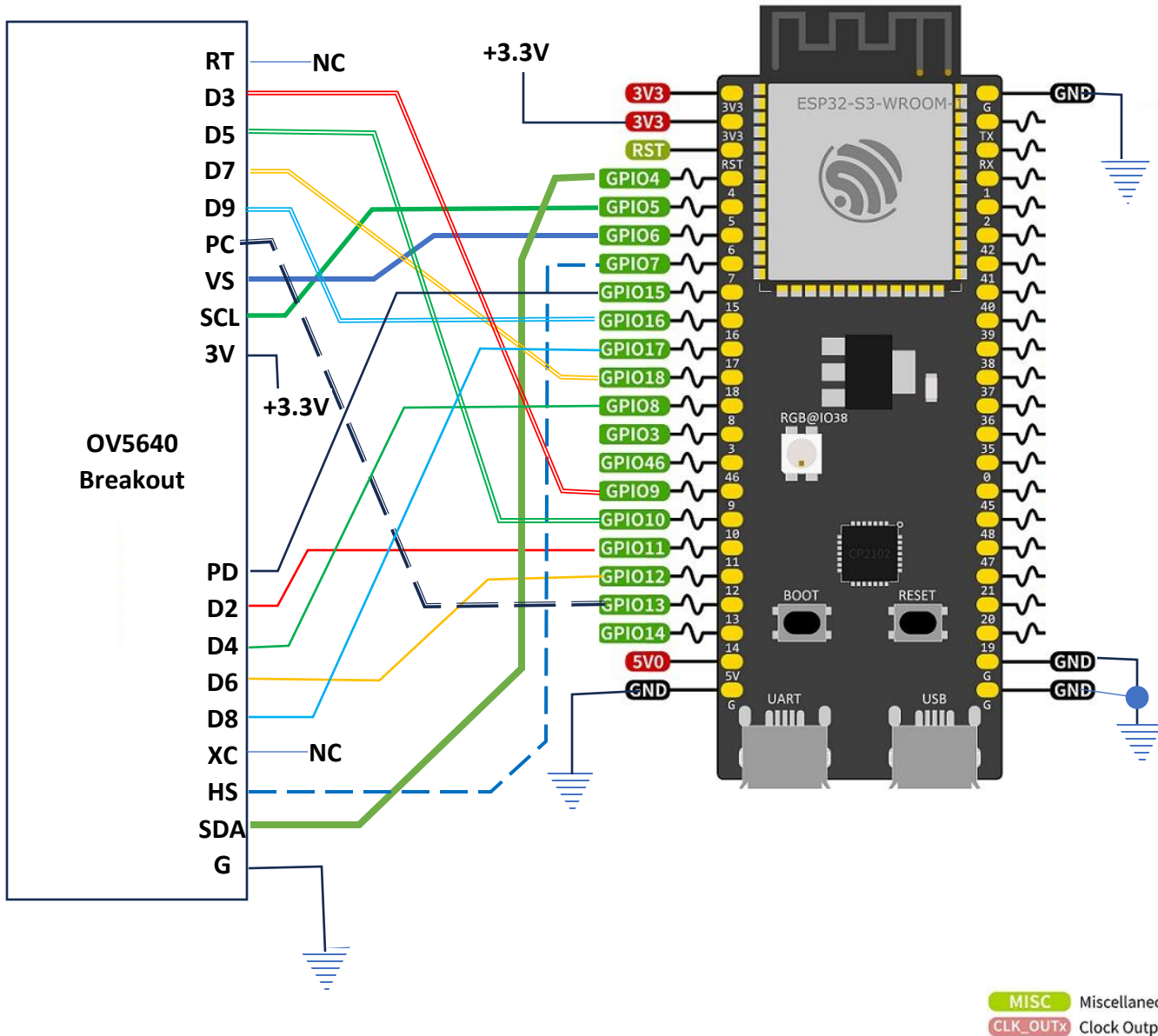


ESP32-S3-DevkitC-1-N8R8 to Adafruit OV5640 Schematic



BOM:

- ESP32-S3-DevkitC-1-N8R8
- Adafruit OV5640 breakout with autofocus camera (in this case Adafruit SKU 5840). (OV5640 Board has terminal blocks and jumpers soldered/configured for autofocus and internal clock already)
- 3.3VDC power supply
- Assorted 22AWG wires
- 18-pin terminal block to breadboard adapter (not shown)

Pin Mapping Table: Adafruit OV5640 Breakout to ESP32-S3-DevkitC-1-N8R8

*NOTE: OV5640 board is configured so that

a) Autofocus is enabled (soldered the VM jumper)

b) Internal CLK is enabled (on CLK jumper, trace between center and right pad is cut, & center pad is soldered to left pad)

	OV5640 Header	OV5640 pin	ESP32-DevkitC-1-N8R8 pin
1	H1	RT	-NC-
2	H1	D3	GPIO09
3	H1	D5	GPIO10
4	H1	D7	GPIO18
5	H1	D9	GPIO16
6	H1	PC	GPIO13
7	H1	VS	GPIO06
8	H1	SCL	GPIO05
9	H1	3V	3.3VDC
10	H2	PD	GPIO15
11	H2	D2	GPIO11
12	H2	D4	GPIO08
13	H2	D6	GPIO12
14	H2	D8	GPIO17
15	H2	XC	-NC- (see note)
16	H2	HS	GPIO07
17	H2	SDA	GPIO04
18	H2	G	GND