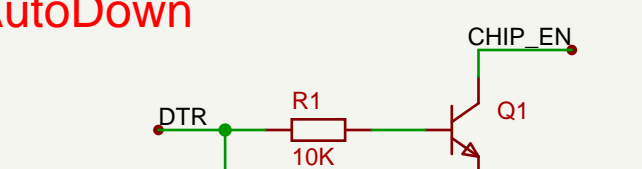


POWER

The schematic diagram illustrates the power supply section of the AMS1117 module. The 5V_VIN input is connected to the VIN pin of the AMS1117 regulator. The output of the regulator is 3V3, which is connected to the CSI_RST pin through a 4.7K resistor (R9) and to the TWI_SCK pin through a 4.7K resistor (R10). The 3V3 line also branches to the TWI_SDA pin through a 4.7K resistor (R11). The 3V3 line is decoupled with capacitors C18 (10uf), C19 (22uf), and C22 (10uf) to ground. The 3V3 line is also connected to the gate of MOSFET Q4 through a 10K resistor (R7). The drain of Q4 is connected to the CSI_POWER pin through a 1K resistor (R12). The source of Q4 is connected to ground. The CSI_POWER pin is connected to the VIN pin of the XC2V8 and XC1V2 FPGAs through a 10uf capacitor (C23) to ground. The VOUT pin of the XC2V8 is connected to the CSI_2.8 pin through a 0.1uf capacitor (C21) and a 10uf capacitor (C17) to ground. The VOUT pin of the XC1V2 is connected to the CSI_1.2 pin through a 0.1uf capacitor (C20) and a 10uf capacitor (C16) to ground. The VSS pin of both FPGAs is connected to ground.

AutoDown



The diagram illustrates a circuit for the 'AutoDown' feature. It consists of two NPN transistors, Q1 and Q2, connected in a common-emitter configuration. The emitters of both transistors are connected to a common ground, labeled 'GPIO0'. The base of transistor Q1 is connected to a green input signal labeled 'DTR'. A resistor, labeled 'R1' with a value of '10K', is connected between the 'DTR' input and the base of Q1. The collector of Q1 is connected to a green output signal labeled 'CHIP_EN'. The base of transistor Q2 is connected to a green input signal labeled 'RTS'. A resistor, labeled 'R2' with a value of '10K', is connected between the 'RTS' input and the base of Q2. The collector of Q2 is connected to a green output signal labeled 'GPIO0'.

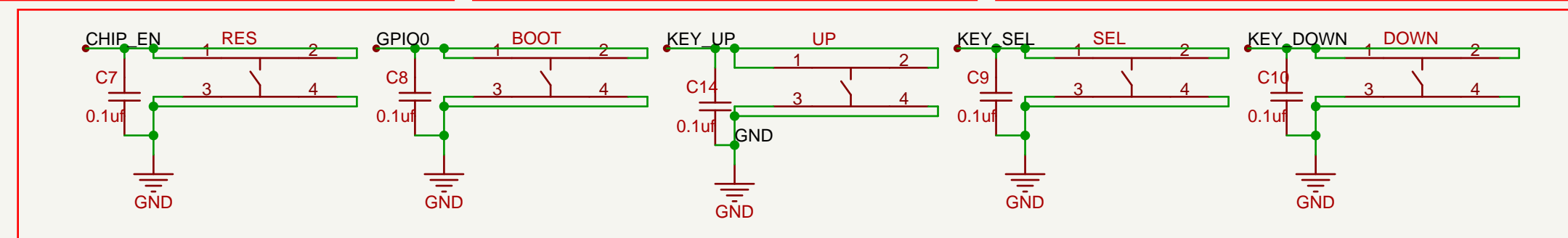
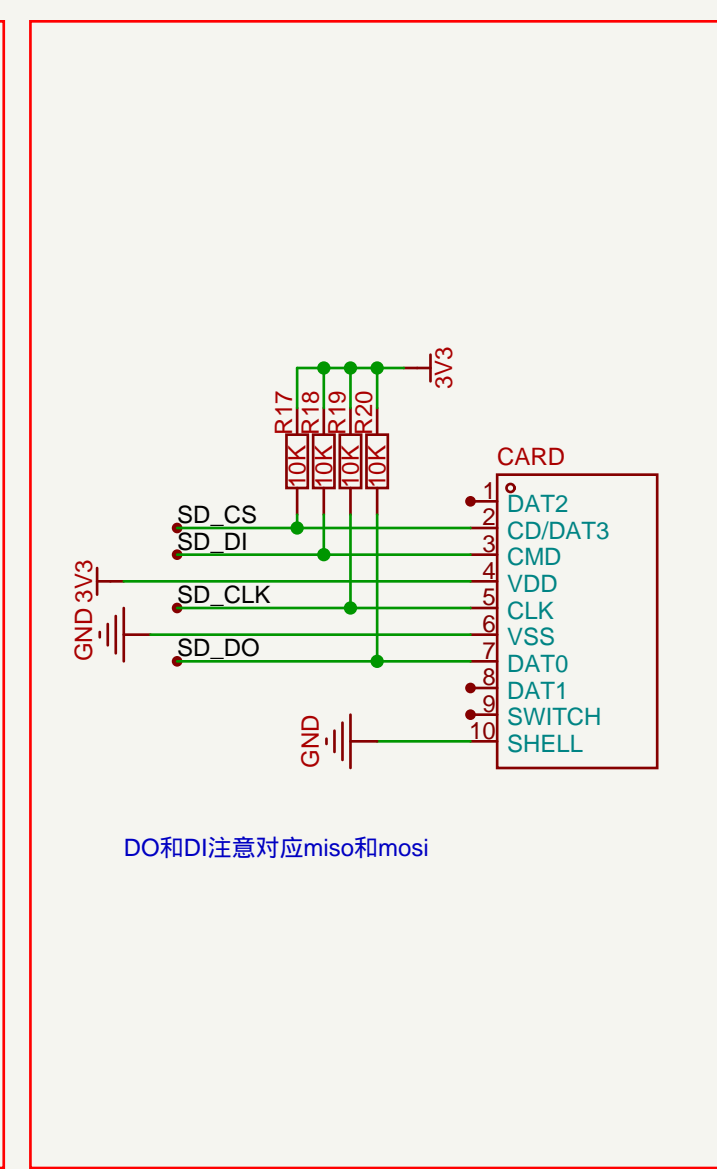
MIC


The diagram shows the pin configuration for the MIC component. The pins are numbered 1 through 11. The connections are as follows:

- Pin 1: MIC (connected to GND via capacitor C1, 0.1uF)
- Pin 2: GND
- Pin 3: MIC_WS
- Pin 4: 3V3
- Pin 5: L/R
- Pin 6: SCK
- Pin 7: SD
- Pin 8: VDD
- Pin 9: MIC_DATA
- Pin 10: MIC_CLK
- Pin 11: 3V3

AHT20

LCD



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