

A-Z80 Quick Start

Windows setup; download and install the following tools:

Altera Quartus II Web Edition: <https://www.altera.com/download> OR

Xilinx ISE Webpack: <http://www.xilinx.com/products/design-tools/ise-design-suite.html> OR

Lattice ICECube toolchain from Synopsys.

For Altera DE1 board, the latest free version that supported Cyclone II was Quartus 13.0 SP1.

Download *ModelSim* from the same Altera site.

Python 3.5 (or newer): <https://www.python.org/downloads/>

How do I add A-Z80 sources to my Z80-based project?

Run Python script “cpu/export.py” which will export all core CPU files to a directory of your choice. Then, add those files to your project. Instantiate a CPU using “z80_top_direct_n” module declared in the “z80_top_direct_n.v” file.

Note for the users of Lattice FPGA toolset: instead of “data_pins.v”, manually copy and use “data_pins_lattice.v file” instead.

How do I setup my Altera DE1 board to run Sinclair ZX Spectrum?

Flash the supporting ZX Spectrum combined ROM binary file (“host/zxspectrum_de1/rom/combined.rom”) into the board’s flash memory starting at the address 0. Use “DE1_ControlPanel.exe” utility from your DE1 CD disk (which you can also download from the Terasic’s site).

In Quartus: open, compile and flash “host/zxspectrum_de1/zxspectrum_de1.qpf” project. Connect VGA, PS/2 keyboard and line-in to load Spectrum programs. Plug in a set of earphones to Line-out.

Select from thousands of ZX Spectrum games and load them by using *Baltazar Studios’ PlayZX* app which can be found on Google Play store.

Still stuck?

Read the full *User’s Guide*.

Visit www.baltazarstudios.com, post a question and/or send me an email.

In any case – I would like to hear from you --

Hope you have fun using it as much as I had fun creating it!

Goran Devic

gdevic@yahoo.com