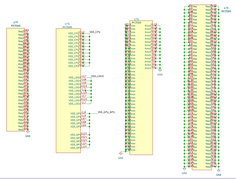
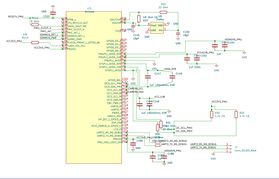
RK3566 Main SoC

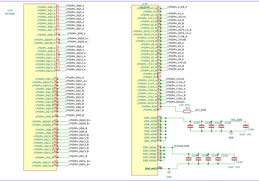
Main Power and Ground



Main PLL / Misc.



SDRAM controller

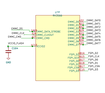


PWM, SARADC and Misc.

Ethernet Interface

Storage Interfaces

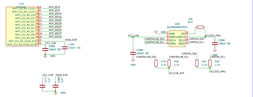
Internal Storage Interfaces



External Storage Interfaces

Video Input Interface

MIPI CSI-2 Interface



Video Output Interfaces

MIPI DSI Interface

HDMI Interface

BLK/I2C Comms

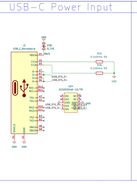
High Speed Serial Interfaces

PCI-Express 1 lane. USB host and USB OTG. Misc.

Main Power Regulators

Power Inputs

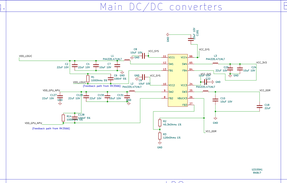
USB-C Power Input



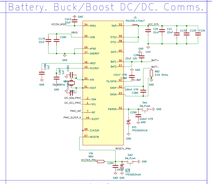
3.7V Lithium Battery. JST Plug.

RK817 Main PMIC + Audio Codec

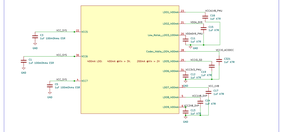
Main DC/DC converters



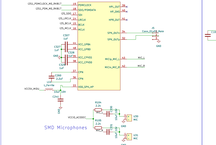
Battery. Buck/Boost DC/DC. Comms.



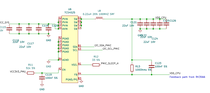
LDOs



Audio Codec

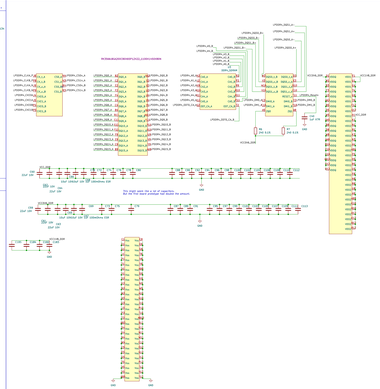


CPU Main PMIC.

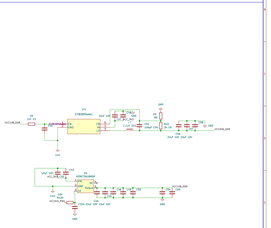


LPDDR4X SDRAM.

LPDDR4X SDRAM IC.



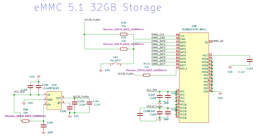
Power Regulators.



Main and Secondary Storage Devices

eMMC Internal Storage

eMMC 5.1 32GB Storage

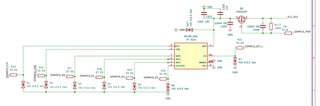


SPI Internal Storage

NOR Flash Storage
OPTIONAL.
NOT MOUNTED IN CURRENT PROTOTYPE.

MicroSD External Storage

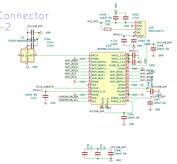
MicroSD Slot.
It can be used for additional storage.
You can also store the OS inside the MicroSD.



48MP IMX586 Camera

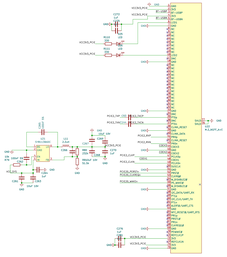
MIPI CSI-2 4 lanes. Custom Connector.

Camera Connector
MIPI CSI-2



Wireless Conectivity Wi-Fi / BT / SDR

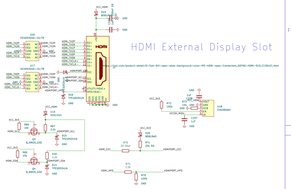
Mini PCIe Slot. 1 lane.



External Displays

HDMI Connector.

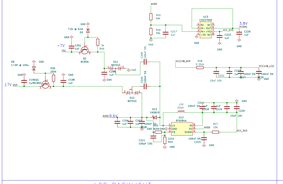
HDMI External Display Slot



Touchscreen. 7'' Inch 1024x600.

TCON Circuit.

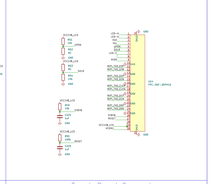
LCD BIAS



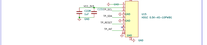
LCD BACKLIGHT

Connectors.

LCD Connector

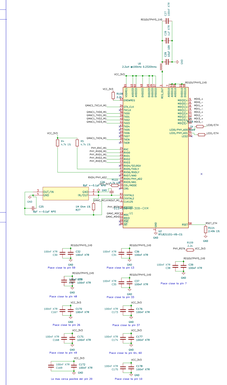


Touch Panel Connector



Ethernet

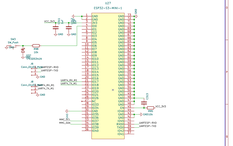
Ethernet PHY IC.



Ethernet Slot.

Microcontroller

ESP32-S3. ESP32-C6 soon.



Author: Avinadad Mendez