



This schematic shows how you might define the VM2 as a 'component' comprised of two 'parts': the two headers.

The hexadecimal numbers on each pin (e.g. \$10) are the channel numbers.

The abbreviated name is the primary function for that pin. Other functions are possible - see the VM2 Datasheet.

**Internal Pullup/down:**

Each I/O pin has an optional internal pull-up or -down resistor, under software control. They are 40K +/- 10K in value.

I2C bus will need extra pull-ups on the application board (4K7 typ).

**Mode Links:**

PROG MODE: Pull to GND for Program mode, else Run mode.  
 DFLT COMMS: Pull to GND to prevent USB file system starting.  
 BOOTMODE: Pull to VCC to download Venom2 OS over serial port 1.

Note that BOOT pin is pulled to VCC, not GND.