

# Z80 Retro! – ESP32 Interface and Programmer Board with WiFi

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Z80 Retro Interface

File: Z80Interface\_sch.kicad\_sch

SPI<-->Z80 Bus

File: SPItoZ80Bus.kicad\_sch

RS232

File: RS232.kicad\_sch

ESP32

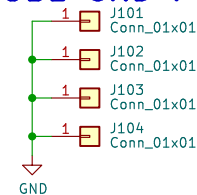
File: ESP32.kicad\_sch

## MOUNTING HOLES

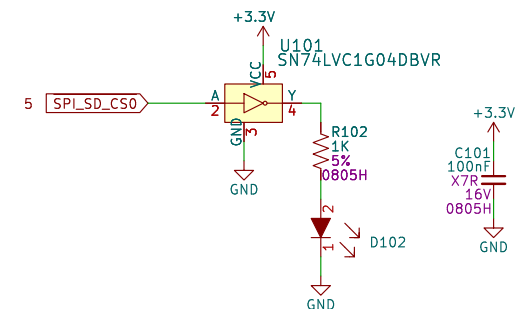
- 4 required for tooling
- 4 required for mechanical
- 1 extra if board connects directly above Z80-Retro main

H1 MountingHole H2 MountingHole H3 MountingHole H4 MountingHole H5 MountingHole

## PROBE GND PINS



## MICRO SD CARD ACTIVITY



## PCB STACKUP NOTE

Use JLC04161H-3313 stackup to give :  
\* Lower trace impedance (~50ohms).  
\* GND plane closer to signal layer routing for improved signal integrity.

LOG011

LOG010



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Z80 Retro! – ESP32-S3 Interface and Programmer With WiFi

Title: Z80 Retro! ESP32 Interface and Programmer

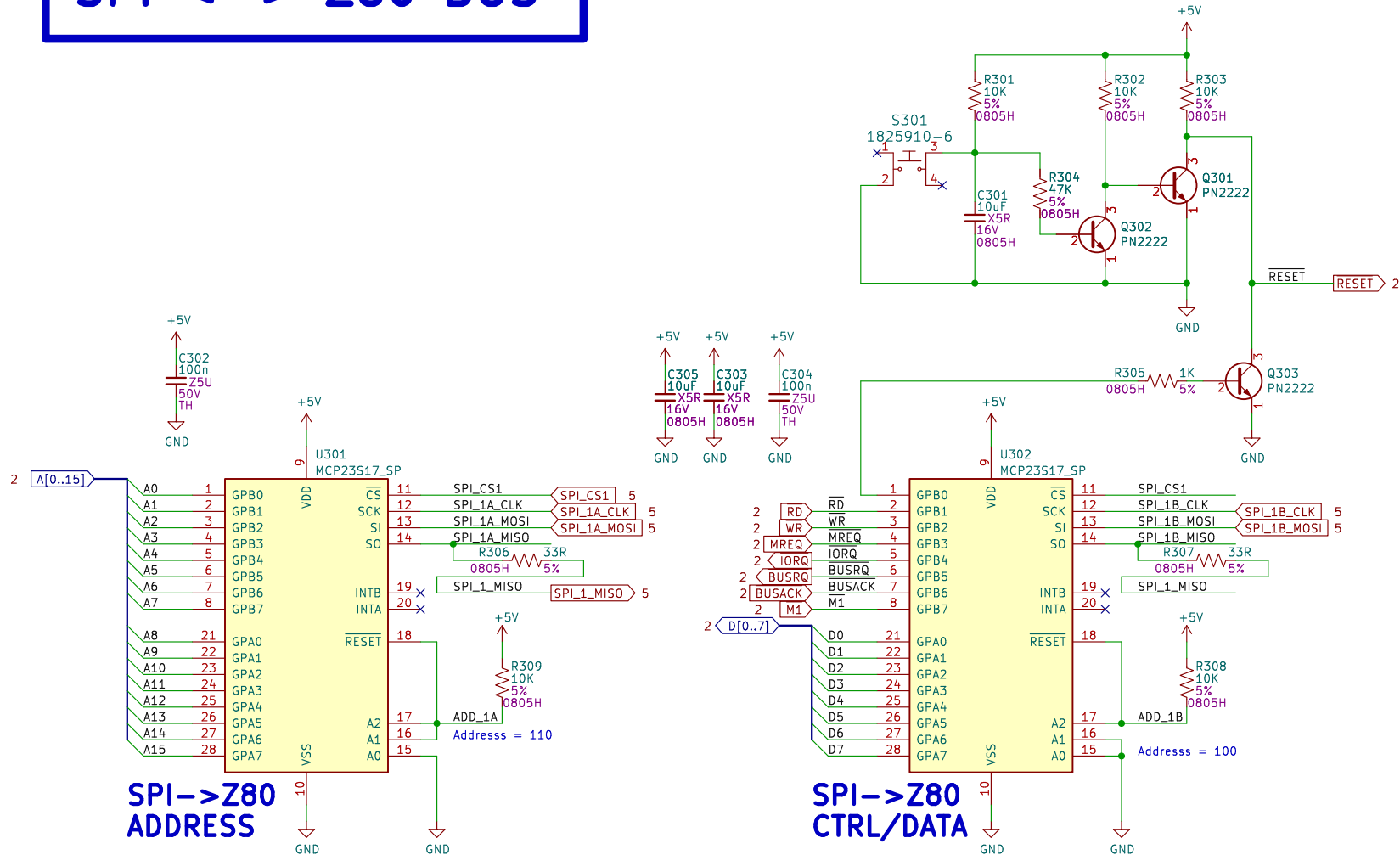
Size: USLetter Date: 2023-06-12 Rev: 1.0

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SPI <-> Z80 BUS

## Z80 RESET CIRCUIT

SPI <-> Z80 ADDRESS, DATA, CONTROL  
EXPANSION

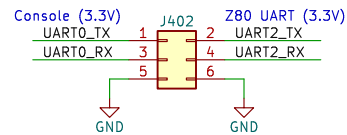
Title: Z80 Retro! ESP32 Interface and Programmer

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KiCad E.D.A. kicad 7.0.2 | Drawn: Denno Wiggle | Id: 3/5

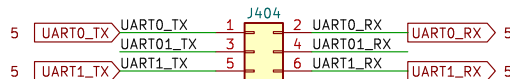
# RS232

## TTL RS232 HEADER



A place to add connection to external TTL level RS232 modules

## J401 TTL RS232 DB9 SELECTOR

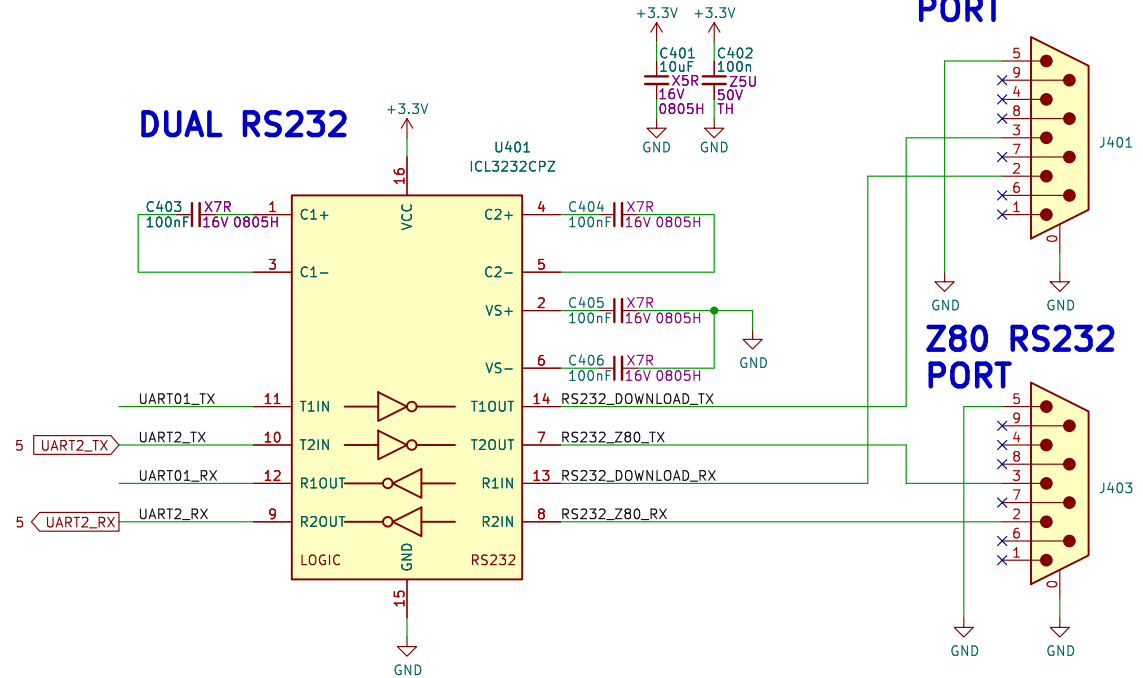


J401 RS232 Output Options  
To select ESP32 Console add jumpers 1-3, 2-4  
To select ESP32 Debug messages add jumpers 3-5, 4-6  
Default jumper settings 1-3, 2-4

If default jumpers are selected, external TTL level RS232 can be connected to pins 5 & 6 + GND for ESP32 debug/download port connection.

ESP32 Debug / Download option on uart 1 set in SW.

## DUAL RS232



## RS232 EXTERNAL INTERFACES

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