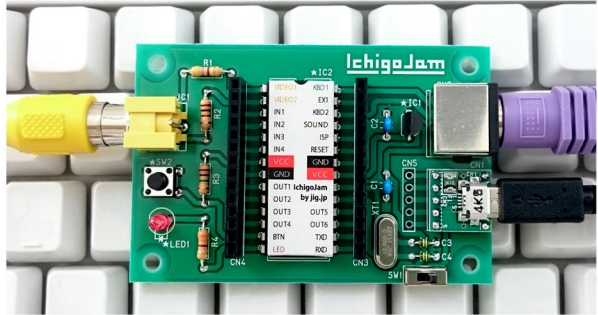


『IchigoJam』 Kit, PC for your first programming

IchigoJam is a PC to learn programming with BASIC. You can make up games and tools on TV, control robots with sensors, by just connecting a PS/2 keyboard, a TV with a video cable and micro USB for the power.

• How to build (list of parts)

- 📌 IchigoJam printed circuit
- 🔌 C3,C4 two axial type condensers 15pF
- 🔌 R1 resistor 470Ω YePpBrGld
- 🔌 R2 resistor 100Ω BrBlkBrGld
- 🔌 R3 resistor 1MΩ BrBlkGrGld
- 🔌 R4 resistor 330Ω OrOrBrGld
- 🔌 XT1 crystal oscillator 12MHz
- 🔌 IC2 IC socket
- 🔌 CN1 7pins, cut 5pins and two 1pin, and put into printed circuit
- 🔌 CN1 micro USB connector ※Put on to pins, soldering from up, upside down soldering
- 🔌 C1,C2 two condensers 0.1μF
- 🔌 IC1 3pins regulator ※Flat side for the left
- 🔌 LED1 a red LED ※Longer pin for the right
- 🔌 SW1 a slide switch ※To turn off to slide right
- 🔌 SW2 a tact switch ※To be row
- 🔌 CN3,CN4 two 14pins socket
- 🔌 CN2 PS/2 connector ※After soldering one point, push on to printed circuit with soldering
- 🔌 JC1 video connector
- 🔌 IchigoJam seal ※Put to the micro controller
- 🔌 IC2 micro controller LPC1114 (IchigoJam Core)
※ Plugged into IC socket. upper with cut side
- 🔌 piezoelectric speaker
※ Apart for CN5 parts is not included



• How to run

Connect a keyboard, a TV and a power source with micro USB.

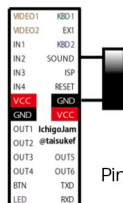
Slide left a switch to boot (just 1sec to boot!) .

Enter " LED 1" , and hit a enter to light LED. " LED 0" to turn it off.

To get IchigoJam BASIC reference and the others, see also <http://ichigojam.net/>

If you connect a Piezo Speaker or RCA jack (cinch connector) to the SOUND pin and GND pin, you can control the sound through the PLAY/BEEP/TEMPO commands.

Try using MML (Music Macro Language) to enrich your program with music and sound effects.



Pin diagram

MML	Explanation	Example
[sound]	Play a scale	PLAY"CDEFG"
[sound][N]	Assign the duration for each note (1/2/3/4/8/16/32 where 1 = 1/60 a second)	PLAY"C4E2D1"
[sound][N].	Use a point (.) after the note to make it 1.5 times the duration	PLAY"C4.E2.D1"
[sound]+	Sharp note	PLAY"CC+"
[sound]-	Flat note	PLAY"DD-"
R	Rest (you can adjust the duration of the rest, too)	PLAY"CRDRE"
T[N]	Set the tempo (default tempo is 120bpm)	PLAY"T60CDE"
L[N]	When there is no parameter (do specify otherwise) the default note duration is 4.	PLAY"L16CCC"
O[N]	Set the octave for a note (range O1C~O5D). Default octave is 4.	PLAY"O1CO5D"
>	Go up one octave.	PLAY"C>C"
<	Go down one octave.	PLAY"C<C"
N[N]	Adjust the pitch (1-255), use L to adjust the duration.	PLAY"N1N2N4N8"
S	Repeat the section of MML code	PLAY"CDE\$GC"
	Stop the sound (mute)	PLAY

※ Because of the use of a video synchronizing mechanism, sometimes the sound isn't perfect