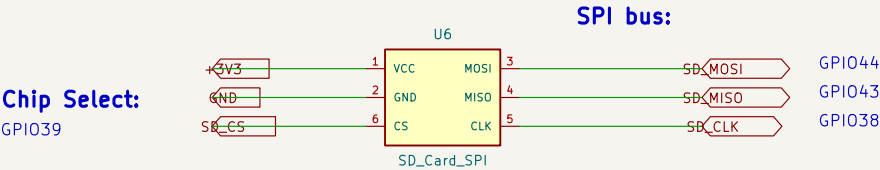


STORAGE – Micro SD Card

SPI interface for ROM storage (SNES ROMs up to 6MB)



Design Notes:

- SPI bus @ 20MHz (R2-MED-5: trace length ~150mm + 6 vias → 40MHz unreliable)
- SNES ROMs: 256KB to 6MB typical (HiROM/LorOM)
- FAT32 filesystem for easy ROM management via PC
- 3.3V logic: no level shifter needed (module has built-in)
- SPI pins: GPIO38/39 (CLK/CS) + GPIO43/44 (MISO/MOSI) – split across WR00M-1 left and right
- y2 TODO (R4-MED-1): add local 100nF bypass within 5 mm of U6 VCC

Generated by scripts/generate_schematics
ESP32 Emu Turbo – Handheld Retro Console

Sheet: /
File: 05-sd-card.kicad_sch

Title: Storage – SD Card SPI

Size: A4
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