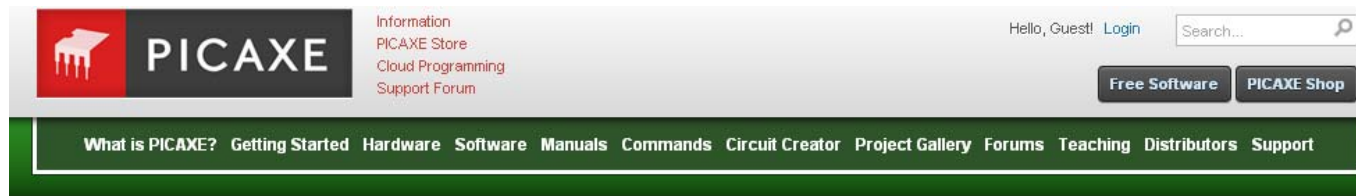


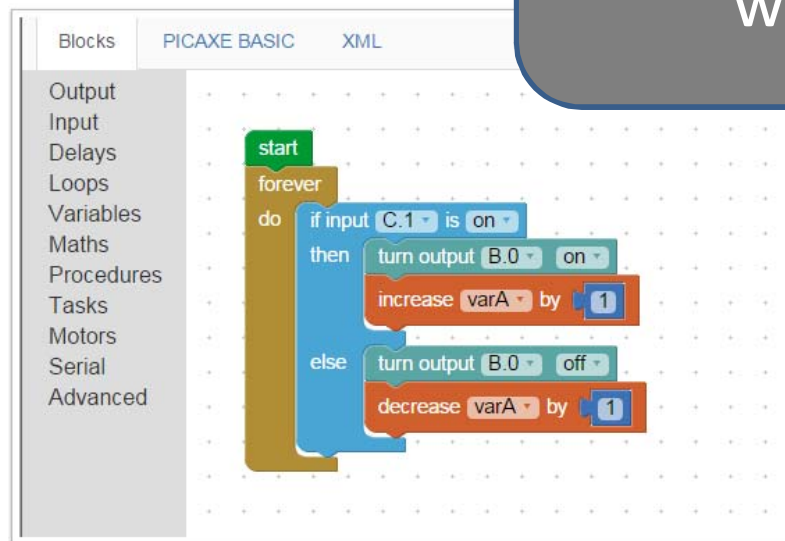
Using SCRATCH 2.0 with PICAXE (including SnapCPU)



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Teaching Portal

Blockly for PICAXE



Head over to the www.picaxe.com website...

Blockly is a graphical tool to generate PICAXE control programs. Blockly can be run entirely online via the Cloud version, or can be installed as part of PE6 or as a standalone Chrome app.

Blockly can be used with Windows, Mac, Linux and Chromebooks, and the web Cloud version can also be used with iOS and Android tablets.

Select SCRATCH 2.0 template to suit

Name	Size	Type	Date Modified
axe020.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
axe021.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
axe050.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
axe055.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
axe101.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
axe102.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
axe105.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
axe107.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
axe117.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
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axe130.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
bot120.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
chi030.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
chi035.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
picaxe-08m2.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
picaxe-14m2.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
picaxe-18m2.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
picaxe-20m2.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
picaxe-20x2.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
picaxe-28x2.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
picaxe-40x2.sb2	43 KB	SB2 File	15/05/2015 1:26 PM
scratch-demo.sb2	55 KB	SB2 File	1/05/2016 3:01 PM

Select the PICAXE
08M2 file as a
generic template

SCRATCH 2.0 template screen view

The screenshot displays the Scratch 2.0 Offline Editor interface. The top menu bar includes "Scratch 2 Offline Editor", "Scratch", and "File Edit Tips About". The stage area shows a cat sprite and three PICAXE sensor output controls: "PICAXE: sensor C.3", "PICAXE: sensor C.4", and "PICAXE: sensor C.2". The sprites panel shows "Sprite1". The scripts panel is active, displaying a list of block categories (Motion, Looks, Sound, Pen, Data, Events, Control, Sensing, Operators) and a "PICAXE" extension menu. The PICAXE menu includes options like "turn output C.1 on/off", "toggle output C.1", "play note 50 for 100 on C.1", "setup sensor C.1 as switch", "setup i2c as None", "reset", and "output to LCD on C.1 line1". The code editor shows a script starting with "when clicked", followed by "setup sensor C.3 as switch", a "forever" loop containing "toggle output C.1", an "if sensor C.3 = 1 then" block with "turn output C.2 on" and "else" block with "turn output C.2 off", and a "wait 1 secs" block.

SCRATCH 2.0 template screen view

The image shows the Scratch 2.0 interface. On the left, the 'More Blocks' category is selected, displaying a list of PICAXE special blocks. The blocks are organized into sections: 'PICAXE' (with a red dot icon) and 'BASIC'. The 'PICAXE' section includes: 'turn output C.1 on', 'turn output C.1 off', 'turn output C.1 on for 1 secs', 'toggle output C.1', 'play note 50 for 100 on C.1', 'setup sensor C.1 as switch', 'setup i2c as None', 'reset', 'output to LCD on C.1 line1', 'wait for IR on input C.1', and 'wait for TV IR on input C.1'. The 'BASIC' section includes: 'sensor C.1', 'sensor C.2', 'sensor C.3', 'sensor C.4', 'sensor C.5*', 'IR', and 'i2c result1'. On the right, a script is visible on the stage, starting with 'when clicked', followed by 'setup sensor C.3 as switch', a 'forever' loop containing 'toggle output C.1', an 'if sensor C.3 = 1 then' block with 'turn output C.2 on' and 'turn output C.2 off' sub-blocks, and 'wait 1 secs'.

Under MORE BLOCKS, you will see the PICAXE special blocks

SCRATCH 2.0 sensor input setup

Scratch 2 Offline Editor

ScrATCH File Edit Tips About

scratch-demo
v446

PICAXE: sensor C.3 0

PICAXE: sensor C.4 0

PICAXE: sensor C.2 0

sensor C.1

sensor C.2

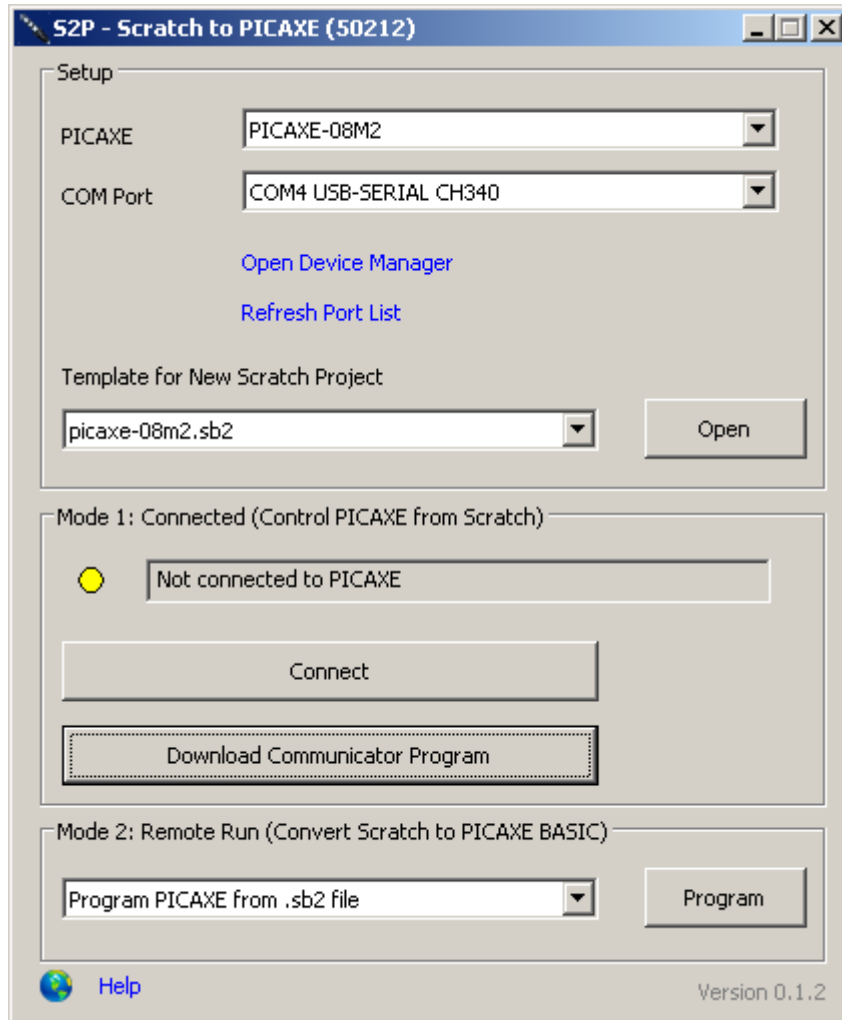
sensor C.3

sensor C.4

sensor C.5*

Inputs are sensor BLOCKS, defined by check box

<http://www.picaxe.com/Software/Third-Party/Scratch/#download>



Use the S2P utility to transfer SCRATCH code to the PICAXE / SnapCPU device

<http://www.picaxe.com/docs/s2p.pdf>