

- <u>Description</u>
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Easy-to-build, easy-to-use and very powerful.

The Pinguino 45K50 is one of the most simple board to assemble.

It is little (71x26mm) but very easy to solder even for kids.

It needs only 4 resistors, 3 capacitors, 2 LEDs, 1 reset button and 1 USB connector (as every Pinguino is a full-speed USB device) to work.

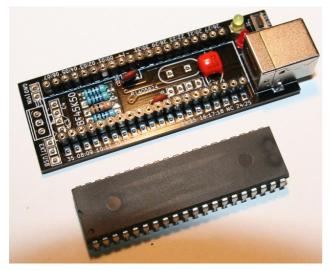
The Pinguino 45K50 is also an upgradeable board.

If you need it, you can add a 5V regulator to feed the board from an external power supply.

It's also possible to add an external crystal. In this case, note that the PCB is fully compatible with the PIC18F4550 so you can easily turn your Pinguino 45K50 to a Pinguino 4550.

The Pinguino 45K50 comes pre-programmed with a USB bootloader, so you won't even need a programmer to use it.

You only need a USB cable and a computer (PC or Raspberry Pi).



Building instructions are available on the Wiki.

KIT CONTENT

Resistors

- R1,R2,R4 470 Ohm (Yellow Purple -Black - Black)
- R3 10K Ohm (Brown Black Orange)

Capacitors

- C1,C5 100nF (marked as 104)
- C2 220nF (marked as 224)

Diodes

 D1, D2 3mm Red LED (+/anode = long lead)

Connectors

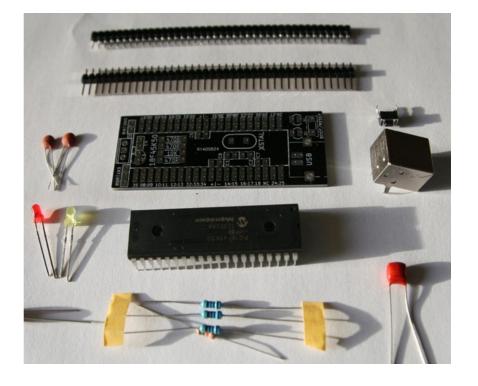
- JP1 USB Type-B Female
- P1,P2 2.54mm header strip (*)
- K1 Power selector (3-pin header strip)
- 18F45K50 2x20-pin round female header strip

Others

- 18F45K50 PIC18F45K50 (DIP package)
- SW1 Push Button (Reset)
- PCB

Optional

- C6,C7 22pF (marked as 22)
- C3 22uF (polarized, marked as 22uF)
- C4 100nF (marked as 104)
- X1 8- or 20 MHz crystal (low profile)
- U1 LM7805 (5V regulator)
- P0 External Power Supply connector (3-pin header strip)
- 18F45K50 PIC18F45K50 or PIC18F4550



(*) Use 2.54mm Single Row Male Header Strip if you want a breadboard-ready Pinguino, Female if you want it like an Arduino.

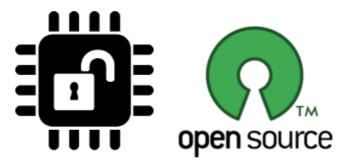
BOARD SPECIFICATION

- Dimensions: 71 x 26 mm
- Breadboard compatible
- There is one reset button to switch to the bootloader mode.
- This board can be powered by the USB connector (5V) or an external power supply.
- It can be optionally powered through a 5V regulator (LM7805, not included) via the VIN pin.
- Any regulated external power supply from 2.3V to 5.5V can power the board via one of the 2 +/- pins (please read the PIC18F45K50 Datasheet carefully if you plan to feed your board this way).

MICROCONTROLLER SPECIFICATION

- 8-bit 12 MIPS processor core running at 48Mhz
- 32K Program Flash Memory
- 2048 RAM bytes
- 256 bytes Data EEPROM
- 17 digital input/output with 5 shared analog inputs
- 1 UART for serial communications
- 1 SPI and 1 I2C
- 2 fast PWM output (3000 Hz)
- Up to 25 Channel 10-bit ADC with Voltage Reference
- 2 Analog Comparators
- 5-bit Digital to Analog Converter (DAC)
- Charge Time Measurement Unit (CTMU) for measurement applications
- 2x 8-bit Timers
- 2x 16-bit Timers
- Operating voltage 5V

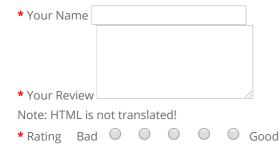
The Pinguino 45K50 is supported by the latest version of the Pinguino IDE.



Pinguino is an Open Source Hardware Project.

There are no reviews for this product.

Write a review







Kit Pinguino 45K50

- Brand: SealceLab
- Product Code: KIT45K50
- Availability: In Stock
- . 12.50€
- Ex Tax: 10.00€
- •
- 10 or more 11.06€
- 30 or more 10.45€
- 50 or more 9.83€

Qty 1

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