

The schematic shows the MIC5219-3.3V voltage regulator circuit. The input side features a capacitor C1 (0.1µF) connected between V_USB and GND. A resistor R1 (100k) is connected between V_USB and the IN pin of the regulator U1. The EN pin of U1 is connected to a signal labeled PROC_PWR_EN. The GND pin of U1 is connected to GND. The output of the regulator, taken from the OUT pin, provides a 3.3V supply to a load capacitor C2 (2.2µF), which is also connected to GND.

MIC5219-3.3V
I _{out} (max): 500mA
V _{in} (max): 12V
V _{drip} (typ @ 500mA): 350mV
V _{drip} (max @ 500mA): 500mV
I _q (typ): 80µA
Output discharge: None

FLASH_VDD

U3

FLASH_VDD

C5

0.1uF

GND

1

6

2

3

7

FLASH_SCS

FLASH_SCR

FLASH_SDI

FLASH_SWP

FLASH_SHD

CS

CLK

D0/D1

D1/D0

D2/WP

D3/HOLD

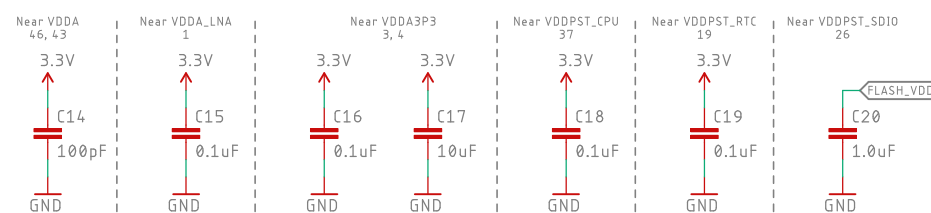
VDD

GND

W25QXX128MBIT-6X5-SKINNY_CENTER

The diagram shows an ESP32 module with the following components and connections:

- Antenna:** ANTENNA2.4GHZ-8.0X1.0MM connected to A1.
- Power Section:**
 - 3.3V input with 10k resistor R2 and 10nF capacitor C12 to GND.
 - RESET pin connected to 3.3V through a 10k resistor.
 - Chip select (CS0) connected to 3.3V through a 10k resistor.
- RF Section:**
 - LNA_IN connected to 3.3V through a 10k resistor.
 - XTAL_P and XTAL_N connected to a 4.0MHz crystal (X2) with 12pF capacitors (C8, C9) to GND.
- GPIOs and I2C:**
 - GPIO0 and GPIO1 connected to a 10k resistor to GND.
 - GPIO2 connected to a 10k resistor to GND.
 - GPIO3 connected to a 10k resistor to GND.
 - GPIO4 connected to a 10k resistor to GND.
 - GPIO5 connected to a 10k resistor to GND.
 - GPIO6 connected to a 10k resistor to GND.
 - GPIO7 connected to a 10k resistor to GND.
 - GPIO8 connected to a 10k resistor to GND.
 - GPIO9 connected to a 10k resistor to GND.
 - GPIO10 connected to a 10k resistor to GND.
 - GPIO11 connected to a 10k resistor to GND.
 - GPIO12 connected to a 10k resistor to GND.
 - GPIO13 connected to a 10k resistor to GND.
 - GPIO14 connected to a 10k resistor to GND.
 - GPIO15 connected to a 10k resistor to GND.
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 - GPIO27 connected to a 10k resistor to GND.
 - GPIO28 connected to a 10k resistor to GND.
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 - GPIO30 connected to a 10k resistor to GND.
 - GPIO31 connected to a 10k resistor to GND.
 - GPIO32 connected to a 10k resistor to GND.
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 - GPIO46 connected to a 10k resistor to GND.
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 - GPIO82 connected to a 10k resistor to GND.
 - GPIO83 connected to a 10k resistor to GND.
 - GPIO84 connected to a 10k resistor to GND.
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 - GPIO92 connected to a 10k resistor to GND.
 - GPIO93 connected to a 10k resistor to GND.
 - GPIO94 connected to a 10k resistor to GND.
 - GPIO95 connected to a 10k resistor to GND.
 - GPIO96 connected to a 10k resistor to GND.
 - GPIO97 connected to a 10k resistor to GND.
 - GPIO98 connected to a 10k resistor to GND.
 - GPIO99 connected to a 10k resistor to GND.
- Other Components:**
 - Capacitors: C1 (10nF), C2 (10nF), C3 (10nF), C4 (10nF), C5 (10nF), C6 (10nF), C7 (10nF), C8 (12pF), C9 (12pF), C10 (270pF), C11 (270pF), C12 (10nF), C13 (30nF).
 - Resistors: R1 (10k), R2 (10k), R3 (10k), R4 (20k).
 - Inductor: L1 (0).
 - Crystal: X2 (4.0MHz).

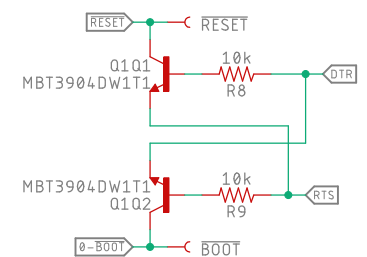


Ground is on layer 2.
Prepreg thickness: 0.2mm
12 mil track with 4 mil gap = 49.5 Ohms

[illegible]

Boot Mode Configuration			
Pin	Default	Boot	Download
GPIO0	1	1	0
U0TXD	1	1	x
GPIO2	0	x	0
GPIO4	0	x	x
MTD0	1	x	x
GPIO5	1	1	x

If U0TXD, GPIO2, GPIO5 are floating, GPIO0 determines boot mode



If DTR is LOW, toggling RTS from HIGH to LOW resets to run mode.
If RTS is HIGH, toggling DTR from LOW to HIGH resets to bootloader.

Sheet: 1/1