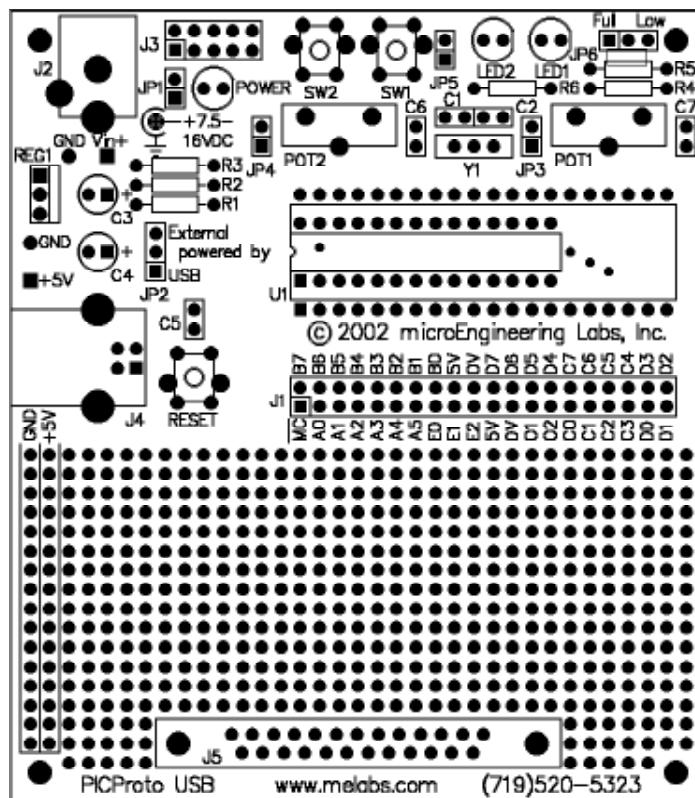


PICPROTO™ USB Prototyping Board

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\$19⁹⁵

- ❖ High quality double-sided board
- ❖ Solder mask both sides
- ❖ Hundreds of plated-through holes
- ❖ 4 mounting holes
- ❖ Overall dimensions 3.6" X 4.1"



- U1 - PIC16C745, 765, 18F2450, 2455, 2550, 4450, 4455 or 4550
- Y1 - crystal or ceramic resonator
- C1,2 - crystal capacitors
- C3 - input capacitor
- C4 - regulator capacitor
- C5, 6 - bypass capacitors
- C7 - Vusb capacitor
- R1 - Master Clear resistor
- R2 - RESET series resistor
- R3,5,6 - LED series resistor
- R4 - USB speed resistor
- POT1,2 - potentiometers
- REG1 - 5 volt regulator
- POWER, LED1,2 - LEDs
- RESET, SW1, 2 - 4.5mm x 6.5mm push button
- J1 - I/O connector
- J2 - Vin connector
- J3 - melabs ICP connector
- J4 - USB connector
- J5 - DB9, 15, or 25

ASSEMBLY NOTES:

- Pin 1 of U1, REG1, J1 and J3 is marked with a square pad.
- Note polarity of Vin, REG1, LEDs and any polarized capacitors.
- U1 may be 28- or 40-pin device.
- External or USB powered must be selected with JP2.
- JP3 and 4 may be used to disconnect the pots from the MCU.
- JP5 may be used to disconnect the LEDs from ground.
- JP3, 4 and 5 are already jumpered with a trace on the back of the board.
- JP6 is already set to Low Speed with a trace on the back of the board.
- PORTB pullups should be enabled for SW1 and 2.

SUGGESTED PARTS:

- Y1 - 6MHz(PIC16) or 20MHz(PIC18) crystal
- C1,2 - 22pf ceramic disk capacitors
- C3 - 10uf radial electrolytic capacitor
- C4 - 1uf radial electrolytic capacitor
- C5,6 - .1uf monolythic capacitors
- C7 - .47uf capacitor
- R1 - 4.7k ohm resistor
- R2 - 100 ohm resistor
- R3,5,6 - 470 ohm resistors
- R4 - 1.5k ohm resistor (not required for PIC18)
- POT1,2 - 5k ohm potentiometers
- REG1 - 7805T 5 volt regulator

SOURCES:

PIC® documentation is available from:
Microchip Technology Inc.
2355 West Chandler Blvd.
Chandler AZ 85224-6199
(480) 792-7200
(480) 792-7277 fax

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