

Shutdown Board Interface

Software

Software is included in the hamvoip Pi edition of Allstar.

Simply set `SHUTDOWN_MONITOR="enabled"` in `/usr/local/etc/allstar.env`

The default setting is "disabled" The script will be loaded and run in the background at each boot.

This is the same script that is used for the single button shutdown and has been modified to support both the single button and this circuit.

Although it is not recommend using the script without the circuit attached the pi will operate normally in that case - unless a 5 second low signal is applied to pin 11 which would cause the Pi to shutdown.

When using this circuit and script the user can still use the manual SSH or DTMF shutdown commands and the shutdown process will be the same. After shutdown the power will be removed.

Hardware

There are three wires to the Pi from the power shutdown board

Make sure these are connected on the right pins

- The ground pin is connected to pin 9

- The power good pin is connected to pin 11 (GPIO0) the next pin.

- The shutdown wire is connected to pin 12 (GPIO1) adjacent to pin 11.

SHDN

Raspberry Pi 3 GPIO Header

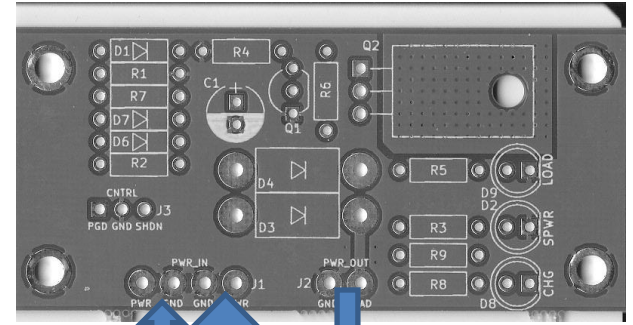
Pin#	NAME	NAME	Pin#
01	3.3v DC Power	DC Power 5v	02
03	GPIO02 (SDA1 , I2C)	DC Power 5v	04
05	GPIO03 (SCL1 , I2C)	Ground	06
07	GPIO04 (GPIO_GCLK)	(TXD0) GPIO14	08
09	Ground	(RXD0) GPIO15	10
11	GPIO17 (GPIO_GEN0)	GPIO18	12
13	GPIO27 (GPIO_GEN2)	Ground	14
15	GPIO22 (GPIO_GEN3)	(GPIO_GEN4) GPIO23	16
17	3.3v DC Power	(GPIO_GEN5) GPIO24	18
19	GPIO10 (SPL_MOSI)	Ground	20
21	GPIO09 (SPL_MISO)	(GPIO_GEN6) GPIO25	22
23	GPIO11 (SPL_CLK)	(SPL_CE0_N) GPIO08	24
25	Ground	(SPL_CE1_N) GPIO07	26
27	ID_SD (I2C ID EEPROM)	(I2C ID EEPROM) ID_SC	28
29	GPIO05	Ground	30
31	GPIO06	GPIO12	32
33	GPIO13	Ground	34
35	GPIO19	GPIO16	36
37	GPIO26	GPIO20	38
39	Ground	GPIO21	40

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GND

PGD

Pin 1

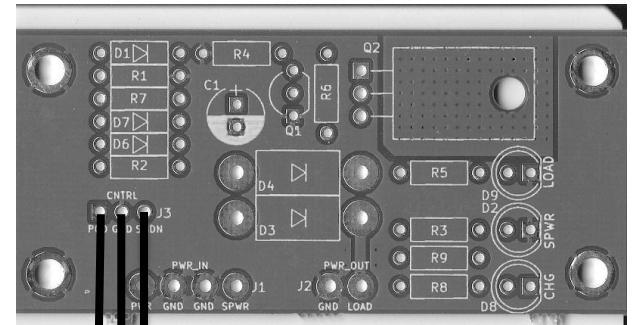


Battery

Main
12 Volt
Source

Yellow Box Power

Red – Power Out
Yellow – Power In
Green - Charging



SHDN

GND

Good (PGD)