A-Z80 Quick Start

Windows first time 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.x: 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 copy all core CPU files to a directory of your choice. Then, add all Verilog (*.v) files to your project and ensure that Verilog include files (*.vh) are on the include path (do not explicitly add those). 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 ZX Spectrum combined ROM package ("`host/zxspectrum_de1/rom/combined.rom`") into the flash memory at address 0. Use "`DE1_ControlPanel.exe`" utility from your DE1 CD disk (you can also download it from terasic.com site).

In Quartus: open, compile and flash project "`host/zxspectrum_de1/zxspectrum_de1.qpf`".
Connect VGA, PS/2 keyboard and line-in to load Spectrum programs. Plug in a set of earphones to Line-out.
You can select from thousands of ZX Spectrum games and load them by using *Baltazar Studios'* PlayZX app which was built just for this purpose and 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,
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