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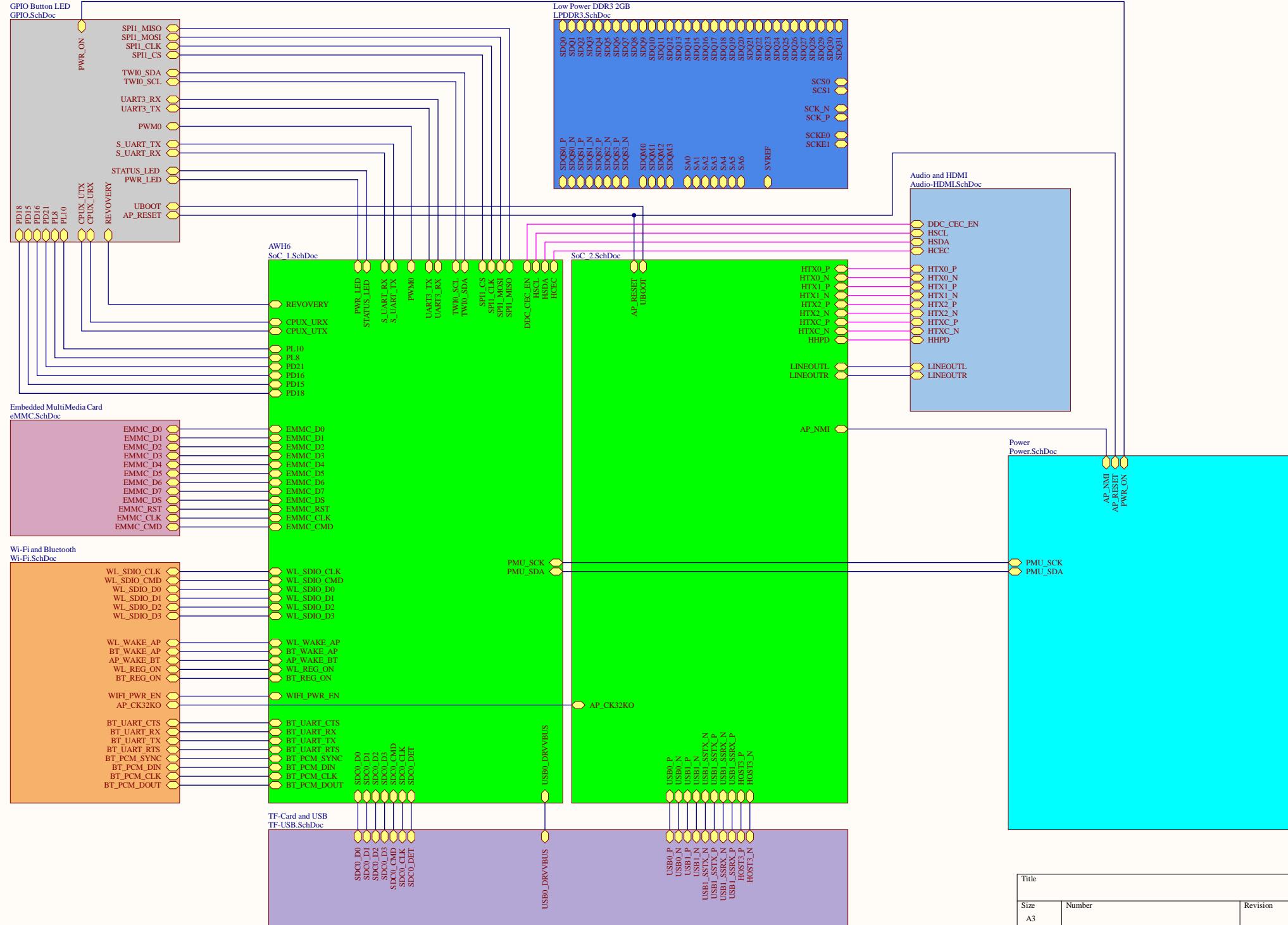
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Title		
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A3		
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Data rate of DDR3: >800MHz

DQ: Data Queue 32-bit, used for Data transmission

DQS: Data Queue Strobe, used for Sampling DQ

DQM: Data Queue Mask, used for controlling useful or useless bytes

A: DDR3:0-9, DDR4:0-17

SC: Chip Selection

SCK: Diff Clock

CKE: Clock Enable

Layout rule:

DQ: 500Ohm, DQS: 1000Ohm, DQM:50Ohm, CLK: 1000Ohm

DQ&DQS < 30mil/0.762mm

Diff DQS < 6mil/0.1524mm

DQ of 4 group < 900mil/22.86mm

Diff CLK < 30mil/0.762mm

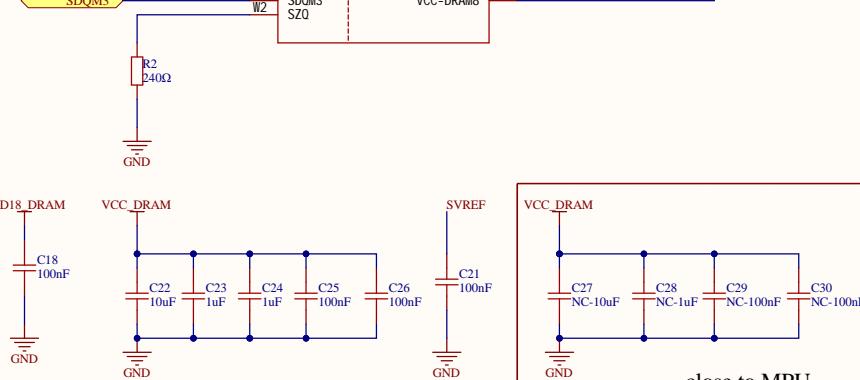
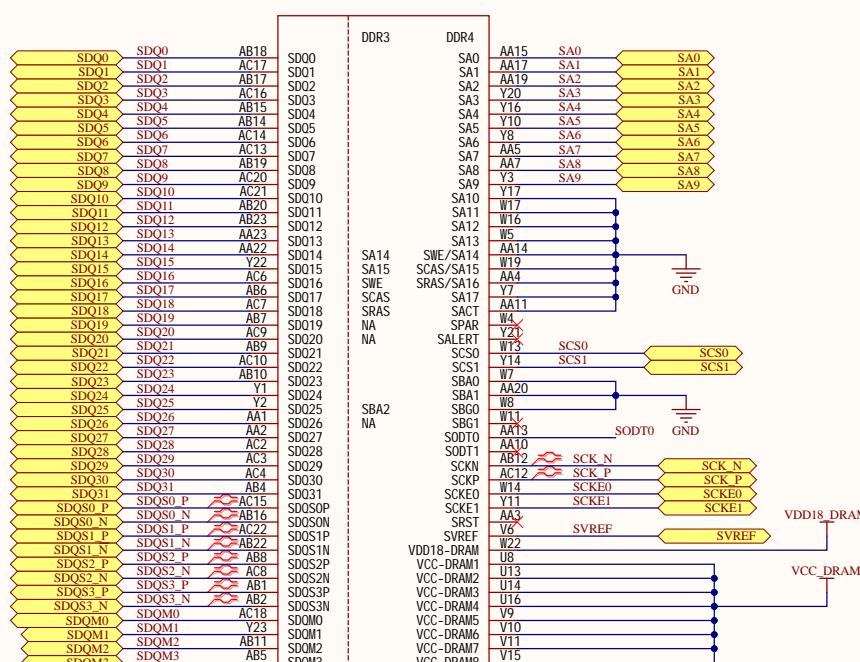
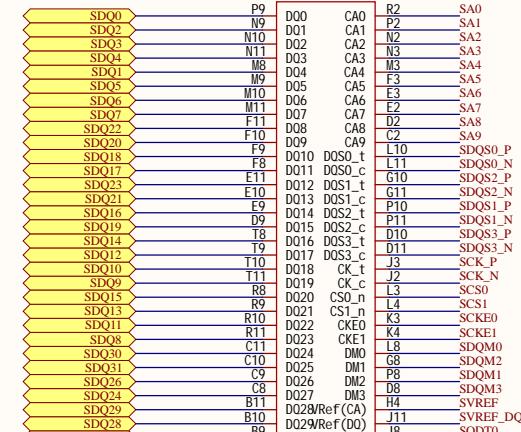
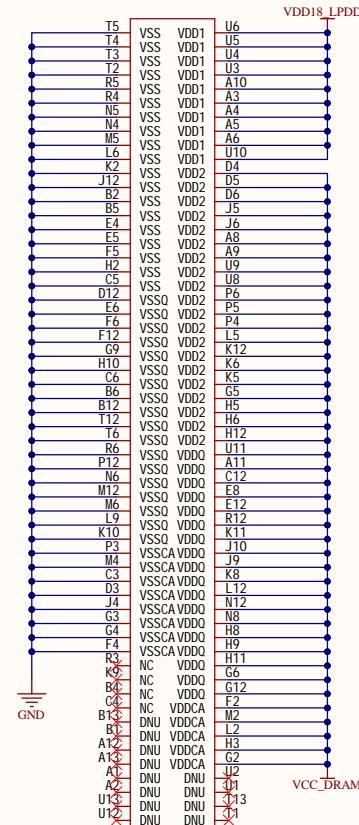
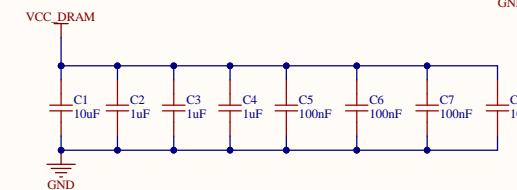
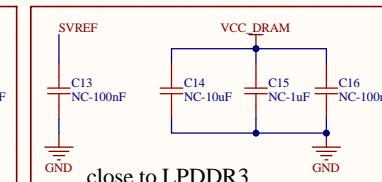
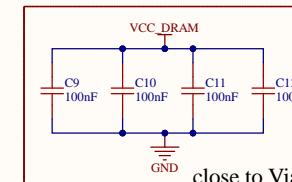
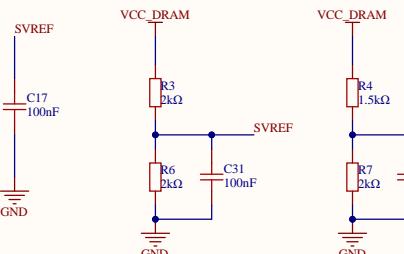
Data Group:

DQ0-DQ7, DM0, DQS0P/M

DQ8-DQ15, DM1, DQS1P/M

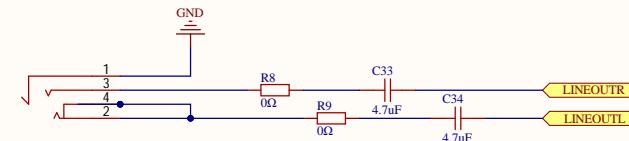
DQ16-DQ22, DM2, DQS2P/M

DQ23-DQ31, DM3, DQS3P/M

Command Group:
Other**SoC-DDR Part****Data Part****Power Part****LPDDR3**

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A



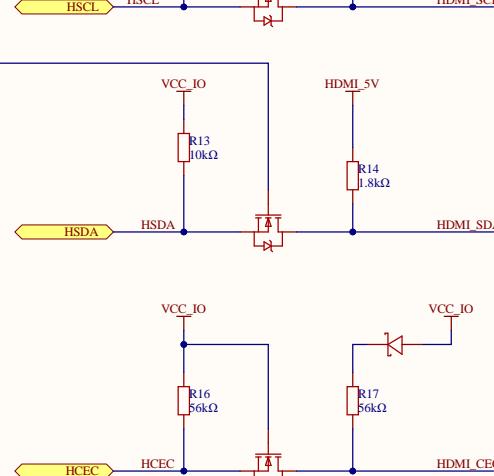
Audio

B

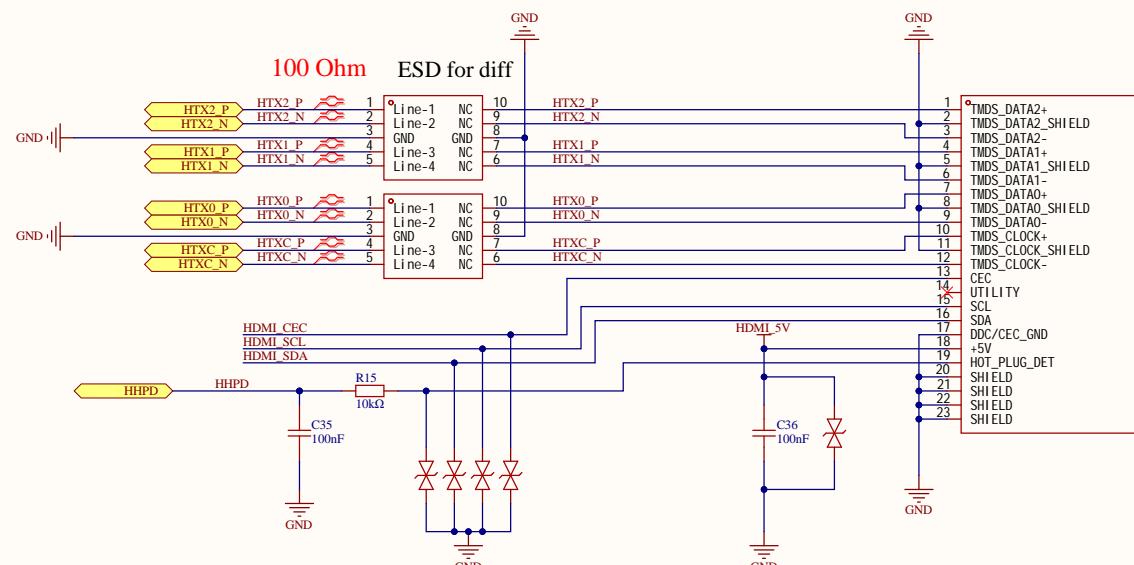
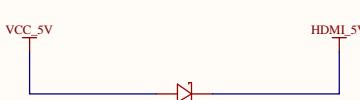
DDC: Display Data Channel, I2C used for Data-Transmission between Host and Display
CEC: Consumer Electronics Control, Single line bus used for controlling of many HDMI devices



C

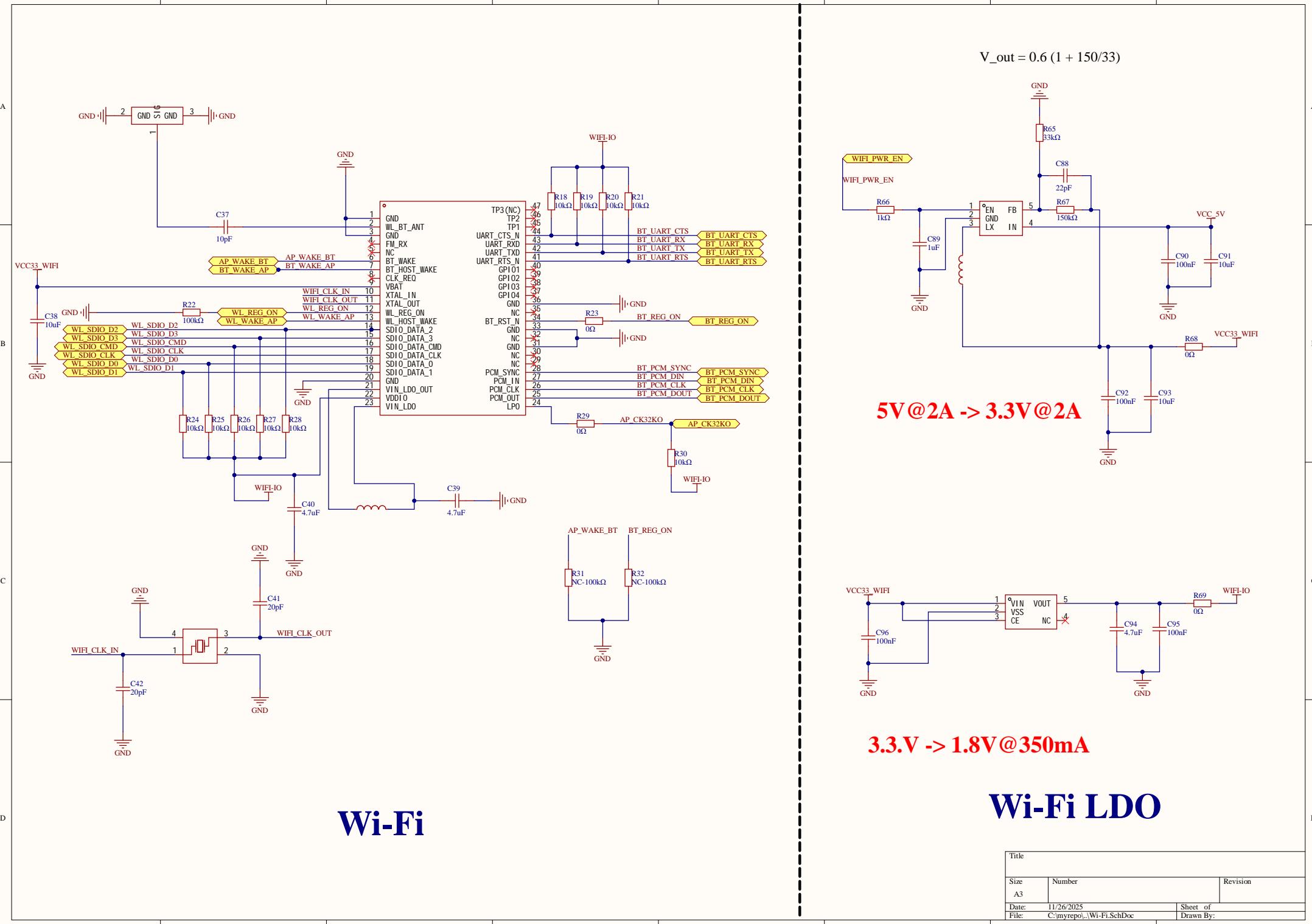


D



HDMI

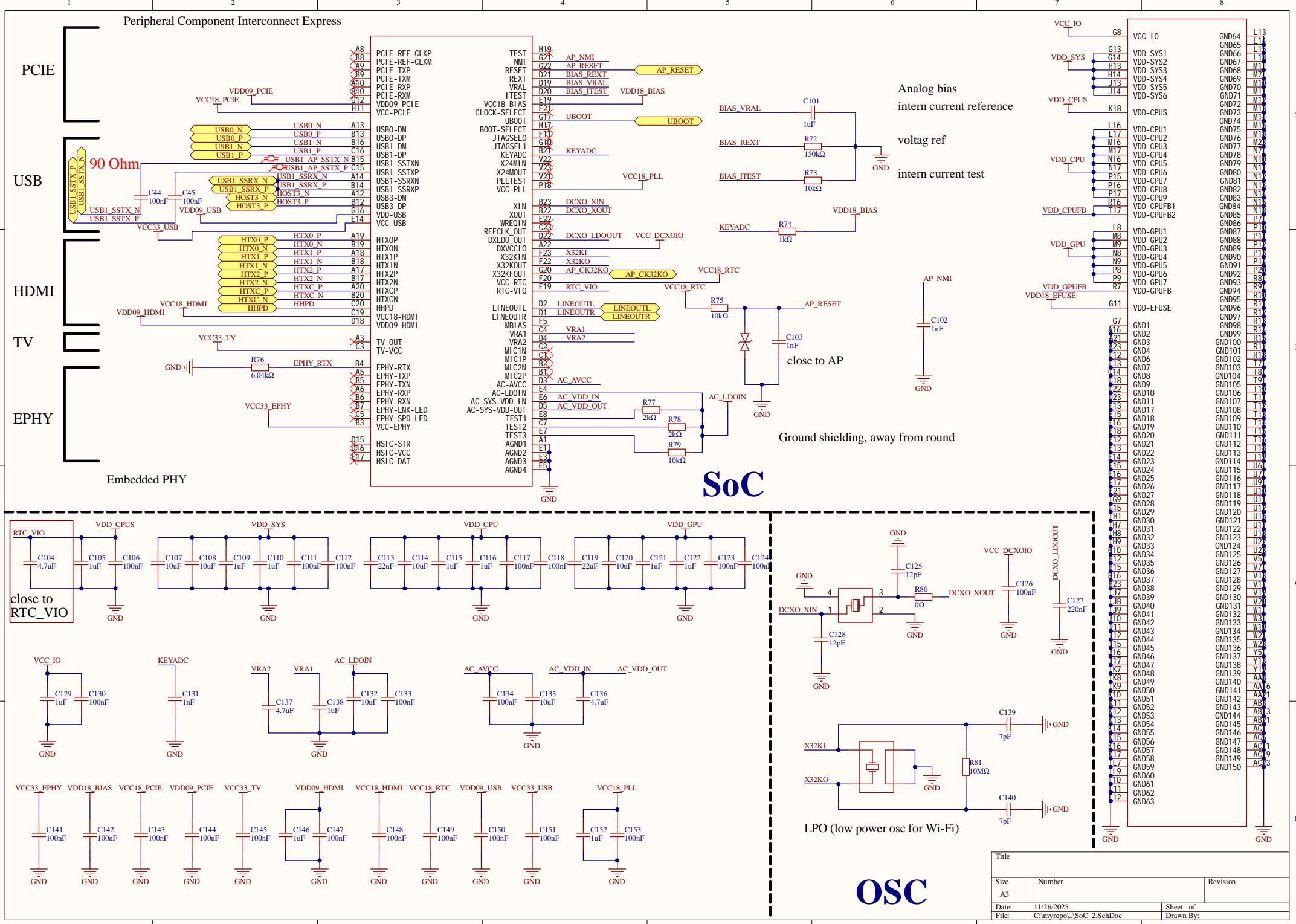
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A

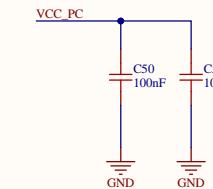
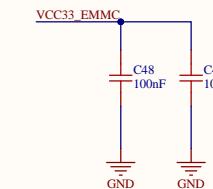
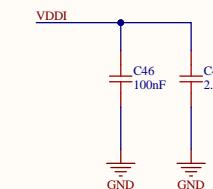
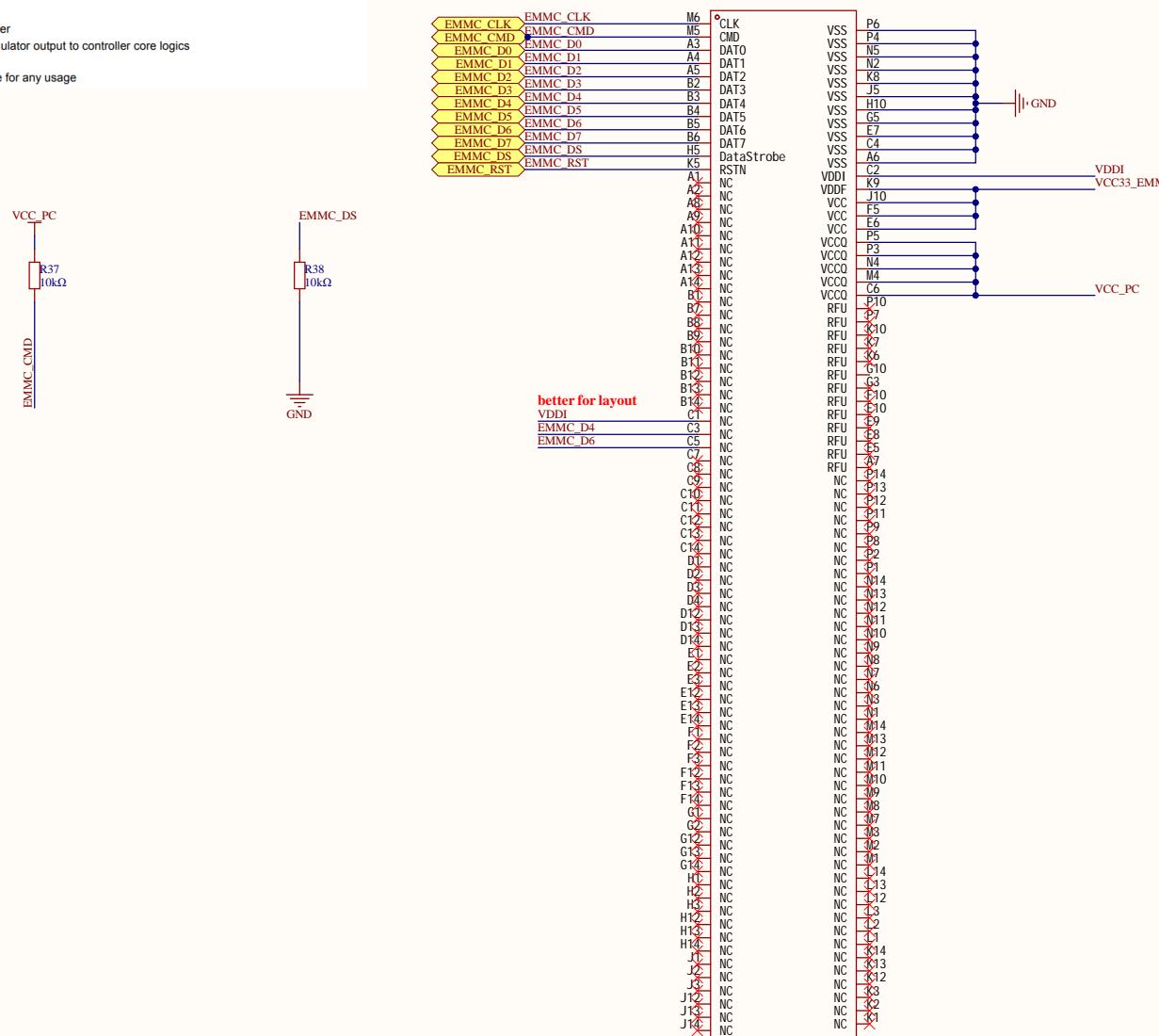


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eMMC integrates NAND Flash, Flash controller and IO controller

- CLK : Clock input
 - Data Strobe : Data Strobe is generated from eMMC to host.
In HS400 mode, read data and CRC response are synchronized with Data Strobe.
 - CMD : A bidirectional signal used for device initialization and command transfers.
Command operates in two modes, open-drain for initialization and push-pull for fast command transfers.
 - DATA[7:0] : Bidirectional data channels. It operates in push-pull mode.
 - RST_n : H/W reset signal pin
 - V_{CC} : Supply voltage for flash memory
 - V_{CCQ} : Supply voltage for memory controller
 - VDDI : Internal power node to stabilize regulator output to controller core logics
 - V_{SS} : Ground connections
 - RFU : Reserved for future use , do not use for any usage



eMMC

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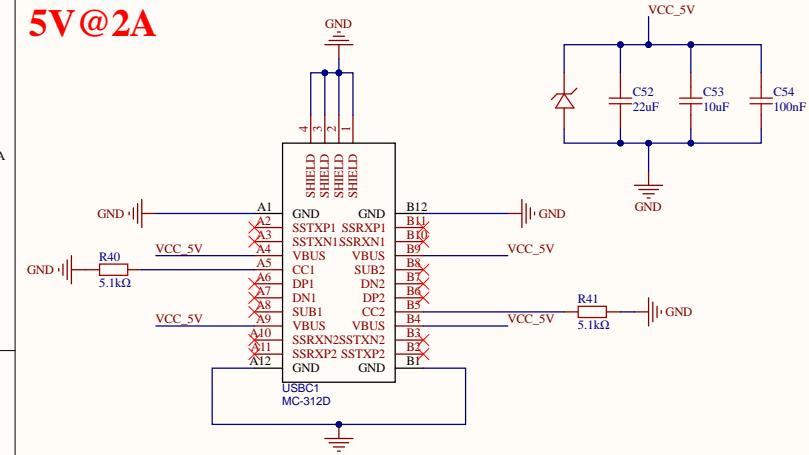
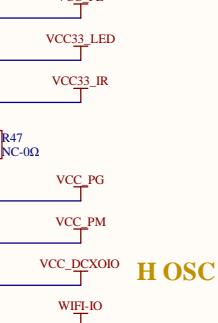
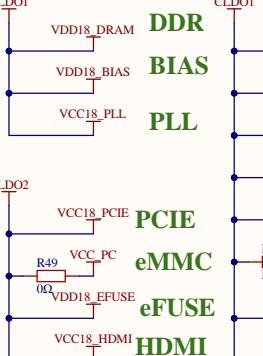
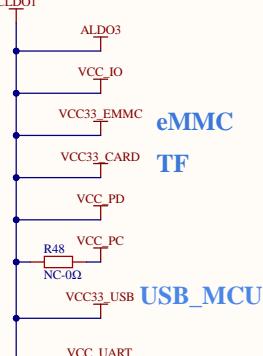
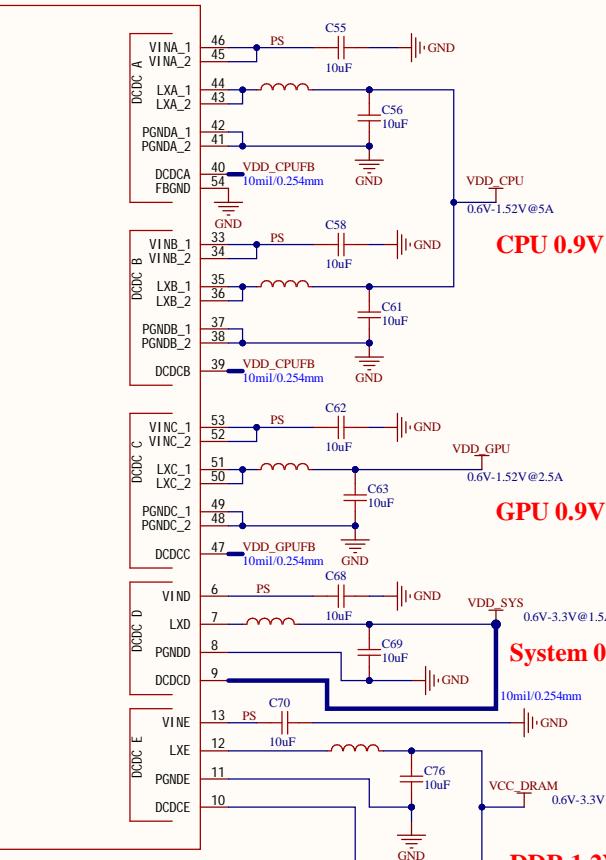
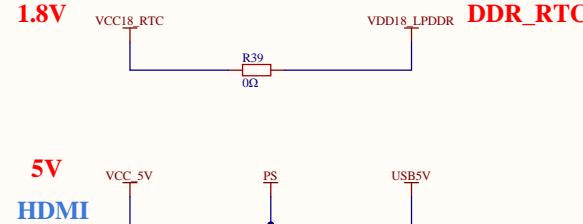
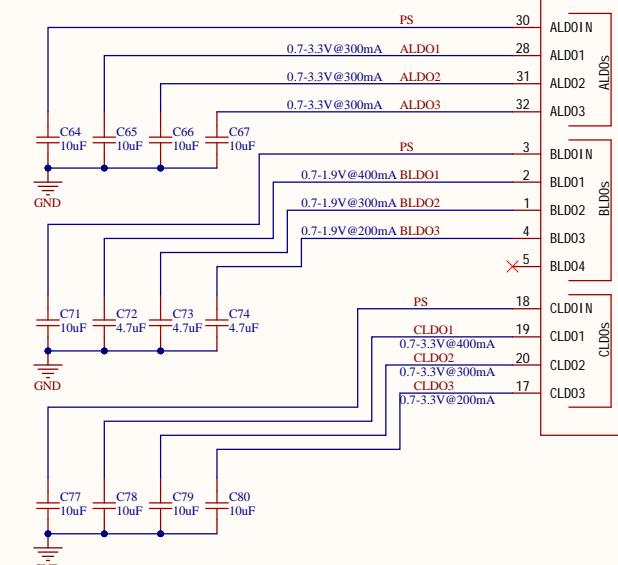
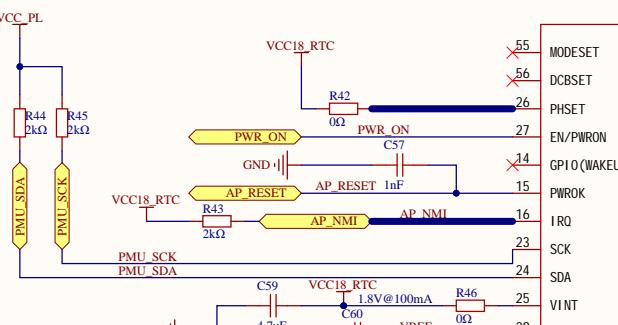
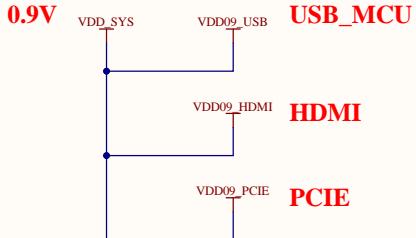
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5V@2A**24Pin Type C****LDO Part****Analog 3.3V****I2C Pull Up****Digital B 1.8V****Digital C 3.3V****Default: Wi-Fi LDO****DCDC Part****AXP805**

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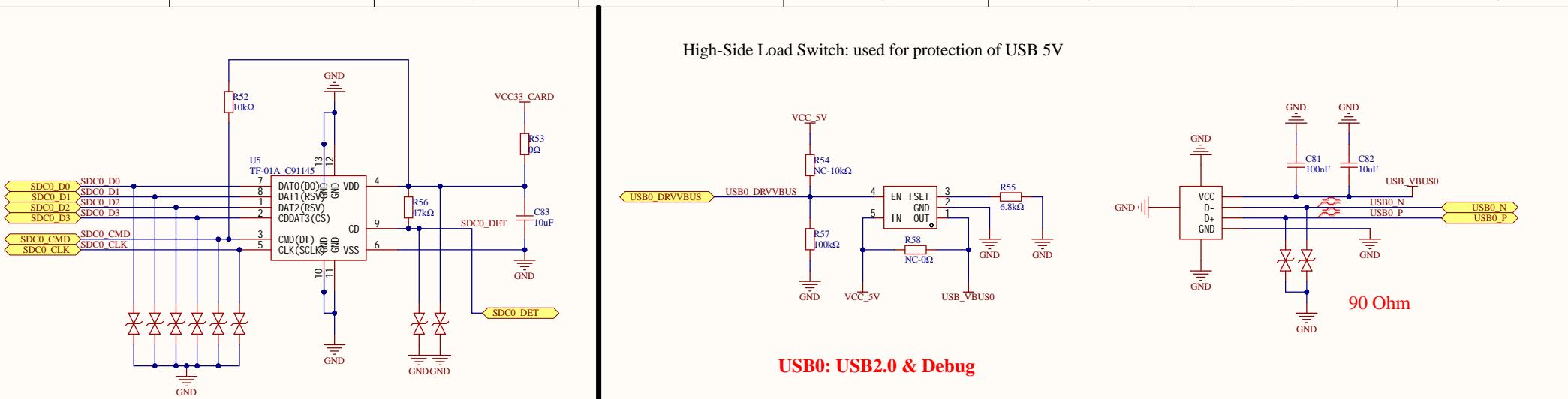
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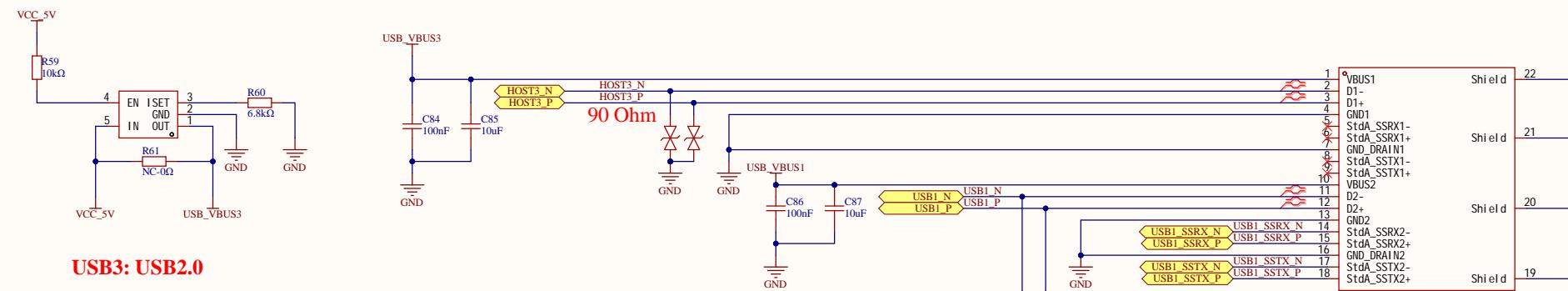
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TF Card

Single Type A

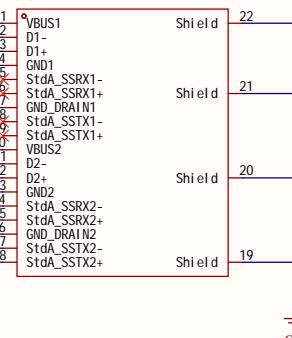


USB3: USB2.0

USB1: USB3.0

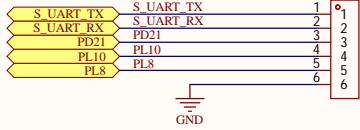
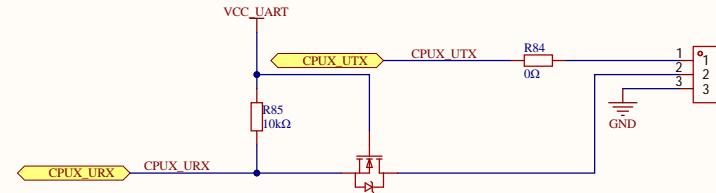
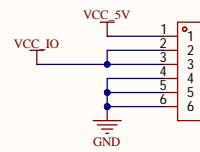
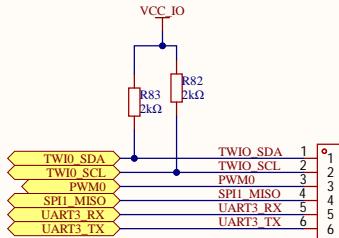
90 Ohm

ESD protection array

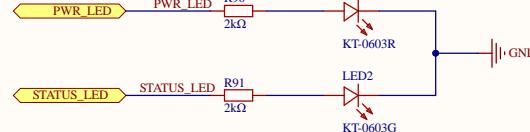


Double Type A

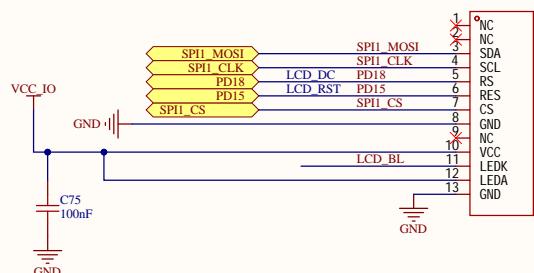
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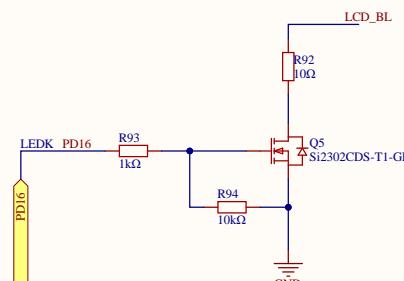
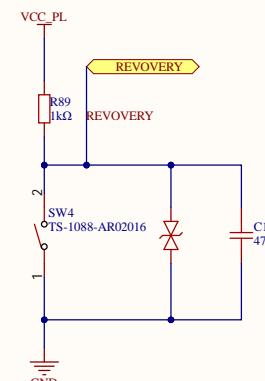
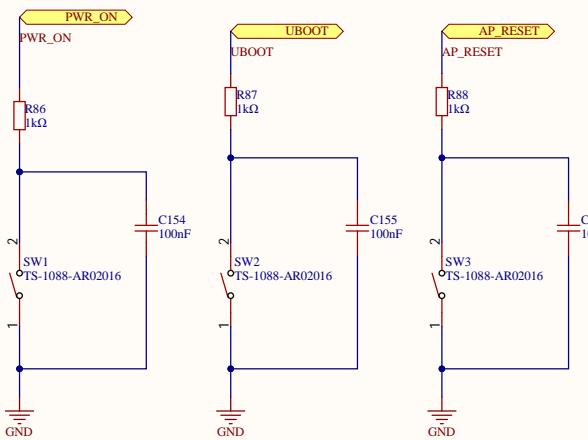
GPIO break out



LED



1.14inch ST7789



BTN

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