PIC16C63	EM167200	AC165207
PIC16C642	EM167200	AC165213
PIC16C64A	EM167200	AC165207
PIC16C65A	EM167200	AC165207

Model Name/ Part Number	ICEPIC	
	Pod	Daughter Board
PIC16C66	EM167200	AC165214
PIC16C662	EM167200	AC165213
PIC16C67	EM167200	AC165214
PIC16C71	EM167200	AC165211
PIC16C710	EM167200	AC165211
PIC16C711	EM167200	AC165211
PIC16C715	EM167200	AC165215
PIC16C72	EM167200	AC165207
PIC16C73A	EM167200	AC165207
PIC16C74A	EM167200	AC165207
PIC16C76	EM167200	AC165214
PIC16C77	EM167200	AC165214
PIC16C77X	EM167200	AC165217
PIC16C923	EM167200	AC165210
PIC16C924	EM167200	AC165210
PIC16F73, 74, 76, 77	EM167200	AC165218
PIC16F77X	EM167200	AC165217
PIC16F83, 84	EM167200	AC165212
PIC16F873, 874, 876, 877	EM167200	AC165216

* ICEPIC PIC12CXXX emulation support also requires the use of a kit daughter board adapter AC122002.

DEVELOPMENT SYSTEMS

PICmicro Microcontroller and Memory Software Tools, Programmers and Demonstration Boards

	PIC12CXX	PIC16C5X	PIC16C6X	PIC16CXX	PIC16C7X	PIC16C7XX	PIC16C8X	PIC16F87X	PIC16C9XX	PIC17CXX	PIC18CXX	PIC18FXX	24CXX/93CXX
Software Tools													
MPLAB® Integrated Development Environment	SW007002	SW007002	SW007002	SW007002	SW007002	SW007002	SW007002	SW007002	SW007002	SW007002	SW007002	SW007002	SW007002
PICC™ Compiler (HI-TECH C Compiler)	***	***	***	***	***	***	***	***	***	***	***	***	—
Embedded Workbench (IAR C Compiler)	—	—	****	****	****	****	****	****	****	****	****	****	—
MPLAB C17 Compiler	—	—	—	—	—	—	—	—	—	SW006010	—	—	—
MPLAB C18 Compiler	—	—	—	—	—	—	—	—	—	—	SW006011	SW006011	—
Programmers													
PICSTART® Plus Low-Cost Development Kit	DV003001	DV003001	DV003001	DV003001	DV003001	DV003001	DV003001	DV003001	DV003001	DV003001	DV003001	DV003001	DV003001
PRO MATE® II Universal Programmer	DV007003	DV007003	DV007003	DV007003	DV007003	DV007003	DV007003	DV007003	DV007003	DV007003	DV007003	DV007003	DV007003**
ICSP™ Programming Socket for PRO MATE II	AC004004	—	AC004004	AC004004	AC004004	AC004004	AC004004	AC004004	AC004004	AC004004	AC004004**	AC004004**	—
Demonstration Boards													
PICDEM™ 1	—	DM163001**	—	DM163001**	—	DM163001**	DM163001**	—	—	DM163001**	—	—	—
PICDEM 2	—	—	DM163002**	DM163002**	DM163002**	DM163002**	—	DM163002**	—	—	DM163002**	—	—
PICDEM 3	—	—	DM163022**	DM163022**	DM163022**	DM163022**	—	DM163022**	DM163003	—	DM163022**	DM163022**	—
PICDEM 14A	DM143001	—	—	—	—	—	—	—	—	—	—	—	—
PICDEM 17 Development Kit	—	—	—	—	—	—	—	—	—	DM173001**	—	—	—

* Contact Microchip Technology Inc. for availability date.

** Development tool is available on select devices. Please refer to the Microchip Development Systems Ordering Guide (DS30177) for device-specific ordering numbers and more information.

*** HI-TECH Software LLC Telephone 1-800-735-5715 U.S.A., Telephone 61 7 3354 2411 Australia or Web Site www.htsoft.com

**** IAR Systems Software Inc., Telephone 1-415-765-5500 U.S.A., Telephone 46 18 16 7000 or Web Site www.iar.com

† Contact Microchip Technology Inc.'s web site at www.microchip.com for information on how to use the MPLAB In-Circuit Debugger (DV164001) with PIC16C62, 63, 64, 65, 72, 73, 74, 76, 77 (see Technical Brief, TP033).

In addition to Microchip Development Tools, a wide range of emulators, programmers (single and gang), software (including compilers, RTOS, TCP/IP stack, etc.) evaluation and demonstration boards (PICmicro specific, CAN, LIN, USB, etc.) training tools, analyzers and other products are offered, please see the Microchip Third Party Guide (DS00104), which is available in book form from your local Microchip Sales Office, on the MPLAB IDE CD-ROM, or on our web site at www.microchip.com.

RFID Evaluation/Developer's Kits				
	MCRF200	MCRF250	MCRF355	MCRF450/452
RFID Developer's Kits				
125 kHz microID™ Developer's Kit for MCRF200	DV103001	—	—	—
125 kHz Anti-Collision microID Developer's Kit for MCRF250	—	DV103002	—	—
13.56 MHz Anti-Collision microID Developer's Kit for MCRF355, 360, 450, 452	—	—	DV103003, DV103005	DV103005
microID Programmer Kit only for MCRF200, MCRF250	PG103001	PG103001	—	—
microID Programmer Kit only for MCRF355	—	—	PG103003	—
Extra Card Pack for the 125 kHz microID Developer's Kit for MCRF200	AC103001	—	—	—
Extra Card Pack for the 125 kHz Anti-Collision microID Developer's Kit for MCRF250	—	AC103002	—	—

Memory Evaluation/Developer's Kits		
SEEVAL™ Serial EEPROM Developer's Kit	DV243001	All serial EEPROMS, 24XX, 93XX, 25XX series

KEELOQ® Evaluation Kits									
	HCS101	HCS200/201	HCS300/301/320	HCS360/361	HCS362	HCS365/370	HCS410/412	HCS473	HCS500/512/515
KEELOQ Evaluation Kit	DM303002	DM303002	DM303002	DM303002	DM303002	—	—	—	DM303002
KEELOQ Transponder Evaluation Kit	—	—	—	—	—	—	DM303005	—	—
KEELOQ Evaluation Kit II*	DM303006	DM303006	DM303006	DM303006	DM303006	DM303006	DM303006	DM303006	DM303006
PRO MATE II Universal Programmer for SOIC	AC004002	AC004002	AC004002	AC004002	AC004002	AC004003	AC004002	AC004003	—
PRO MATE II Universal Programmer for DIP	AC004001	AC004001	AC004001	AC004001	AC004001	AC004007	AC004001	AC004007	—
PRO MATE II Universal Programmer for ICSP™	AC004004	AC004004	AC004004	AC004004	AC004004	AC004004	AC004004	AC004004	AC004004

* Contact Microchip Technology Inc. for availability date.

Analog Evaluation/Developer's Kits													
	MCP3001/02	MCP3004/08	MCP3201/02	MCP3204/08	MCP60X	MCP41XXX/ 42XXX	TC642/46	TC642/6/ 7/8/9	TC650/51	TC652/53	TC74	TC3401/05	TC3400/01/ 02/03/04/05
Analog Evaluation Kits													
Analog Evaluation Driver Board	DVMCPA	DVMCPA	DVMCPA	DVMCPA	—	DVMCPA							
Evaluation Board	DV3201A**	DV3204A**	DV3201A**	DV3204A**	—	DV42XXX**							
FilterLab™ Active Filter Design Tool					FilterLab*								
Thermal Management Tools													
Fan Controller Demo Board							TC642Demo		TC650Demo	TC652Demo			
Fan Controller Evaluation Kit								TC642EV			TC74Demo		
Serial Digital Thermal Sensor Demo Board													
Data Converter Tools													
Sigma-Delta A/D Family Demo Board												TC3400Demo	
Sigma-Delta A/D Family Evaluation Kit													TC3400EV

* Available for download from Microchip Technology Inc.'s web site at www.microchip.com

** Must be ordered with DVMCPA.

Connectivity Evaluation/Developer's Kits												
	MCP2120	MCP2150	MCP2510	MCP250XX	PIC18C658	PIC18C858	PIC16C745	PIC16C765	PIC16F877	PIC16C432	PIC16C433	PIC16C7XX
MCP2120/2150 Developer's Kit	DM163008*	DM163008*										
MCP2510 CAN IC Evaluation/Developer's Kit			DV251001									
MCP250XXX CAN Mixed Signal/IO Expander Kit				DV250501*								
PICDEM™ CAN Microcontroller Kit					DM163011*	DM163011*						
PICDEM™ USB Evaluation/Developer's Kit							DM163010*	DM163010*				
PICDEM.net™ Evaluation/Developer's Kit									DM163004			
PICDEM™ LIN Evaluation/Developer's Kit										DV163005*	DV163005*	
PICDEM™ MSC1 Evaluation/Developer's Kit												DM163012

* Contact Microchip Technology Inc. for availability date.