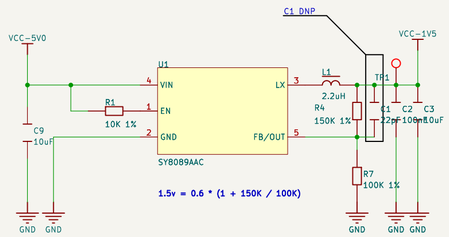
Power Scheme

Sakura Pi RK3308B

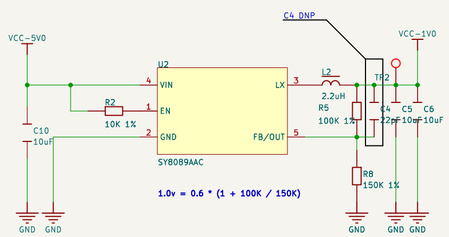
SY8089A

DRAM 1.5v / 2A OUTPUT



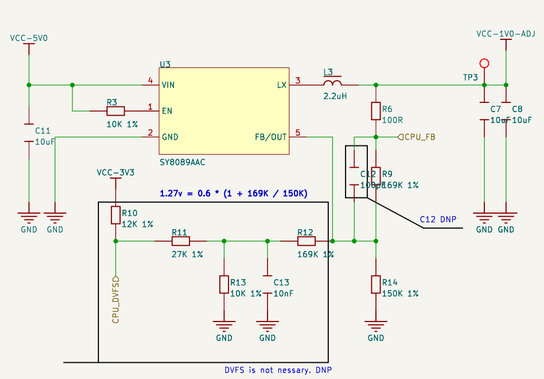
SY8089A

CORE-LOGIC 1.0v / 2A OUTPUT



SY8089A

CPU-CORE 1.0-1.35v / 2A OUTPUT

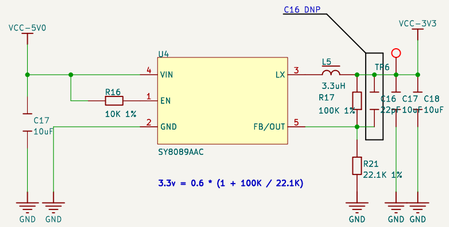


CPU_DVFS

Using CPU PWM output for
interfering with the feedback cause
the output voltage can be kept in the range of 1.0v to 1.35v

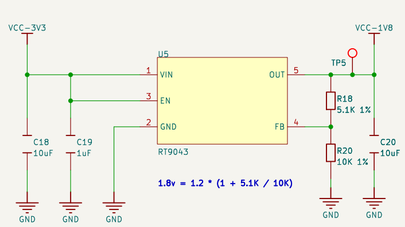
SY8089A

3V3-IO 3.3v / 2A OUTPUT



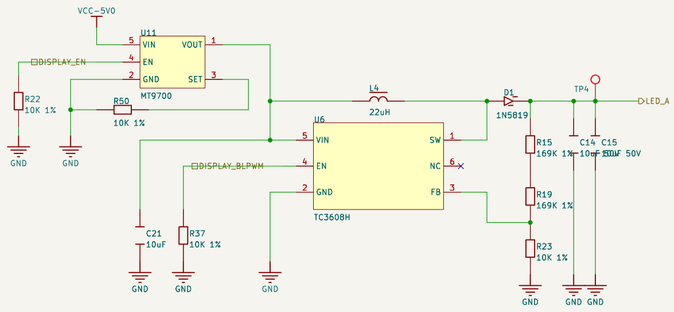
TMI6030/RT9043

1V8-IO 1.8v / 300mA OUTPUT

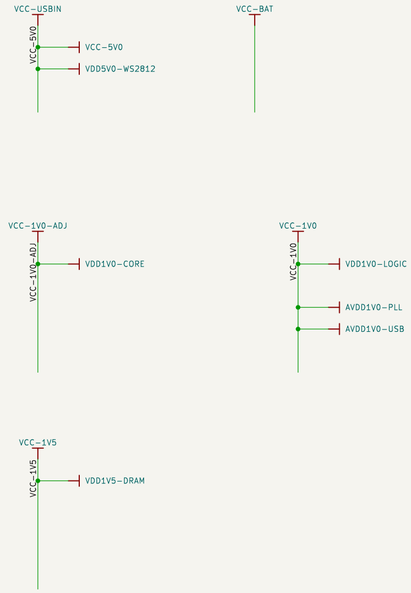


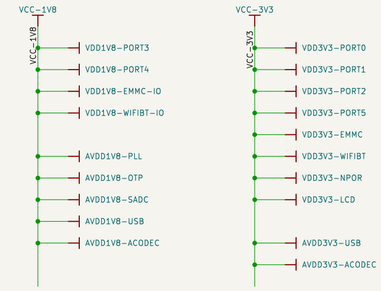
TC3608H

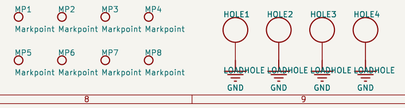
DISPLAY-BG 21v / 20mA OUTPUT



Power Tree







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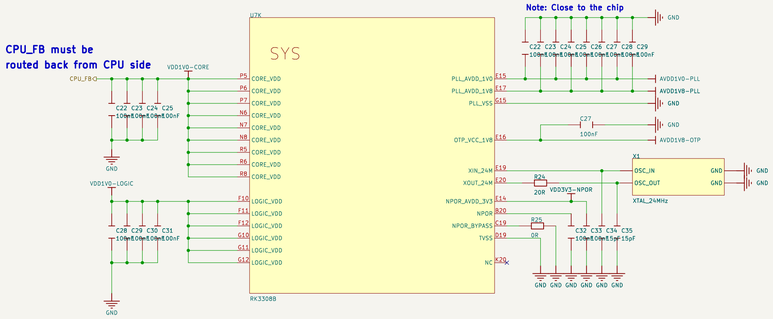
KiCad E.D.A. 9.0.2		Id: 1/1

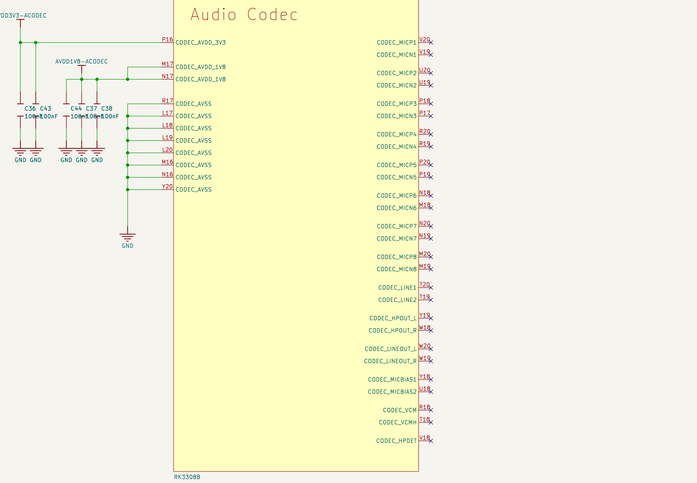
CPU Core

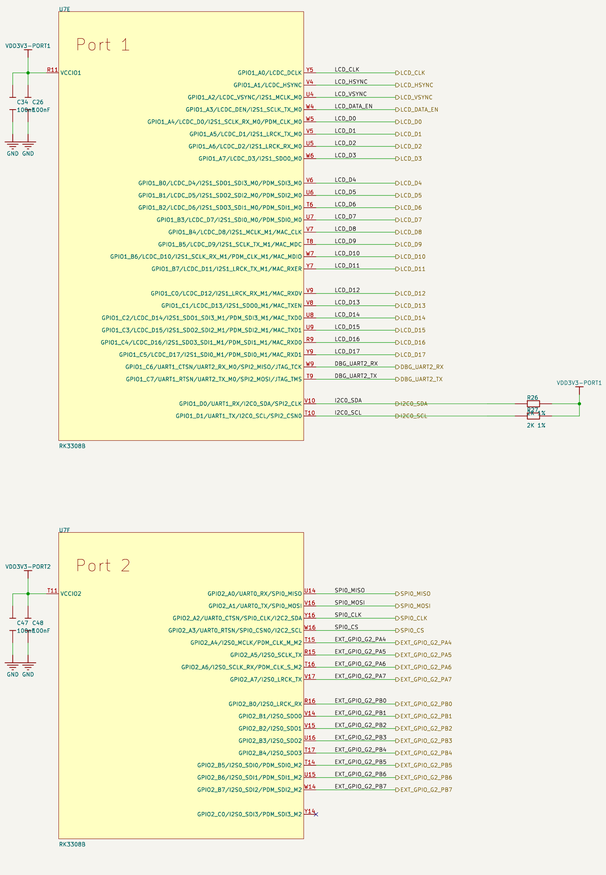
Sakura Pi RK3308B

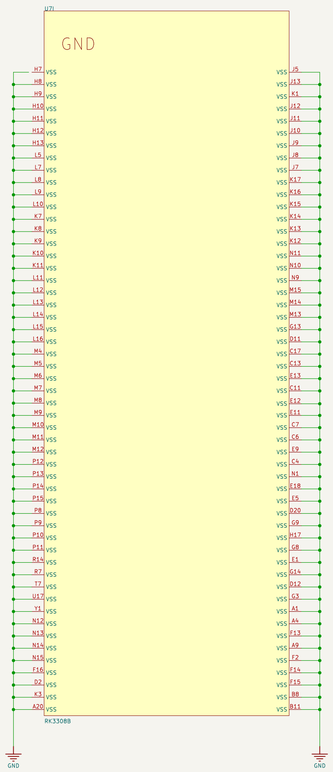
CPU_FB must be routed back from CPU side

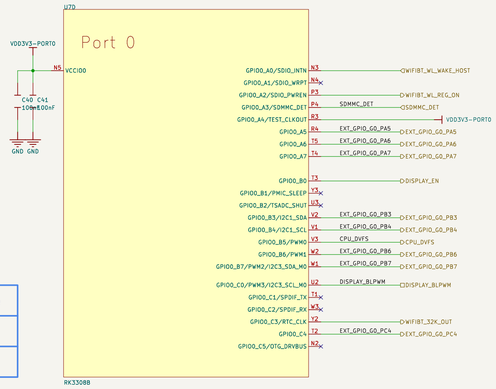
Note: Close to the chip











PIN R3 default as FLASH_SEL function

Speed	Voltage	R3 state
HS200	1.8v	HIGH
MMCHS	3.3v	LOW

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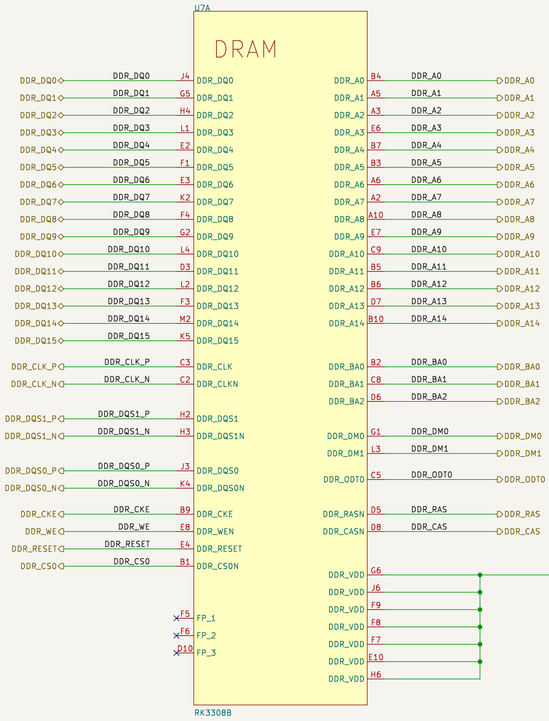
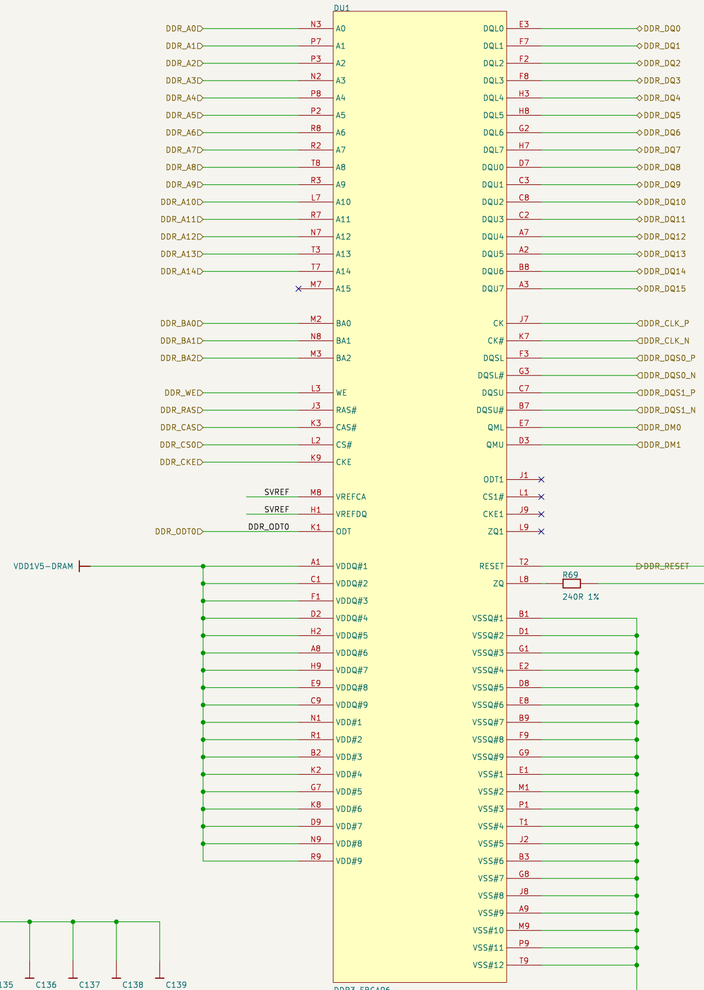
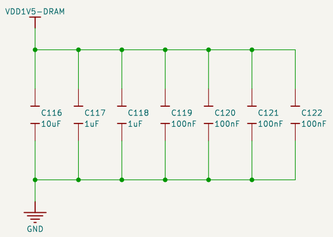
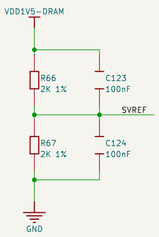
DRAM 1 x 16Bit 512MB

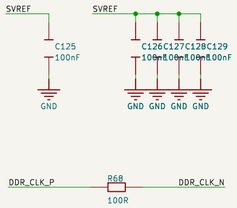
Sakura Pi RK3308B

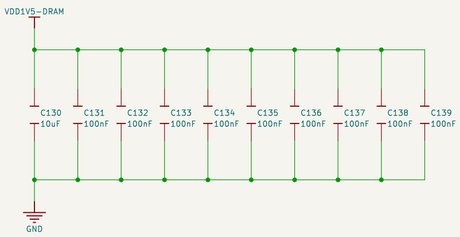












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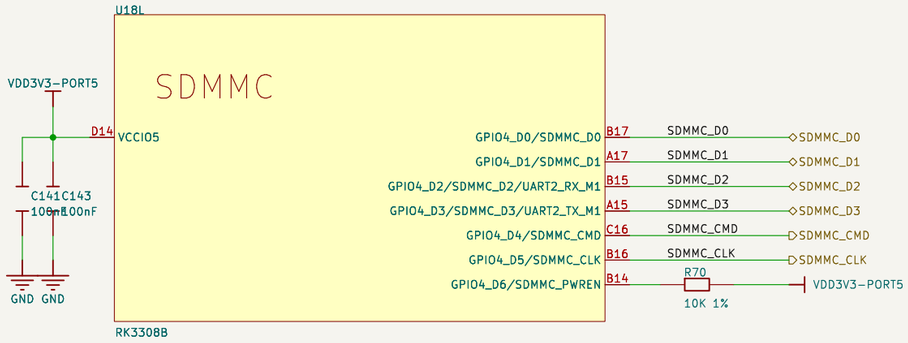
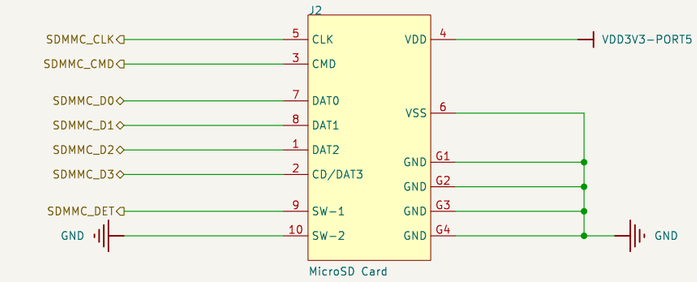
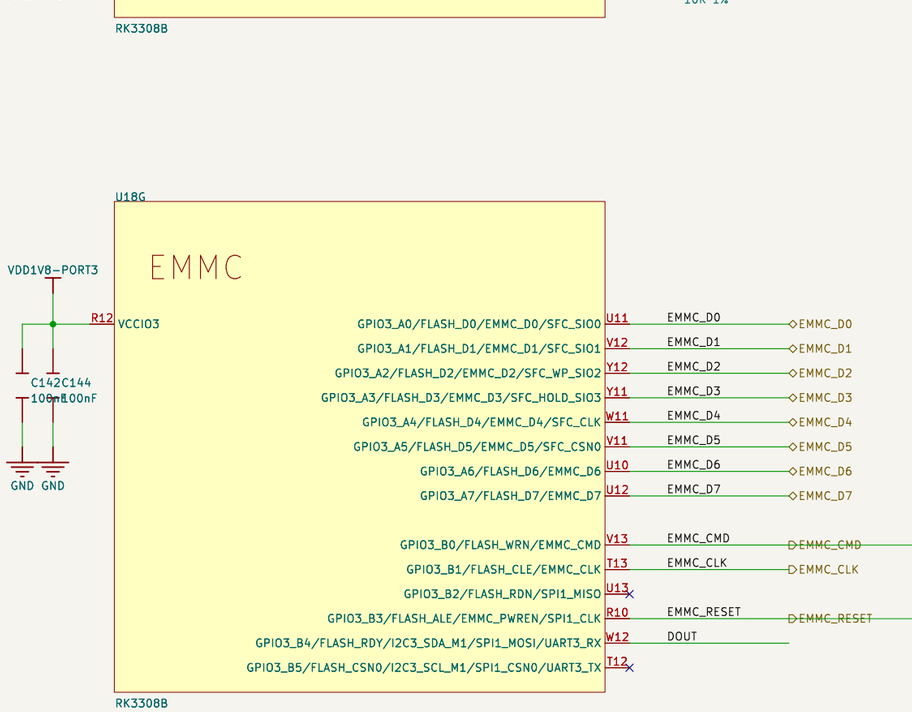
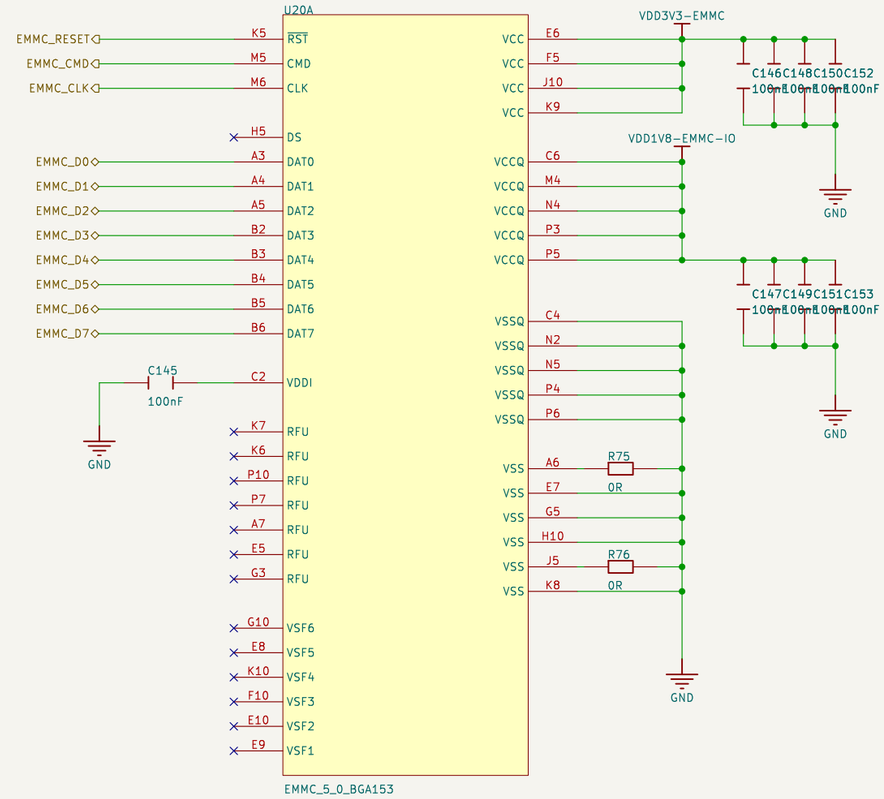
Onboard Storage

Sakura Pi RK3308B





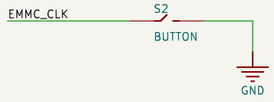




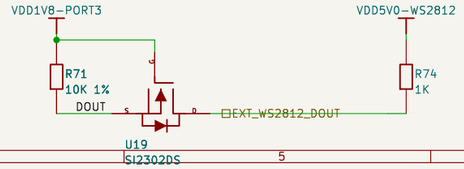
A6 / J5 0R resistors are used to switch the eMMC version configuration.

Type	A6 Installed	J5 Installed
eMMC 5.0	Yes	Yes
eMMC 4.x	No	No

MASK Button



WS2812 Level Shift



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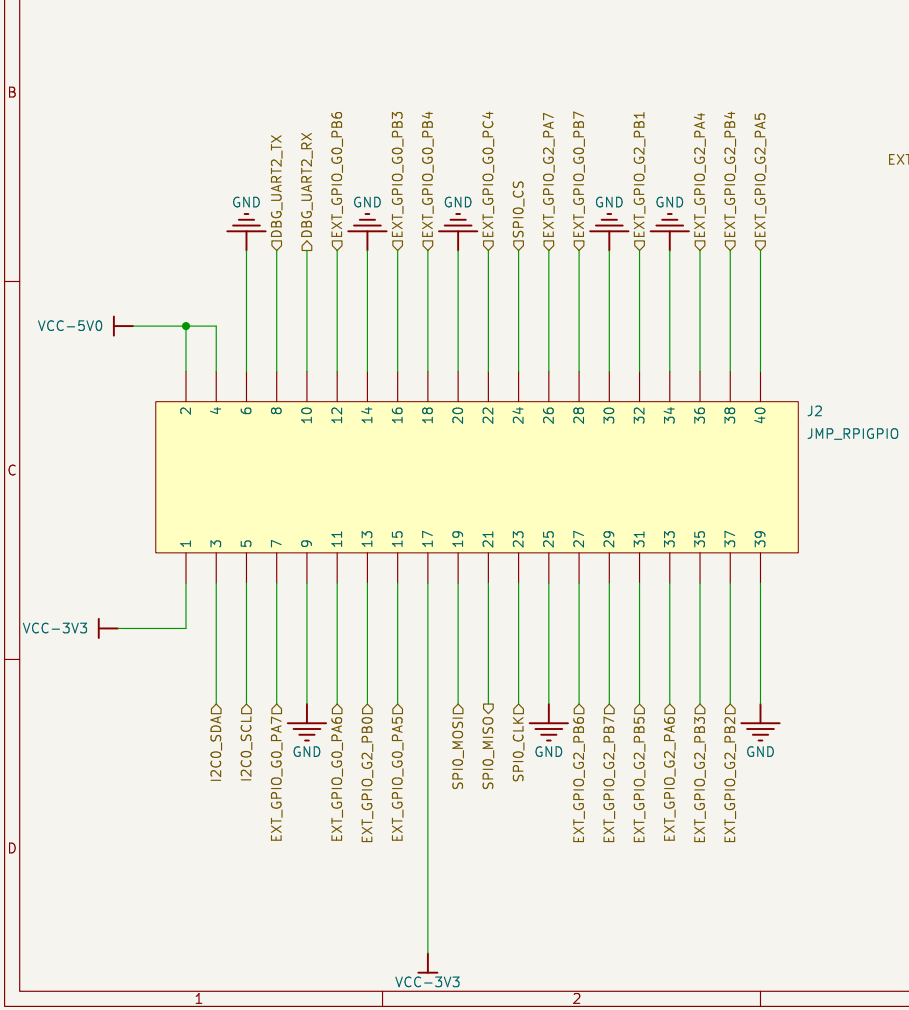
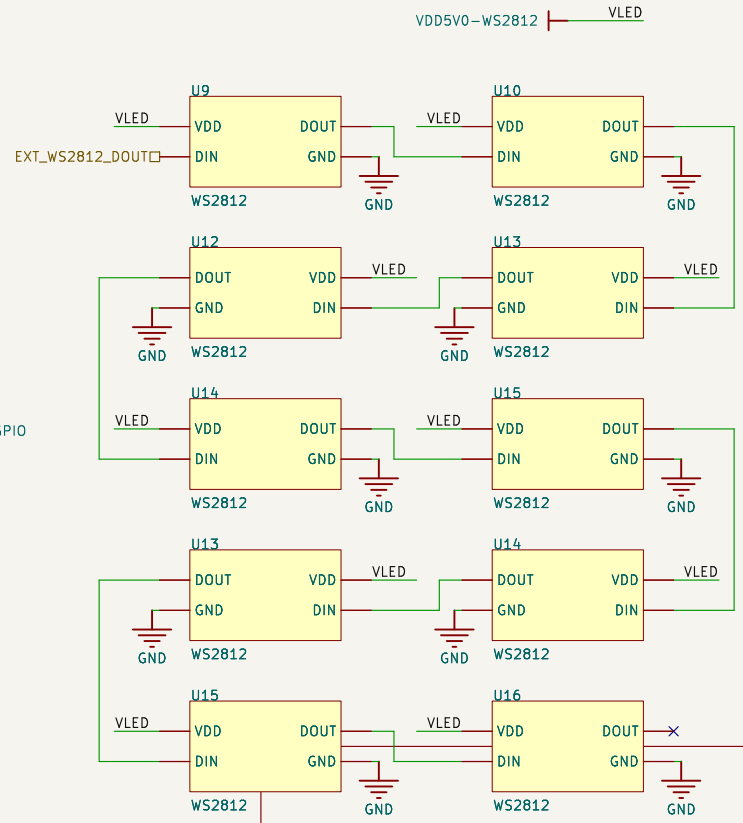
GPIO Pins

Sakura Pi RK3308B





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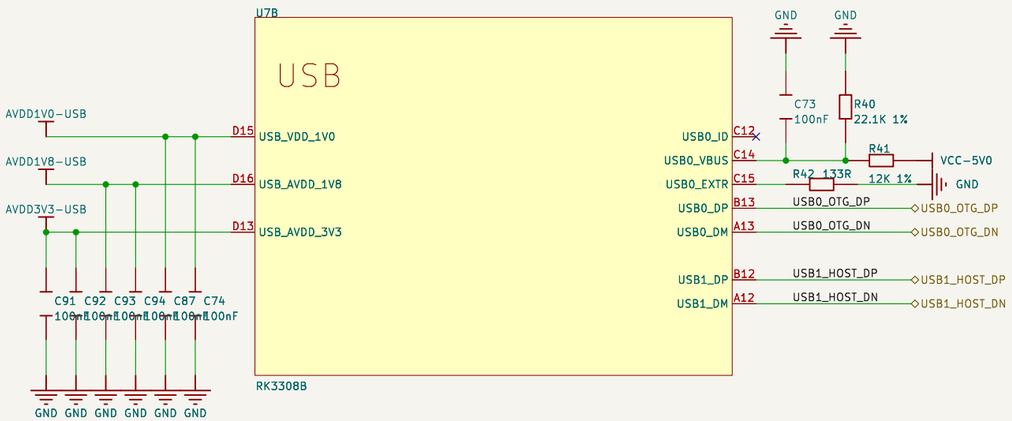
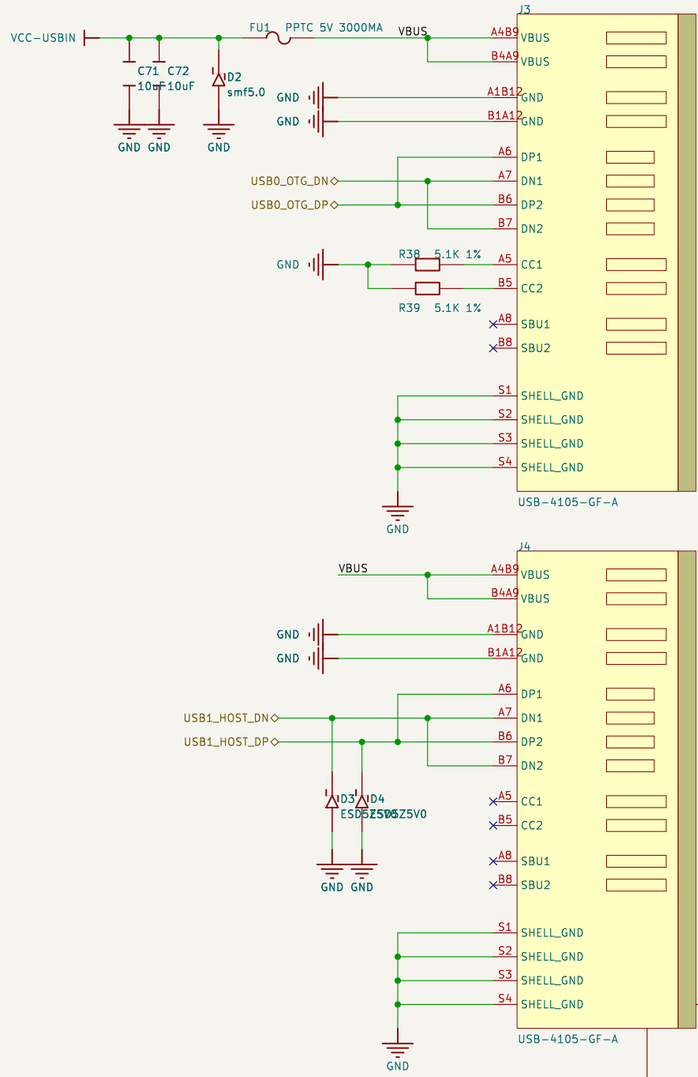
USB OTG & Host

Sakura Pi RK3308B

Note: Type-C 5v Power In





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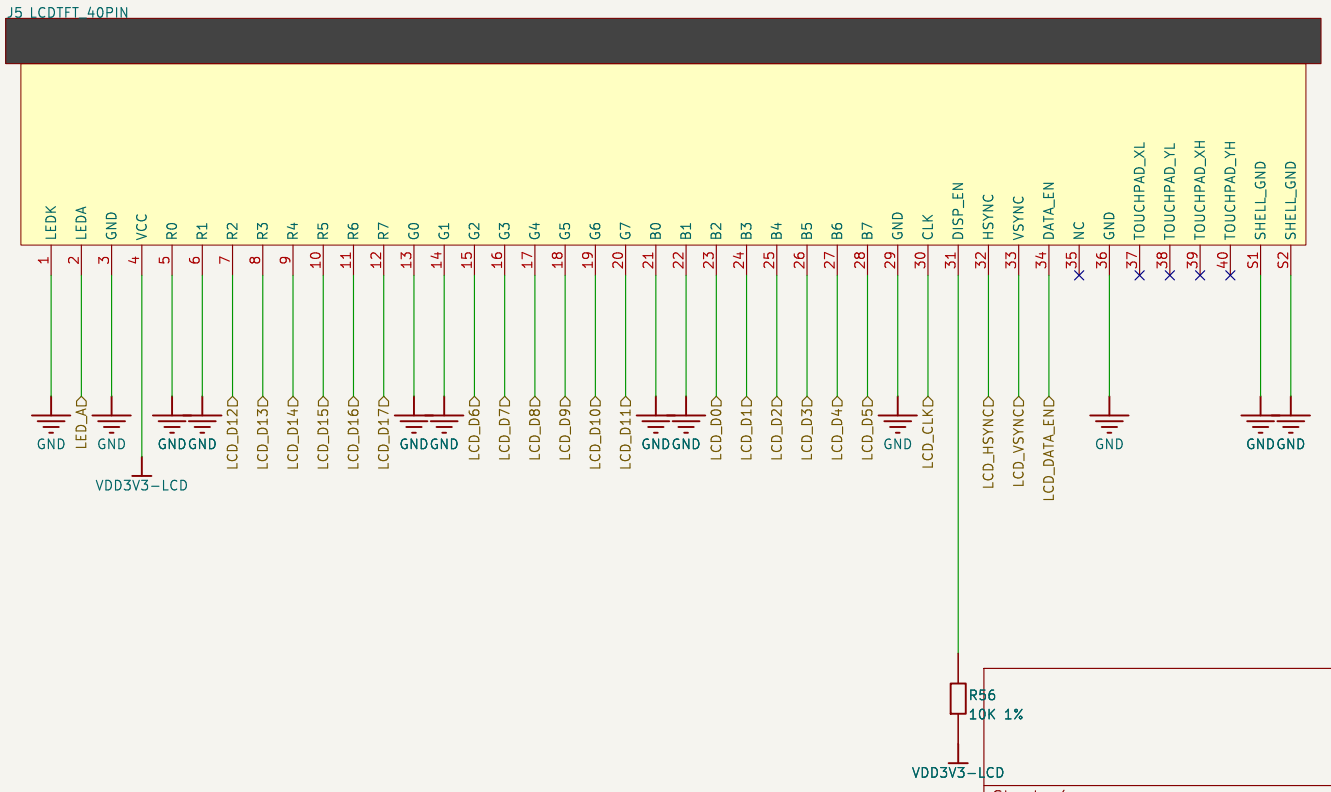
Display Connector

Sakura Pi RK3308B



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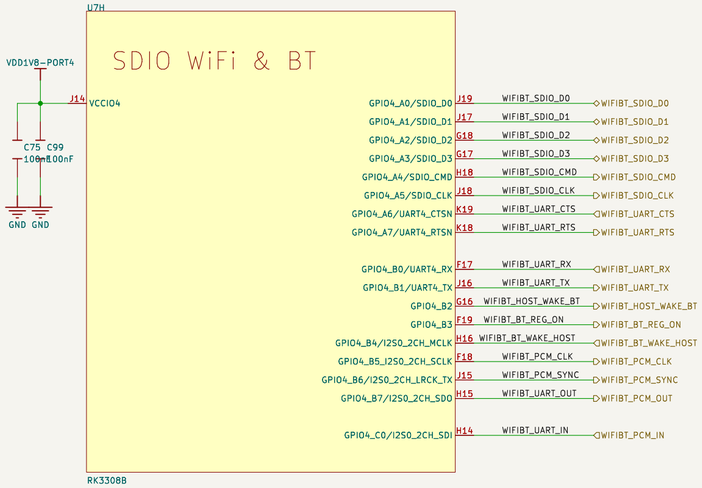
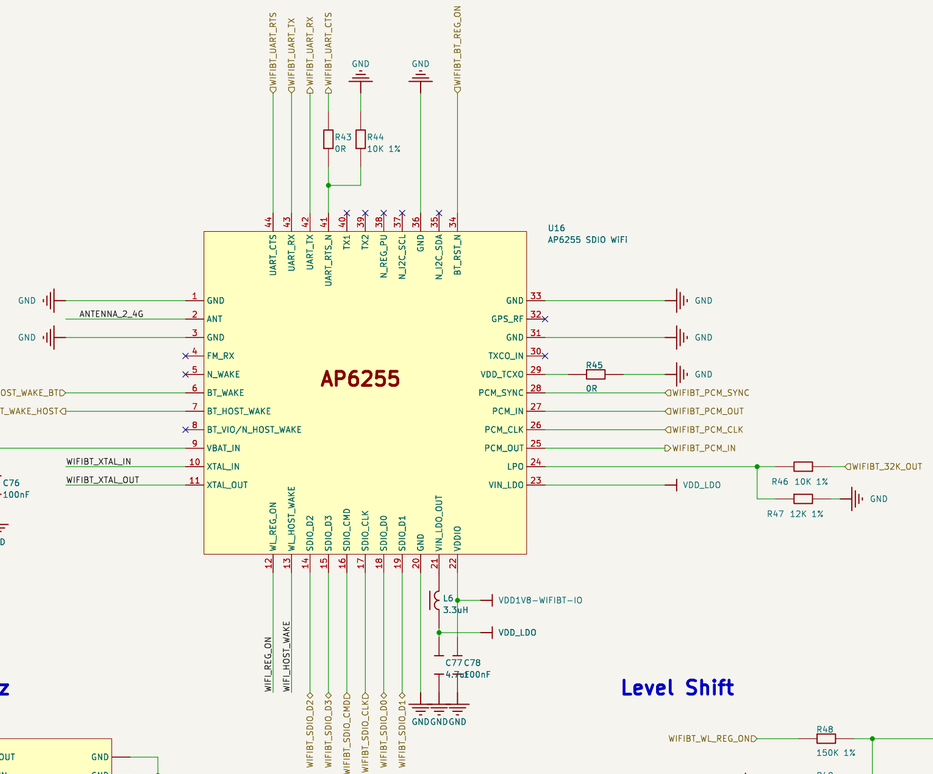
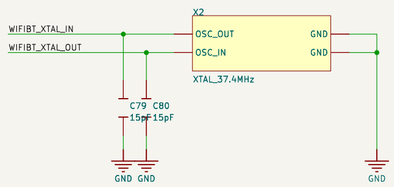
Wireless WiFi & BT

Sakura Pi RK3308B

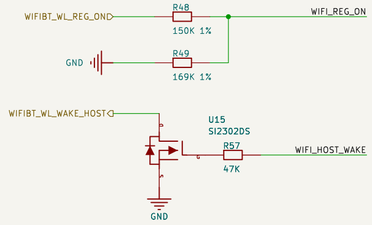




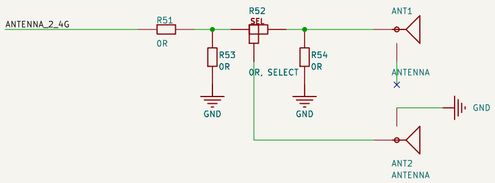
Crystal 37.4MHz



Level Shift



RF 2.4GHz Antenna



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