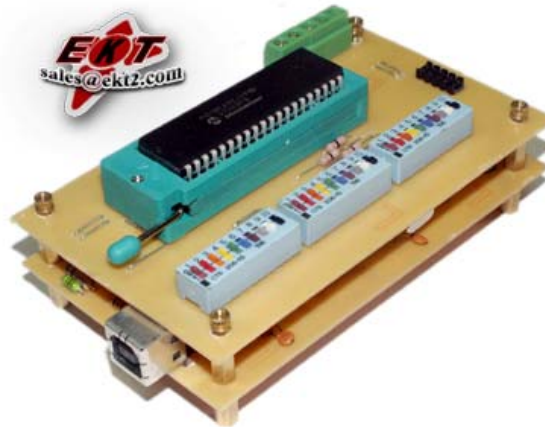


Microchip ICD2



Definition:

An all-in-one debugger/programmer solution the MPLAB[®] ICD 2 is a low cost, real-time debugger and programmer for selected PIC[®] MCUs and dsPIC[®] DSCs. Using Microchip Technology's proprietary In-Circuit Debug functions, programs can be downloaded, executed in real time and examined in detail with the debug functions of MPLAB. Set watch variables and breakpoints from symbolic labels in C or assembly source code, and single step through C source lines or into assembly code. MPLAB ICD 2 can also be used as a development programmer for supported MCUs. The secret behind In Circuit Debugging is two dedicated hardware lines (microcontroller pins used only during debugging mode) that control In Circuit Serial Programming[™] (ICSP[™]) of the device and, afterwards, debugging through proprietary, on-chip firmware. The ICD 2 debug features are built into the microcontroller and activated by programming the debug code into the target processor. There is some shared overhead expense that includes one stack level, some general purpose file registers and a small area of program memory when in the debug mode.

Features:

- 1-Programming all flash PIC and DSPIC mcu .
- 2-Programming directly from mlab .
- 3-Loading any hex file and programming the chip directly regardless the programming language used .
- 4-Programming and debugging the PIC and DSPIC directly from the mlab while connected in the circuit (ICSP) with option to supplying your circuit power form the ICD2 .

Specification:

- Real time background debugging
- MPLAB IDE GUI (free copy included)
- Built in over-voltage/short circuit monitor
- Firmware upgradeable from PC
- Totally enclosed
- Supports low voltage to 2.0 volts. (2.0 to 6.0 range)
- Diagnostic LEDs (Power, Busy, Error)
- Reading/Writing memory space and EEDATA areas of target microcontroller
- Programs configuration bits
- Erase of program memory space with verification
- Peripheral freeze-on-halt stops timers at breakpoints

PIC and DSPIC programmed with the ICD2

PIC10FXXX

PIC10F200	PIC10F202	PIC10F204	PIC10F206	PIC10F220	PIC10F222
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PIC12XX

PIC12F508	PIC12F509	PIC12F510	PIC12F629	PIC12F635	PIC12F675	PIC12F683
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PIC16XX

PIC16F505	PIC16F506*	PIC16F54	PIC16F57	PIC16F59	PIC16F616	PIC16F627
PIC16F627 A	PIC16F628	PIC16F628 A	PIC16F630	PIC16F631*	PIC16F636	PIC16F639
PIC16F648 A	PIC16F676	PIC16F677*	PIC16F684	PIC16F685	PIC16F687	PIC16F688
PIC16F689	PIC16F690	PIC16F716	PIC16F72	PIC16F73	PIC16F74	PIC16F76
PIC16F77	PIC16F737	PIC16F747	PIC16F767	PIC16F777	PIC16F785	PIC16F818
PIC16F819	PIC16F84A	PIC16F87	PIC16F870	PIC16F871	PIC16F872	PIC16F873 A
PIC16F874 A	PIC16F876 A	PIC16F877 A	PIC16F88	PIC16F913	PIC16F914	PIC16F916
PIC16F917	PIC16F946					

PIC18FXX

PIC18F1220	PIC18F1230*	PIC18F1320	PIC18F1330*	PIC18F2220	PIC18F2221*	PIC18F2320
PIC18F2321*	PIC18F2331	PIC18F2410	PIC18F242	PIC18F2420	PIC18F2423*	PIC18F2431
PIC18F2439	PIC18F2450	PIC18F2455	PIC18F248	PIC18F2480	PIC18F24J10	PIC18F2510
PIC18F2515	PIC18F252	PIC18F2520	PIC18F2523*	PIC18F2525	PIC18F2539	PIC18F2550
PIC18F258	PIC18F2580	PIC18F2585	PIC18F25J10	PIC18F2610	PIC18F2620	PIC18F2680
PIC18F2682	PIC18F2685*	PIC18F4220	PIC18F4221*	PIC18F4320	PIC18F4321*	PIC18F4331
PIC18F4410	PIC18F442	PIC18F4420	PIC18F4423*	PIC18F4431	PIC18F4439	PIC18F4450
PIC18F4455	PIC18F448	PIC18F4480	PIC18F44J10	PIC18F4510	PIC18F4515	PIC18F452
PIC18F4520	PIC18F4523*	PIC18F4525	PIC18F4539	PIC18F4550	PIC18F458	PIC18F4580
PIC18F4585	PIC18F45J10	PIC18F4610	PIC18F4620	PIC18F4680	PIC18F4682*	PIC18F4685
PIC18F46K20*	PIC18F6310	PIC18F6390	PIC18F6410	PIC18F6490	PIC18F6520	PIC18F6525
PIC18F6527	PIC18F6585	PIC18F65J10	PIC18F65J15	PIC18F6620	PIC18F6621	PIC18F6622
PIC18F6627	PIC18F6680	PIC18F66J10	PIC18F66J15	PIC18F66J65	PIC18F6720	PIC18F6722
PIC18F67J10	PIC18F67J60*	PIC18F8310	PIC18F8390	PIC18F8410	PIC18F8490	PIC18F8520
PIC18F8525	PIC18F8527	PIC18F8585	PIC18F85J10	PIC18F85J15	PIC18F8620	PIC18F8621
PIC18F8622	PIC18F8627	PIC18F8680	PIC18F86J10	PIC18F86J15	PIC18F86J60*	PIC18F86J65*
PIC18F8720	PIC18F8722	PIC18F87J10	PIC18F87J60*	PIC18F96J65*	PIC18F97J60*	PIC18LF24J10*
PIC18LF25J10	PIC18LF44J10	PIC18LF45J10				

PIC24XXXX:

PIC24FJ128GA006	PIC24FJ128GA008	PIC24FJ128GA010	PIC24FJ64GA006	PIC24FJ64GA008	PIC24FJ64GA010	PIC24FJ96GA006
PIC24FJ96GA008	PIC24FJ96GA010	PIC24HJ128GP206*	PIC24HJ128GP506	PIC24HJ256GP206	PIC24HJ256GP610	PIC24HJ64GP206*
PIC24HJ64GP210*						

dsPIC30FXX:

dsPIC30F2010	dsPIC30F2010A	dsPIC30F2011	dsPIC30F2012	dsPIC30F2020PS*	dsPIC30F3010	dsPIC30F3011
dsPIC30F3012	dsPIC30F3013	dsPIC30F3014	dsPIC30F4011	dsPIC30F4012	dsPIC30F4013	dsPIC30F5011
dsPIC30F5013	dsPIC30F5015	dsPIC30F5016	dsPIC30F6010	dsPIC30F6010A	dsPIC30F6011	dsPIC30F6011A
dsPIC30F6012	dsPIC30F6012A	dsPIC30F6013	dsPIC30F6013A	dsPIC30F6014	dsPIC30F6014A	dsPIC30F6015

dsPIC33FXX:

dsPIC33FJ128GP706	dsPIC33FJ128GP708	dsPIC33FJ128MC706	dsPIC33FJ128MC708	dsPIC33FJ256GP506	dsPIC33FJ256GP710	dsPIC33FJ256MC710
dsPIC33FJ64GP706*	dsPIC33FJ64GP708*	dsPIC33FJ64GP710*	dsPIC33FJ64MC508*	dsPIC33FJ64MC706*	dsPIC33FJ64MC710	