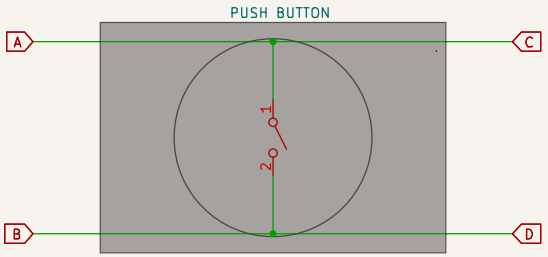
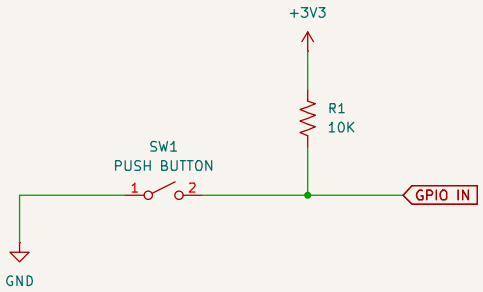
DIGITAL INPUT – PUSHBUTTON

This is a simple momentary pushbutton switch, used for manually & momentarily breaking circuit paths.
– A & B are always connected.
– C & D are always connected.
– When button is pressed, switch is closed...
...any signal present at either A or B will be present at C & D, and vice–versa.



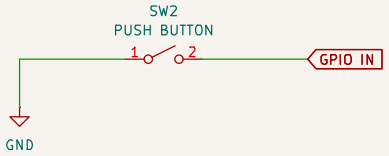
BUTTON: PULL–UP

External PullUp



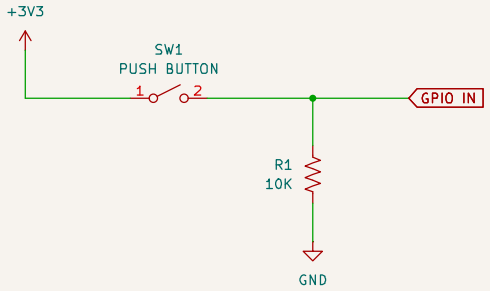
– Button is "pulled–up" to +3V3 when not pressed.
– When button is open, GPIO reads 1.
– When button is closed (button pressed), GPIO reads 0.
– Many MCUs have Internal PullUp resistors, but these must be enabled in software.

Internal PullUp



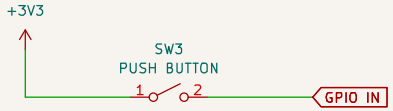
BUTTON: PULL–DOWN

External PullDown



– Button is "pulled–down" to GND [0V] when not pressed.
– When button is open, GPIO reads 0.
– When button is closed (button pressed), GPIO reads 1.
– ESP32 MCU also has External PullDown resistors enabled via software.

Internal PullDown



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Title: PUSH BUTTONS: PullUp & PullDown

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