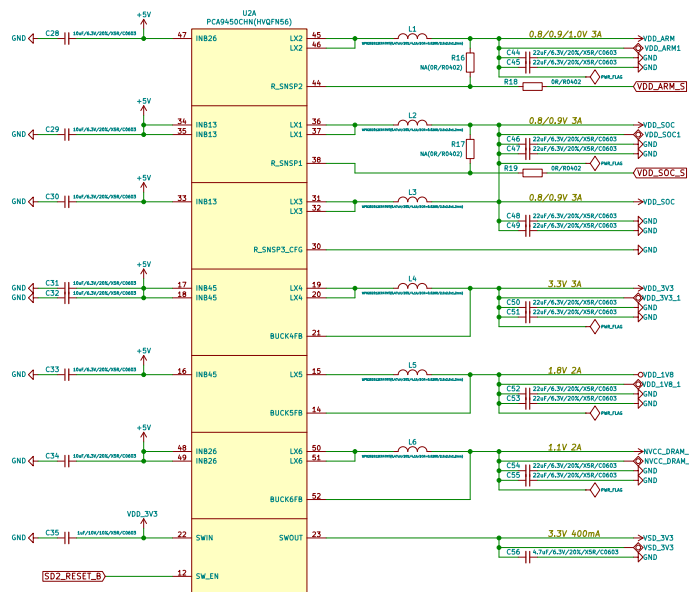# LPDDR4 6GB
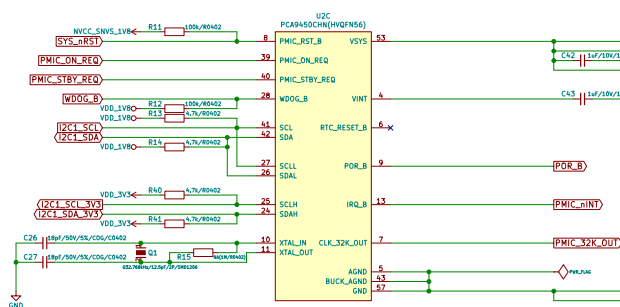
Note:

1. LPDDR4 ODT on i.MX 8M Plus is command-based, ODT_CA_A/B of LPDDR4 part should be connected directly to VDD2.

2. We have used a number of fully compatible, but different LPDDR4 memories due to supply unavailability.
In such cases the memory part name in the schematic might remain outdated.
It is recommended to always refer to the exact memory name printed on the component itself.

Sheet: Power Supply.sch
File: Power Supply.sch

Sheet: Connectors
File: Connectors.sch

Power Supply – PMIC

U2A PCA9450CHN(HVQFN56)

PCA9450 I2C Slave Address: 0x25

Power Supply – MCU

U1N MIMX8ML8CVNKZAB(FCBGA548)
i.MX8MP – Power
Pins:100

U10 MIMX8ML8CVNKZAB(FCBGA548)
i.MX8MP – GND
Pins:109

U2B PCA9450CHN(HVQFN56)

U2C PCA9450CHN(HVQFN56)
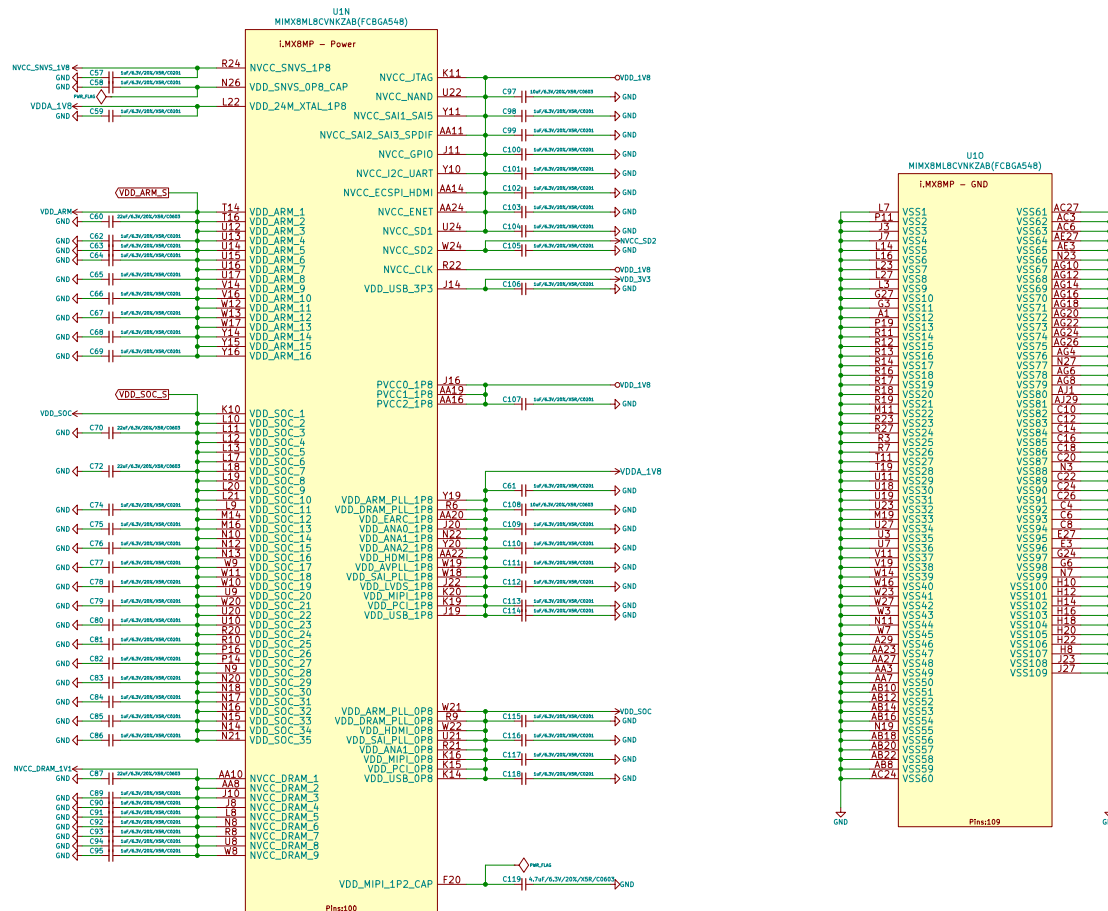
EEPROM

I2C Address: 0x50–0x57
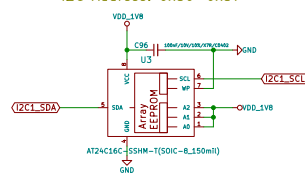
U3 Array EEPROM
AT24C16C–SSHM–T(SOIC-8_150mil)
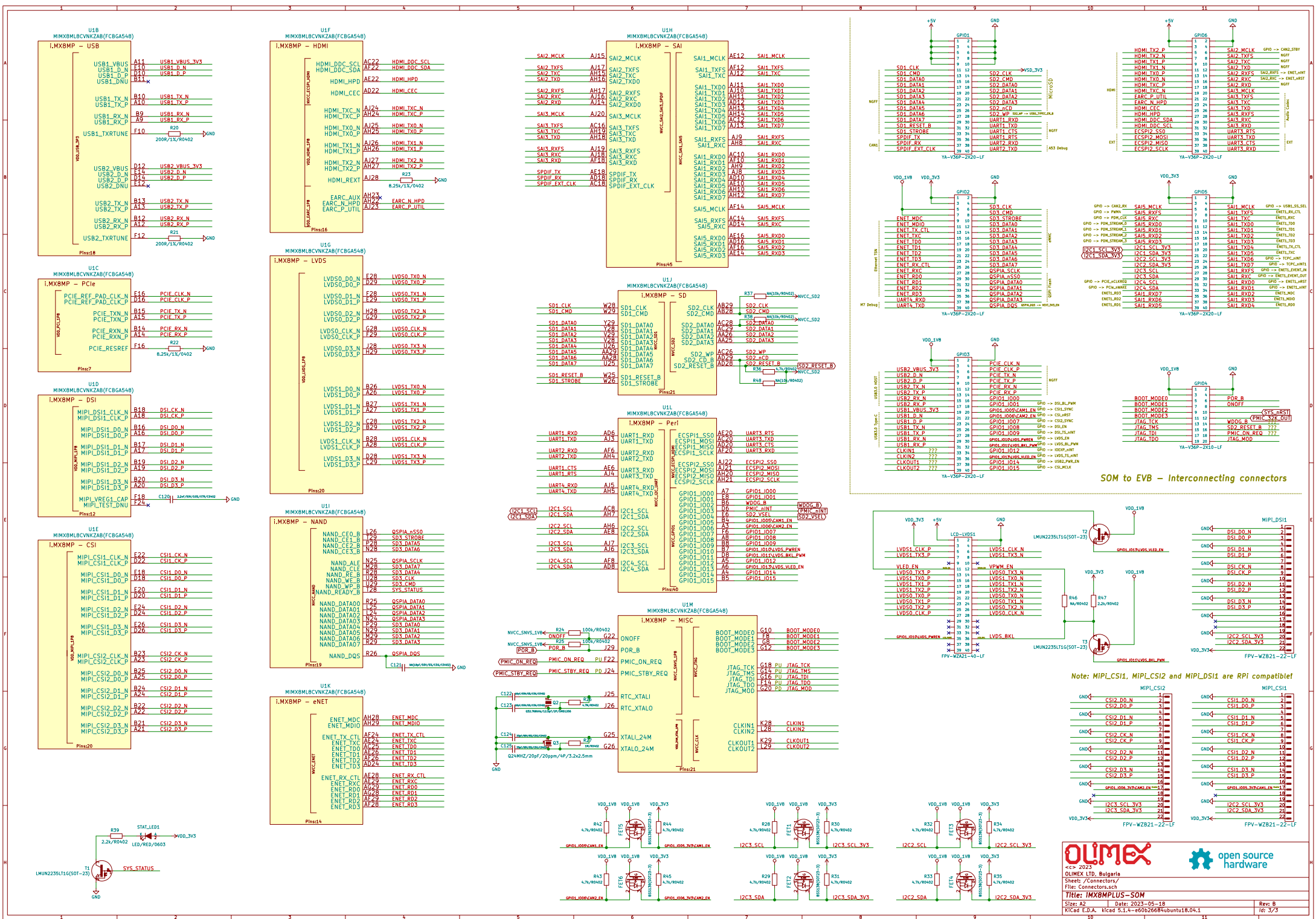
SOM to EVB - Interconnecting connectors

U1B — i.MX8MP – USB — MIMX8MLBCVNKZAB(FCBGA548)
U1F — i.MX8MP – HDMI — MIMX8MLBCVNKZAB(FCBGA548)
U1H — i.MX8MP – SAI — MIMX8MLBCVNKZAB(FCBGA548)
U1C — i.MX8MP – PCIe — MIMX8MLBCVNKZAB(FCBGA548)
U1G — i.MX8MP – LVDS — MIMX8MLBCVNKZAB(FCBGA548)
U1D — i.MX8MP – DSI — MIMX8MLBCVNKZAB(FCBGA548)
U1J — i.MX8MP – SD — MIMX8MLBCVNKZAB(FCBGA548)
U1E — i.MX8MP – CSI — MIMX8MLBCVNKZAB(FCBGA548)
U1I — i.MX8MP – NAND — MIMX8MLBCVNKZAB(FCBGA548)
U1L — i.MX8MP – Peri — MIMX8MLBCVNKZAB(FCBGA548)
U1K — i.MX8MP – eNET — MIMX8MLBCVNKZAB(FCBGA548)
U1M — i.MX8MP – MISC — MIMX8MLBCVNKZAB(FCBGA548)

Note: MiPi_CSI1, MiPi_CSI2 and MiPi_DSI1 are RPI compatible!

Connectors: GPIO1, GPIO2, GPIO3, GPIO4, GPIO5, GPIO6 — YA-V36P-2X20-LF
MicroSD, eMMC, QSPI Flash, Ethernet TDs, USB3.0 HOST, USB3.0 Type-C

Transistors: LMUN2235LT1G(SOT-23) — T1 SYS_STATUS, T2, T3
STAT_LED1, LED/RED/0603, R39 2.2k/R0402, STAT_LED1

Connectors: FPV-WZA21-40-LF (LCD-LVDS1), FPV-WZB21-22-LF (MiPi_DSI1, MiPi_CSI2, MiPi_CSI1)

FETs: BSS138DW(SOT23-3) — FET1–FET6
Resistors 4.7k/R0402: R28–R35, R42–R45