

PIC28 Issue D - Prototyping Kit for 28 pin Microchip PIC microcontrollers.

Examples:- 16F876, 18F252, 18F2520 & 18F2550 etc.

The kit allows easy prototyping of the 18F2550 USB part too.

Everything shown in the picture to the right is included in the kit. The crystal supplied can be 4MHz, 10MHz or 20MHz if specified when ordering; otherwise 4MHz will be supplied.

With USB the 4MHz crystal is multiplied to 96MHz inside the PIC and then divided to 48MHz for the USB peripheral and microcontroller core clocks. Many other crystal and divider combinations are possible; please see the PIC data sheet.

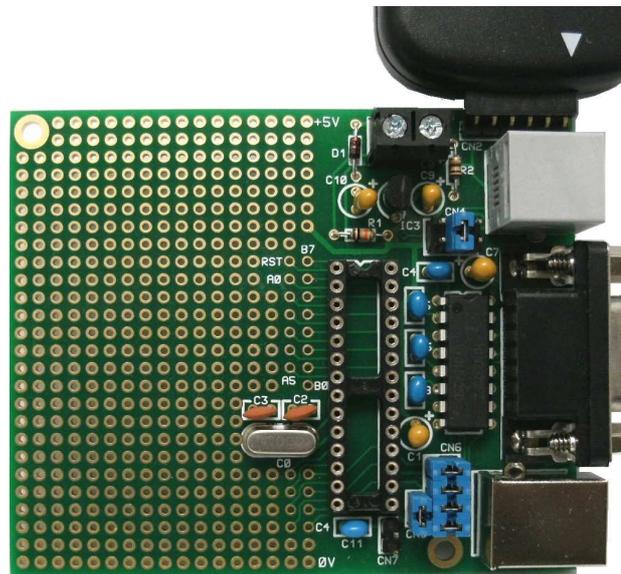
The PCB is a high quality, gold plated, double sided PTH (plated through hole) 1.6mm FR4 (Fibreglass) board 81 x 67mm in size and includes a large prototyping area with pads on both sides of the board.

The 5V power supply for the PIC can be selected to be from the on-board 5V regulator, the Microchip ICD or PicKit2/3 connectors or USB, both the +5V and 0V power rails are extended along the top & bottom edges of the board for easy access.

Microchip Pickit2 and PicKit3 programmers can be connected via the right angle pin header CN2 as pictured.

Note that if using a PicKit3 programmer the target must be powered and the PicKit3 needs to sense the target power for it's output buffers, therefore fit 2 jumpers to CN4.

A circuit diagram follows on the last page of this document.



Zoom in on this document for more image detail.

The PicKit2 programmer is not included in the kit.

Features:-

Connector for Microchip PicKit2 & PicKit3

Connector for Microchip ICD2 and ICD3

Fully buffered RS232 interface

USB connector for 18F2550 etc.

Choice of crystal frequency when ordering

All parts and the PCB are RoHS compliant and can be soldered with tin/lead or lead free solder.

PIC28 Parts List follows

Part	Type
IC1	28 pin high quality turned pin IC Socket
IC2	HIN232
IC3	78L05
D1	1N4148
XT1	4, 10 or 20MHz (please specify when ordering or 4MHz will be supplied)
R1	10K
R2	100R
C1, 7, 9, 10,	1uF Tantalum 25V
C2, 3	33pf Ceramic Disk
C4, 5, 6, 8	100nF Multilayer Ceramic (marked 104)
C11	470nf Multilayer Ceramic
CN1	RJ12 Socket
CN2	6 pin right angle Header (for PicKit2/3)
CN3	9 pin D Socket
CN4	6 pin Header 2x3 way
CN5	USB 'B' Socket
CN6	8 pins supplied as 2x4 way
CN7, 9	2 pins
CN8	2 way Terminal Block

Other Items:-

PIC28 PCB Issue D
6 x 0.1" Jumpers
Crystal insulator pad

PIC28 Prototyping PCB circuit

