PicsimLab_0_6_0

Luis Claudio Gambôa Lopes <lcgamboa@yahoo.com>

http://sourceforge.net/projects/picsim/

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Contents

Chapter 1

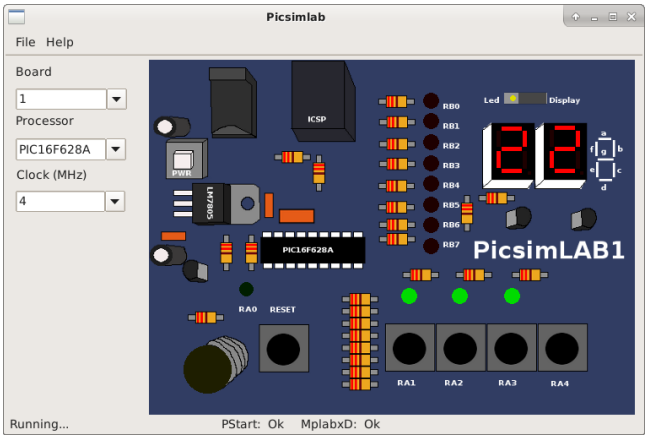
Ajuda

1.1 Comandos

- Clique no conector ICSP para carregar um arquivo .hex.
- Clique no botão PWR para ligar/desligar o emulador.
- Os botões podem ser acionados pelo mouse ou pelas teclas 1, 2, 3 ...

1.2 Características da placa 1

Emula a placa de desenvolvimento McLab1 da Labtools que utiliza um PIC16F628A.

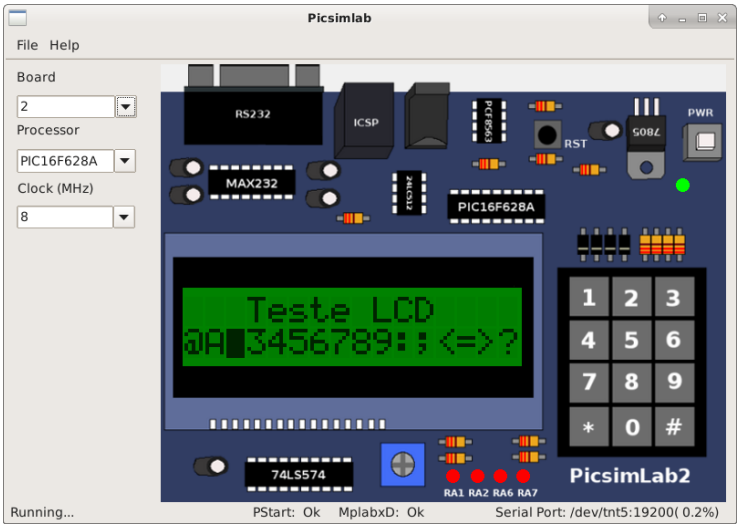


Compra do kit McLab1, manual e exemplos na Área de donwload www.mosaico.com.br

O hardware e a utilização do kit também é descrita no livro **Desbravando o PIC - Ampliado e Atualizado para PIC 16F628A** da editora Erica (ISBN: 978-85-7194-867-9).

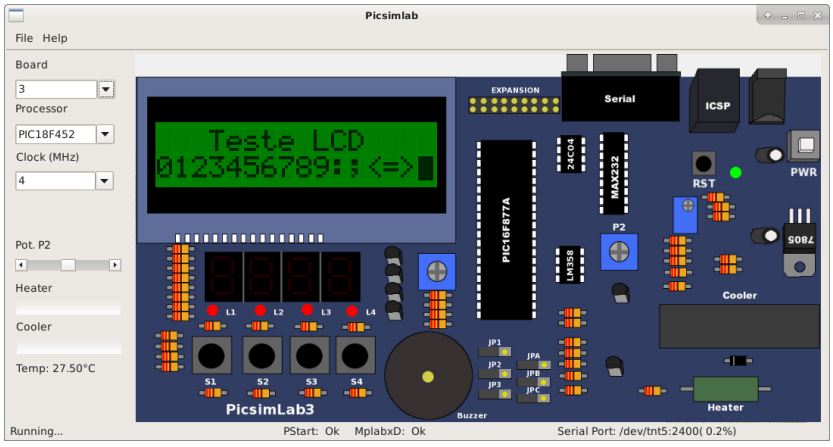
1.3 Características da placa 2

Emula uma placa didática desenvolvida pelo autor.



1.4 Características da placas 3

Emula a placa de desenvolvimento McLab2 da Labtools que utiliza um PIC16F877A ou um PIC18F452.

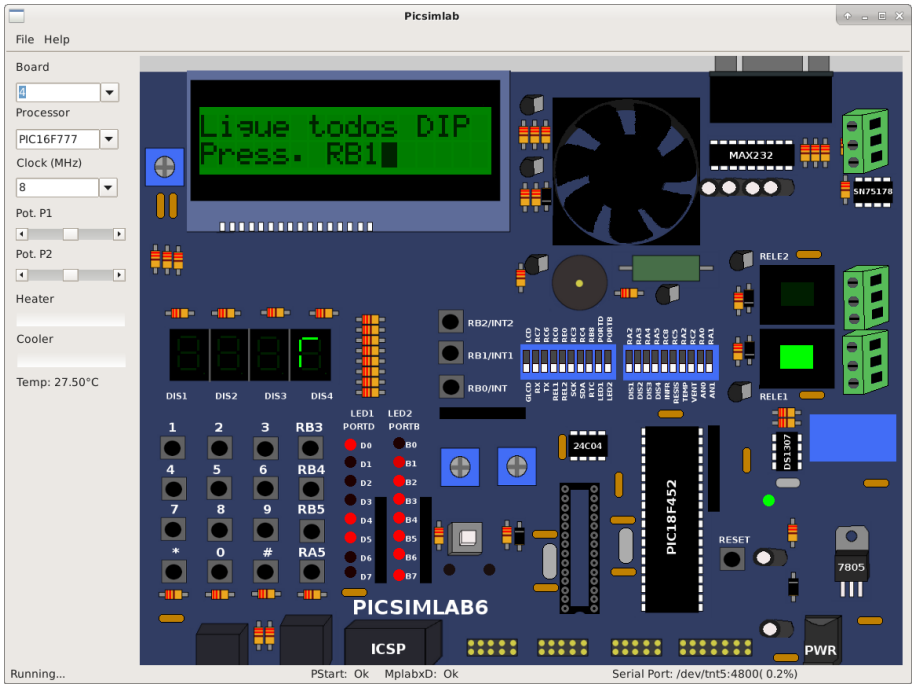


Compra do kit McLab2, manual e exemplos na Área de donwload www.mosaico.com.br

O hardware e a utilização do kit também é descrita no livro **Conectando o PIC - Recursos Avançados** da editora Erica (ISBN: 978-85-7194-737-5).

1.5 Características da placas 4

Emula a placa de desenvolvimento PICGenios PIC18F e PIC16F Microchip da microgenios que utiliza um PIC16F877A ou um PIC18F452.



Compra do kit PICGenios PIC18F e PIC16F Microchip e manual em www.microgenios.com

1.6 Conexão com o Programador

Para utilizar o emulador de programador picstart+ embutido, instale um emulador NULL-MODEM:

- Windows: com0com `http://sourceforge.net/projects/com0com/`
- Linux: tty0tty `http://sourceforge.net/projects/tty0tty/` ou `https://github.com/lcgamboa/tty0tty`

Exemplos de configuração:

OS	porta PicsimLab	porta IDE	NULL-Modem prog.	Conexão
Windows	wport=com8	Mplab=com2	com0com	com2<=>com8
Linux	lport=/dev/tnt4	Piklab=/dev/tnt5	tty0tty	/dev/tnt4<=>/dev/tnt5

1.7 Depuração Integrada com o MPLABX

Para utilizar o IDE MPLABX para depurar e programar o PicsimLab, basta instalar o plugin com-picsim-picsimlab.nbm no MPLABX.

O plugin se conecta ao Picsimlab através de um socket TCP na porta 1234, permita o acesso no firewall.

Chapter 2

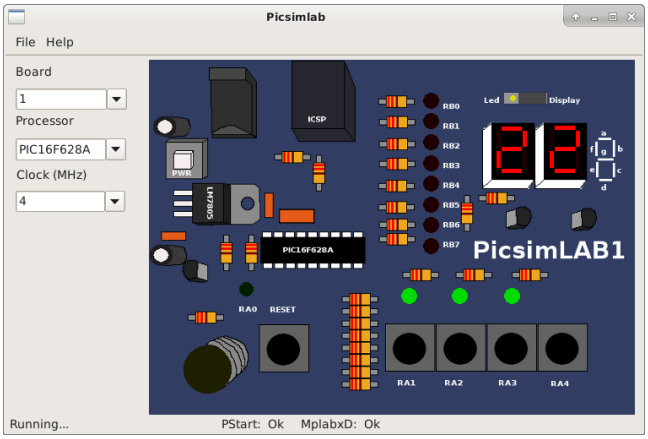
Help

2.1 Commands

- Click in ICSP connector to load an .hex file.
- Click in PWR button to ON/OFF the emulator..
- The buttons can be activated through mouse or keys 1, 2, 3 e 4.

2.2 Features of board 1

Emulates the Labtools development board McLab1 who uses one PIC16F628A.

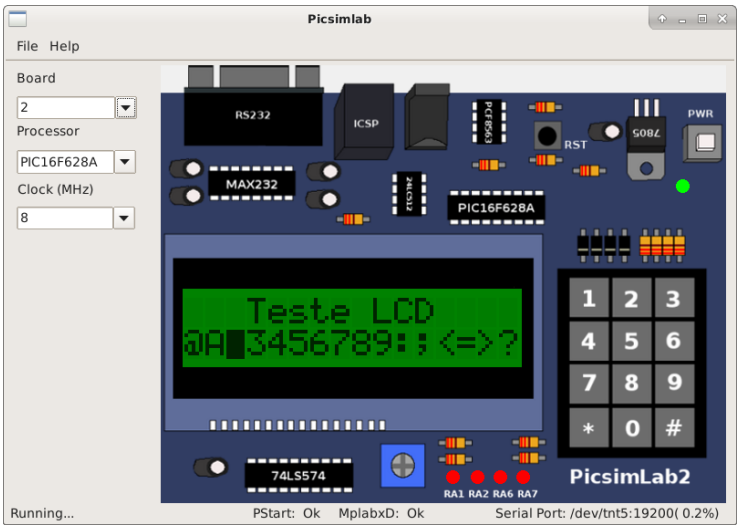


McLab1 kit buy, manual and examples in download area www.mosaico.com.br

The hardware and the use of kit is described in the book **Desbravando o PIC - Ampliado e Atualizado para PIC 16F628A** of Erica publisher (ISBN: 978-85-7194-867-9).

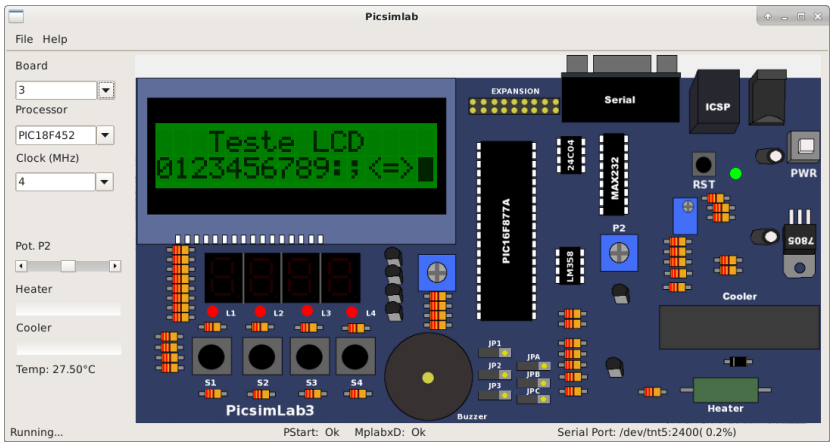
2.3 Features of board 2

Emulates an didatic board developed by author.



2.4 Features of boards 3

Emulates the Labtools development board McLab2 who uses one PIC16F877A or one PIC18F452.

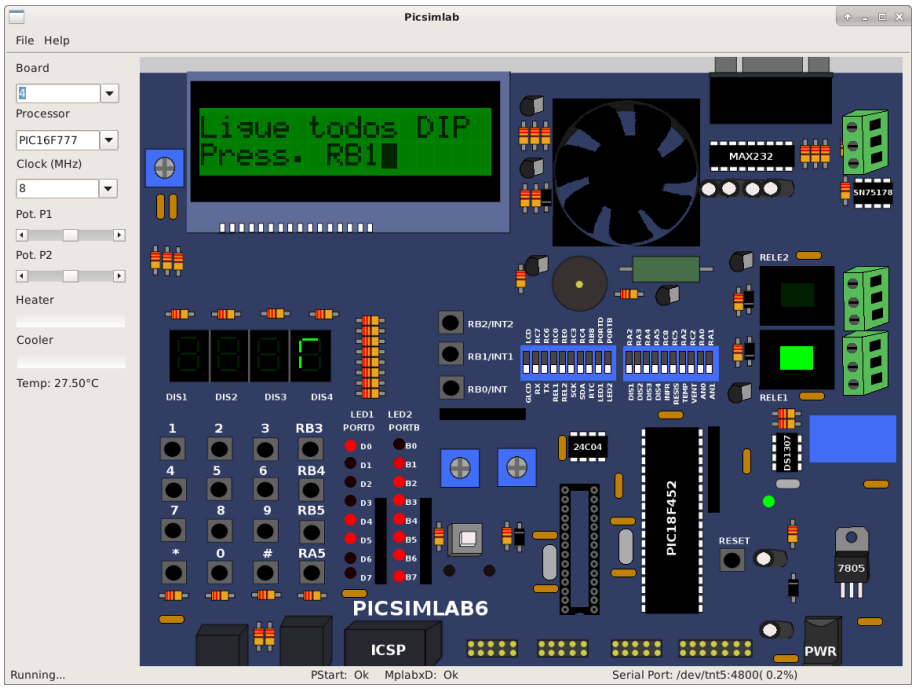


McLab2 kit buy, manual and examples in download area www.mosaico.com.br

The hardware and the use of kit is described in the book **Conectando o PIC - Recursos Avançados** of Erica publisher (ISBN: 978-85-7194-737-5).

2.5 Features of boards 4

Emulates the microgenius development board PICGenios PIC18F e PIC16F Microchip who uses one PIC16F877A or one PIC18F452.



PICGenios PIC18F e PIC16F Microchip kit buy and manual in www.microgenios.com

2.6 Programmer connection

To use the embedded picstart+ emulator, install an NULL-MODEM emulator:

- Windows: com0com `http://sourceforge.net/projects/com0com/`
- Linux: tty0tty `http://sourceforge.net/projects/tty0tty/` or `https://github.com/lcgamboa/tty0tty`

Configuration examples:

OS	PicsimLab port	IDE port	NULL-Modem prog.	Connection
Windows	wport=com8	Mplab=com2	com0com	com2<=>com8
Linux	lport=/dev/tnt4	Piklab=/dev/tnt5	tty0tty	/dev/tnt4<=>/dev/tnt5

2.7 MPLABX Integrated Debug

To use the MPLABX IDE for debug and program the PicsimLab, install the plugin com-picsim-picsimlab.nbm in MPLABX.

The plugin connect to Picsimlab through a TCP socket using port 1234, allow the access in the firewall.

Chapter 3

Schematics

- Board 1
- Board 2
- Board 3
- Board 4

Chapter 4

Source Code Examples

The code examples can be loaded in PicsimLab menu **Help->examples**.

The source code of examples using MPLABX and XC8 compiler are in the folder: source code

Chapter 5

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