UDI's PI64 – A Complete Commodore 64 Emulator System utilizing VICE and Raspbian Wheezy

Welcome to your journey into retrocomputer heaven. This PI64 comes with almost everything you will ever need to emulate the classic Commodore 64 Computer.

This SD Card is configured with 950Hz "High" Overclocking and Expanded Filesystem.
For use with Model B Raspberry Pi Boards.

TURNNING ON:

Before turning on your Raspberry Pi, install the SD card provided, hook up a TV to the video out or HDMI cable, audio cable, ethernet connector, USB Keyboard, and 1 or 2 DB9 Joystick adapters (1 is provided with this kit). Login with id: pi pw: raspberry

TURNING OFF:

To shutdown Vice safely
Go to F12/Settings/Quit Emulator
In terminal type
sudo shutdown -h now (or to reboot sudo shutdown -r now)
when the system halts you can safely unplug your pi and remove your sd card.

Running Programs:

F12 → Autostart image to run a .prg file
F12 → Drive to attach a .d64 disk image to a drive
F12 → Tape to attach a .tap or .t64 image to a tape machine
True Drive emulation must be on for certain programs. Off makes everything load faster. If something doesn't work, try it with true drive emulation turned on.

All programs are in the subdirectory C64 images. Over 30,000 programs have been included, in both pal and ntsc formats. NTSC and PAL emulation can be selected from F12 → Video Settings.

To reset the machine to use F12 → Reset → Soft or Hard Reset

There's lots of options to use cartridges and other forms of loading as well. Play around!

Connecting to the internet and calling BBS Systems:

The PI64 is already set for use with the tcpser hayes modem emulator running at 2400 baud.

Run Striketerm. Located in -> C64images/BBS and Term/Terms/Striketerm2014.d64

Make sure Modem is set to User Port and Baud is set to 2400.
type AT in terminal mode, you should get an OK in response!
Full bbs list at the cbbs outpost. (http://cbbsoutpost.servebbs.com)

Sound Tweaks

Try ALSA Settings if the default doesn't sound good.

INSTALLING JOYSTICKS on REV 2 PI Board:

There are 6 pins on the DB9 Connector. 1-4 are Up,Down,L,R. Pin 6 is Fire, Pin 8 is Ground.

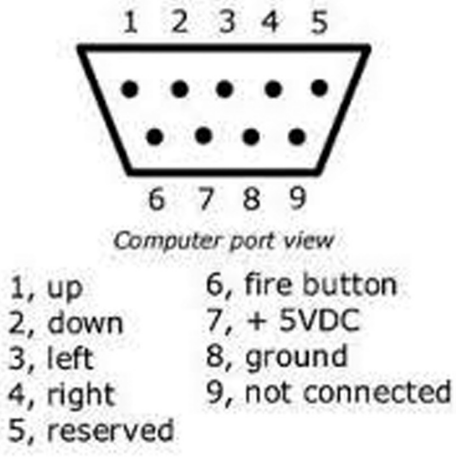
Connect the pins in the following way to the GPIO port of the Raspberry PI
DB9 → GPIO (This configuration mimics Vice's preset NUMPAD Joystick configuration)
Pin 1 → Pin 2
Pin 2 → Pin 3
Pin 3 → Pin 4
Pin 4 → Pin 17
Pin 6 → Pin 27
Pin 8 → Gnd

A second DB9 Joystick can be added using the following configuration:
DB9 → GPIO
Pin 1 → Pin 23
Pin 2 → Pin 24
Pin 3 → Pin 25
Pin 4 → Pin 8
Pin 6 → Pin 7
Pin 8 → Gnd

If you mismatch any of the pins, don't fret. The GND needs to be connected correctly, but if you swap any of the pins for another, it's easy to fix using Vice's “Define Keyset” rule.

Setting up Joysticks / Mapping to Keysets:
F12 → Machine Settings → Joystick Settings → Define Keysets
Select the key you wish to define, (For example Keyset 1 Up). Push the joystick Up and that will be mapped correctly.

C64



GPIO