

Read chip identifier -> A9 = 12v

Same pinout for 28C64 except :

- A13 : NC,
- A14 : \overline{WE} 0-5v,
- A15 : Ready/Busy Output (open collector)

10K resistor as A15 can be an output (28C64) or an input (27C512)

The diagram shows two circuit boards, S1 and S2, connected to a microcontroller. S1 is connected to pins A0-A7 and R27-R38. S2 is connected to pins A8-A15 and R31-R42. Both connectors are connected to a +5V supply and ground. The microcontroller pins are labeled R10-R26 and R11-R23.

The diagram illustrates an 8-bit LED display driver circuit. It consists of 8 input lines, labeled 00 through 07. Each input line is connected to a 1k resistor (R2 through R9) in series with an LED (D1 through D8). The LEDs are connected to a common ground (GND). The input lines are also connected to a common ground (GND) through a 1k resistor (R1).

Schottky diode (low threshold conduction 0.4v) to avoid polarity inversions, power dissipation ~0.6W
 Add an input capacity if the LDO regulator is far from the 12v source as well as an output capacity to improve transient response
 Connect by a jumper 1 and 2 (I) to use the 12v power source and 2, 3 (II) if powered by the USB VBUS

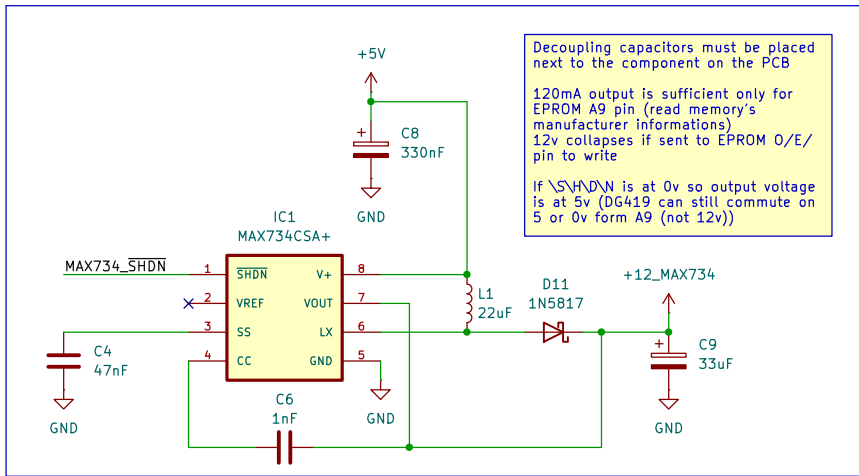
The circuit diagram illustrates the EPROM programming interface for a PIC16C51 microcontroller. The +5V supply is connected to the circuit. The EPROM (PW2, TSW-103-07-F-D) is connected to the comparator output and the relay. The relay (X1, 1825910-6) is used to generate the programming pulses. The text box provides the following instructions:

- I (connect 1,2) to generate a 1ms Low level Pulse (write into 27C512)
- Connect II (connect 3,4) to generate a 500ns Low Pulse (write into 27C512)
- III (connect 5,6) by default to enable the chip if not writing
- I or II -> High state output if not in Low Pulse -> EPROM_CE High -> Chip disable

Choose ceramic or electrolytic capacitors, polarised or not (10uF can be in tantalum)

AOP must be rail to rail output
1K and 10K used to discharged the capacitor after charging them through 240 and 2k (RC circuits) by pressing the button

+12V 120mA PROGRAMMING SUPPLY VOLTAGE



Warning – CMD_6v_VDD_EPROM active low (5v supply EPROM if set High)
Output capacitors (aluminum, tantalum or electrolytic) used to provide improved output impedance and transient rejection

Output voltage at 6v if NPN blocked and 5v if NPN saturated (passing)
Connect by a jumper 1 and 2 (I) to use the 12v power source to generate 5 or 6v and 2, 3 (II) if the board is powered by the USB (no 6v available -> only reading or chip identification)

IC2A
DG419LDY

A9 1 2 A9_TTL +12_MAX734

8

9 CMD_A9_12v

IC2B
DG419LDY

+5V

+12_MAX734

5 VL

4 V+

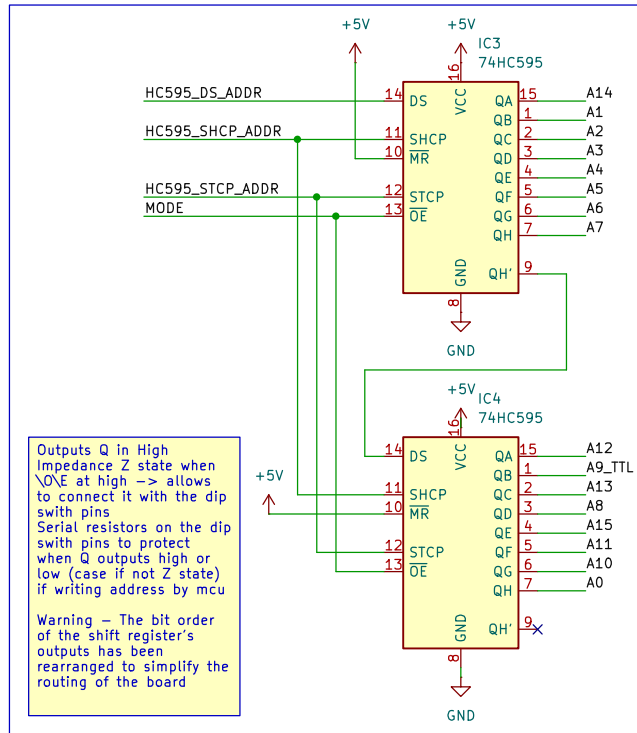
7 V-

3 GND

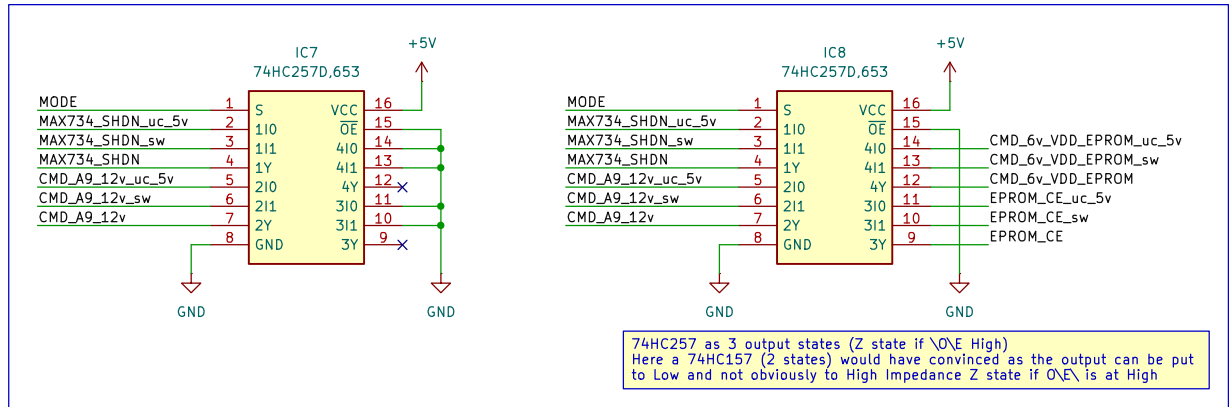
GND

Address pin A9 can take 0–5–12V to read manufacturer byte IDs
A9_TTL can be either 0 either 5v
VL : logic level positive supply input
A contact between D and S1 is made by putting IN at 0v
Connection between D and S2 is made by putting IN at VL voltage level
(Logic 0 → S1 ON and S2 OFF – Logic 1 → S1 OFF and S2 ON)

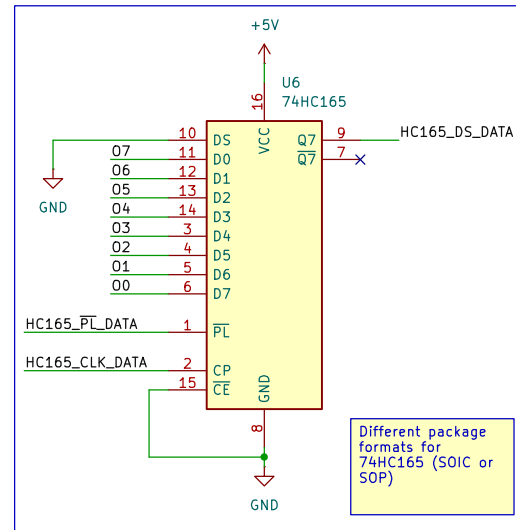
SHIFT REGISTERS (SERIAL INPUT -> PARALLEL OUTPUTS) FOR ADDRESS BUS WRITING



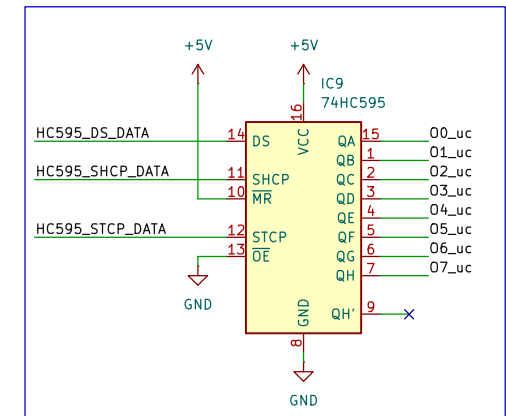
3 STATES QUAD MUX 2->1 - CONFIGURATION SETTING BY DIP SWITCHS OR MCU



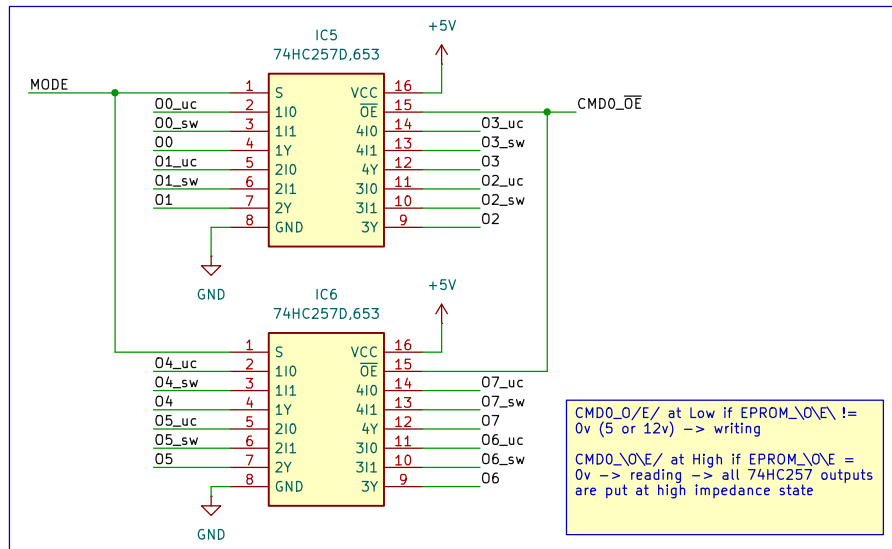
SHIFT REGISTERS (PARALLEL INPUT -> SERIAL OUTPUTS) FOR DATA BUS READING



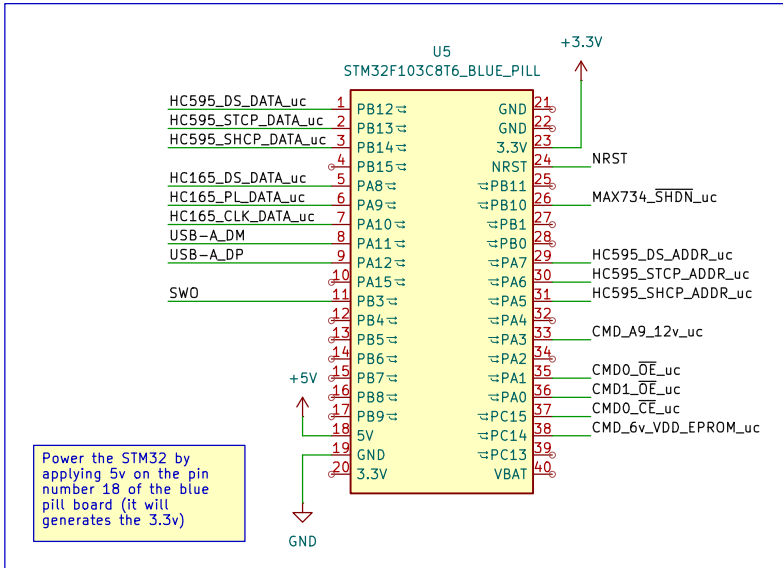
SHIFT REGISTERS (SERIAL INPUT -> PARALLEL OUTPUTS) FOR DATA BUS WRITING



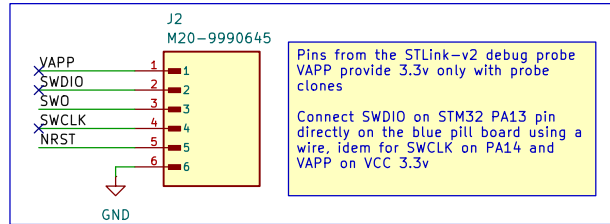
3 STATES QUAD MUX 2->1 WRITING DATA BUS BY DIP SWITCHS OR MCU



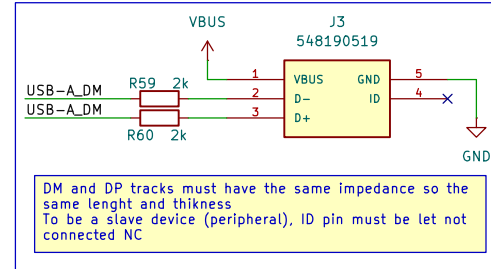
STM32F103C8T6 BLUE PILL BOARD



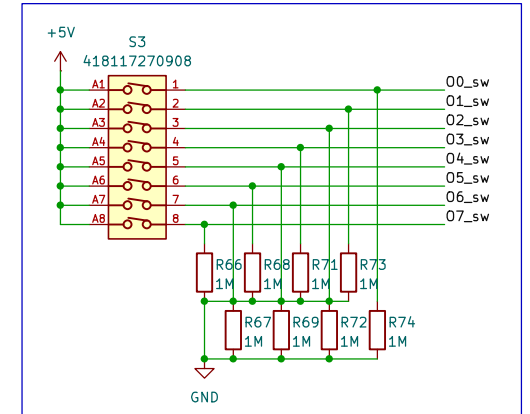
STM32 DEBUG PORT



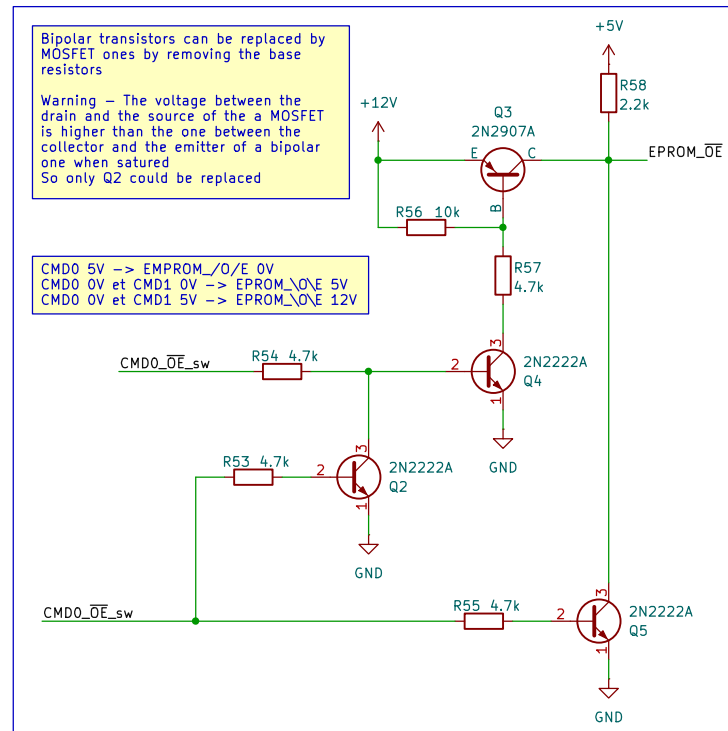
USB-MINI (port COM)



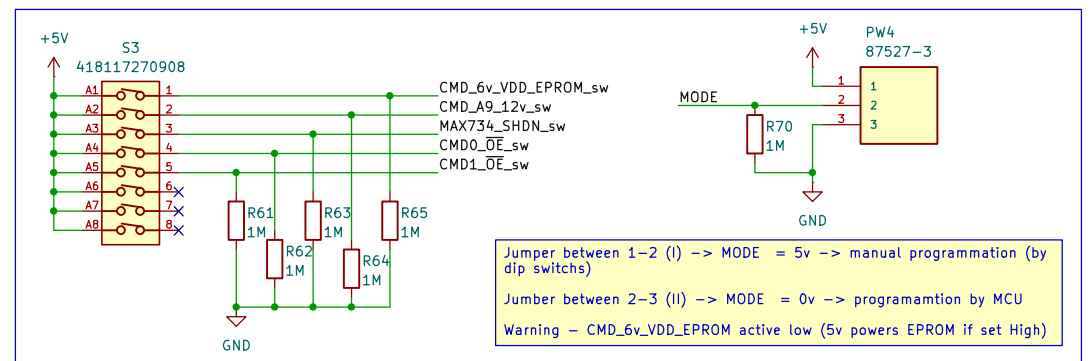
DIP SWITCHS EPROM's DATA BUS



OUTPUT ENABLE EPROM COMMAND



DIP SWITCHS AND JUMPERS TO SET THE CONFIGURATION



BIDIRECTIONNAL VOLTAGE TRANSLATION 3.3 <-> 5v

