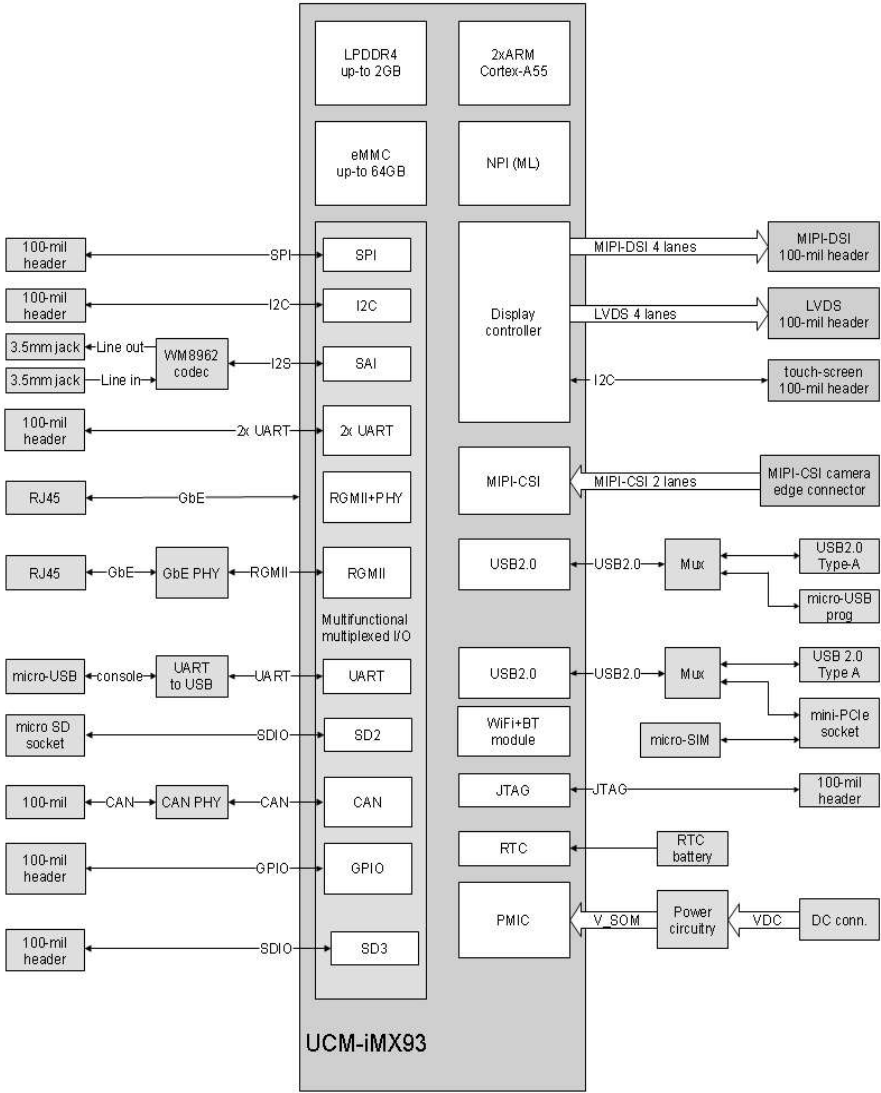


SBEV-UCMIMX93

BOARD REVISION: 1.0

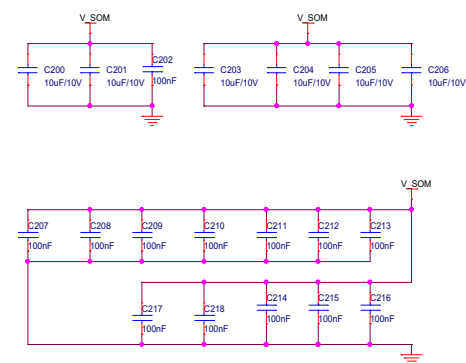
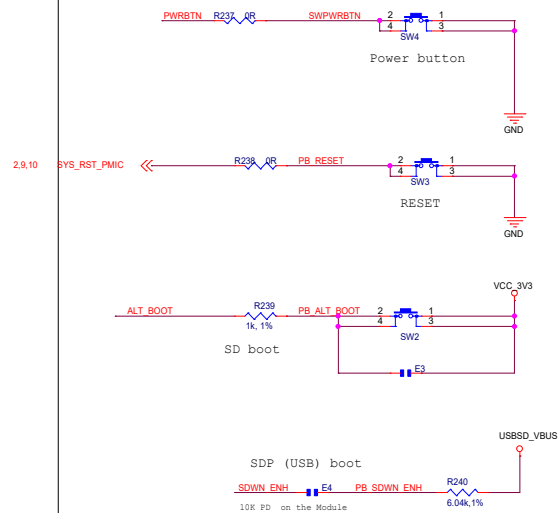
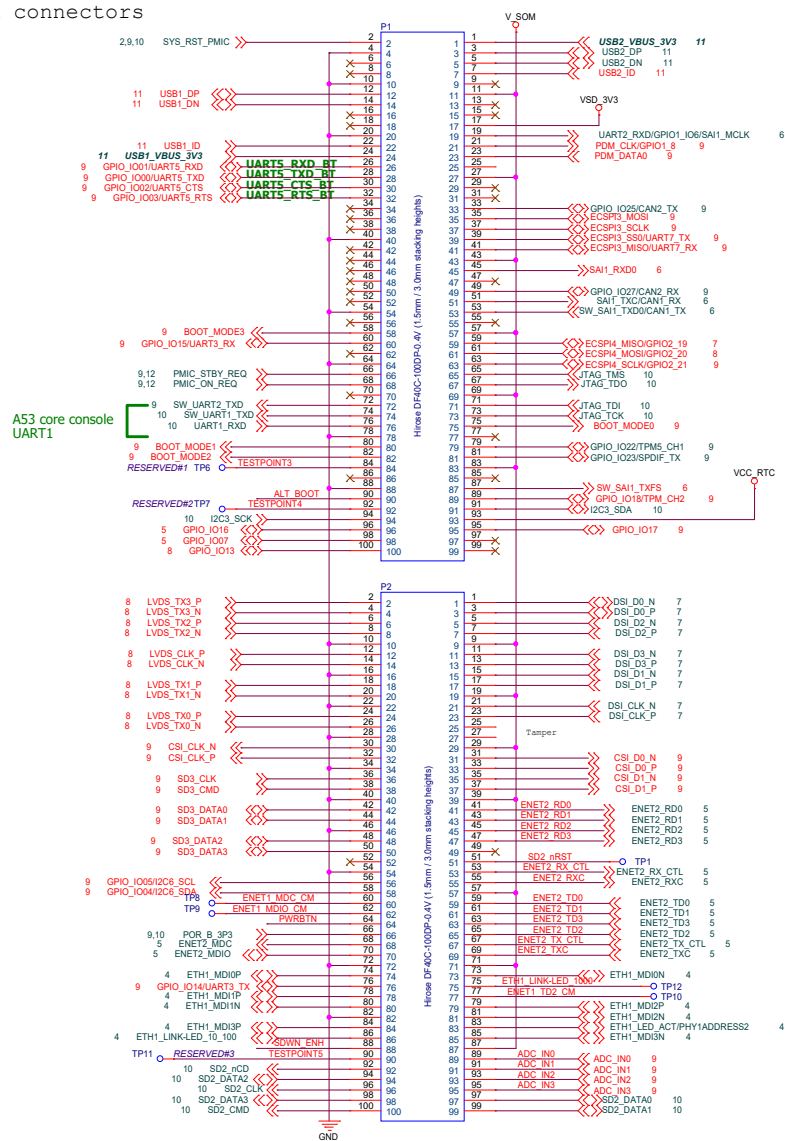
Page	Description
01	Index and Block Diagram
02	SOM Connectors
03	DC INP, Discharge
04	Ethernet Connectors
05	Gbe PHY2
06	Codec
07	MIPI-DSI LCD
08	LVDS LCD
09	SPDIF,CAN, CSI,MISC
10	Console, RS232, SD, miniPCIe
11	USB
12	Power
13	Mechanical



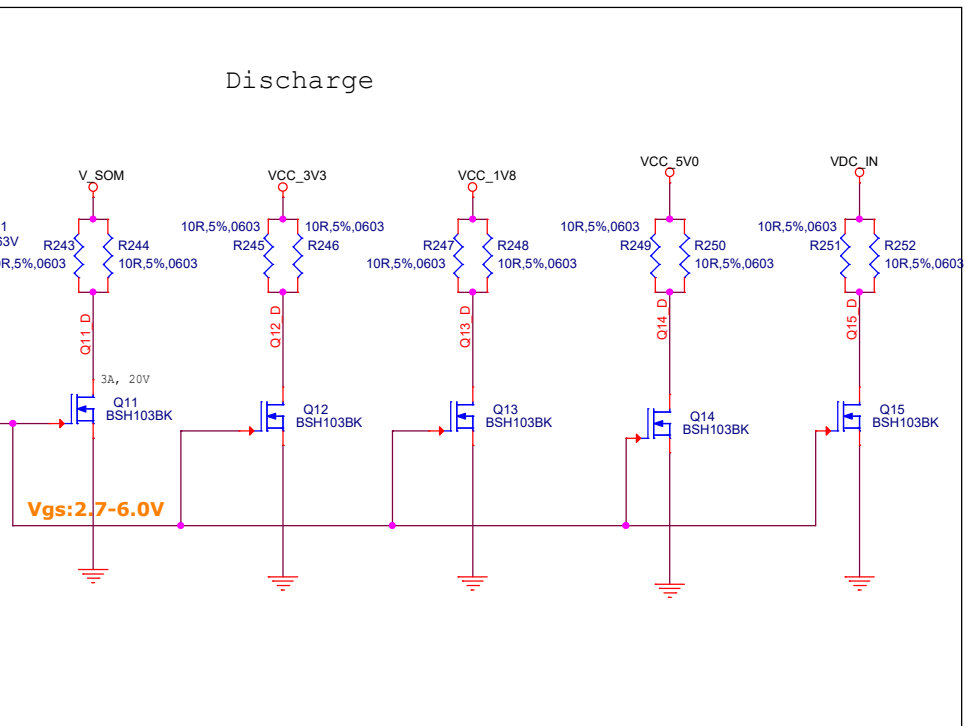
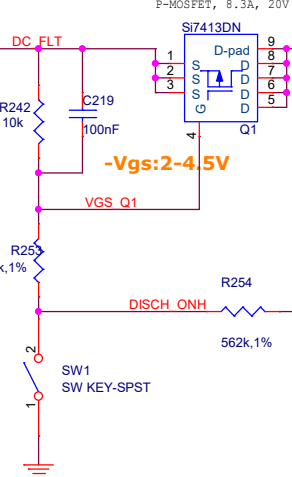
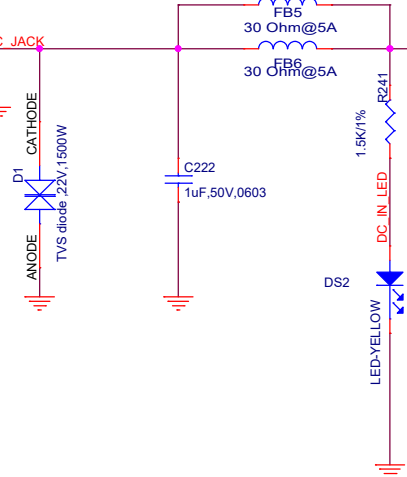
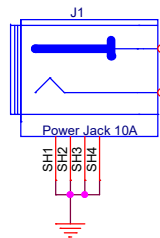
PCB1  
PCB, SBEV-UCMIMX93, Rev 1.0  
PIN = 188C04680

ZZ1  
PARSER\_VERSION\_1.0

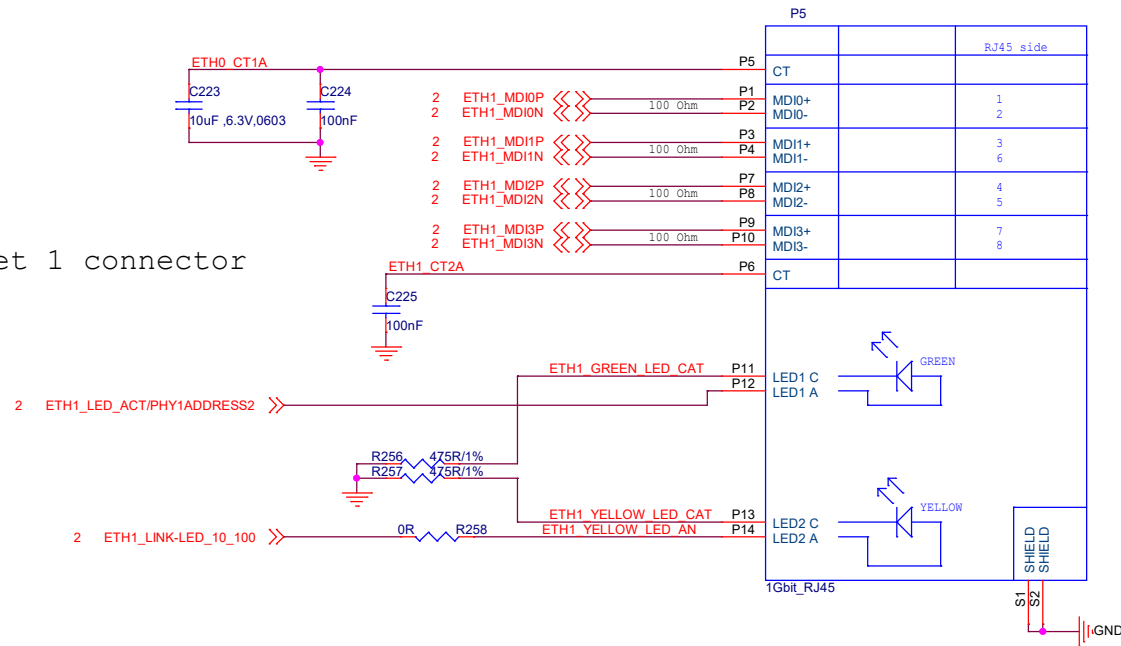
SOM connectors



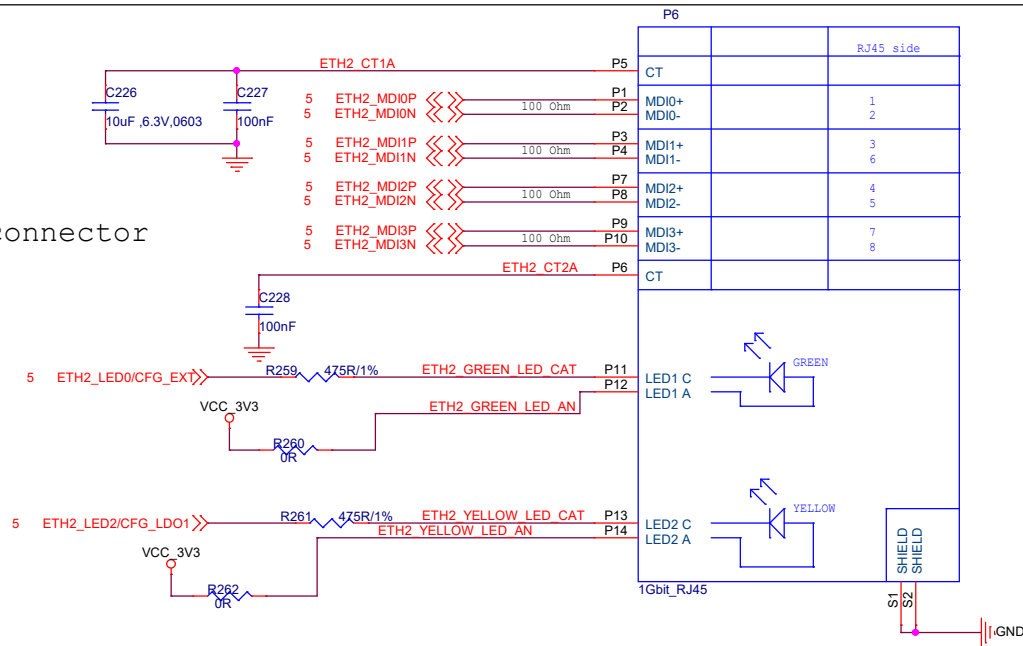
DC input  
 $V_{in}$  8V-18V  
 $I_{max}$  ( $V_{in}=10V$ ) =3.31A

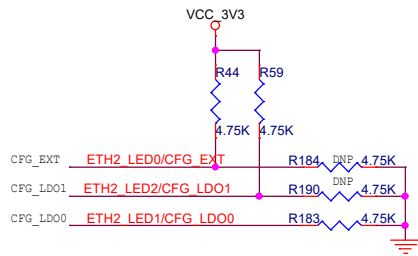


## Ethernet 1 connector



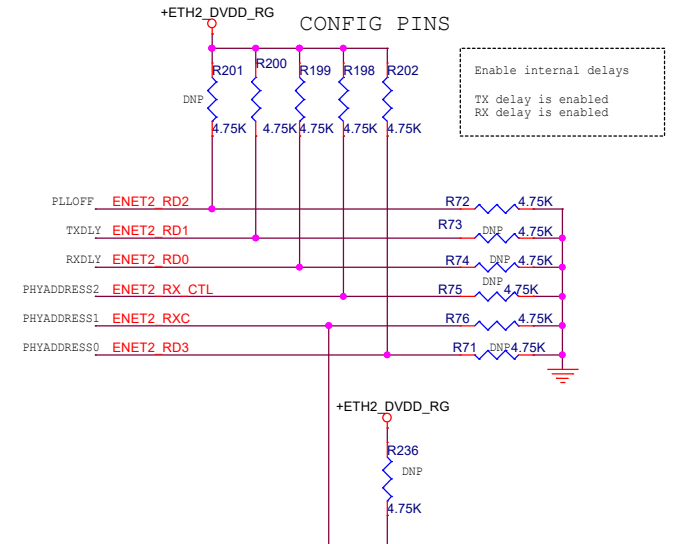
## Ethernet 2 connector



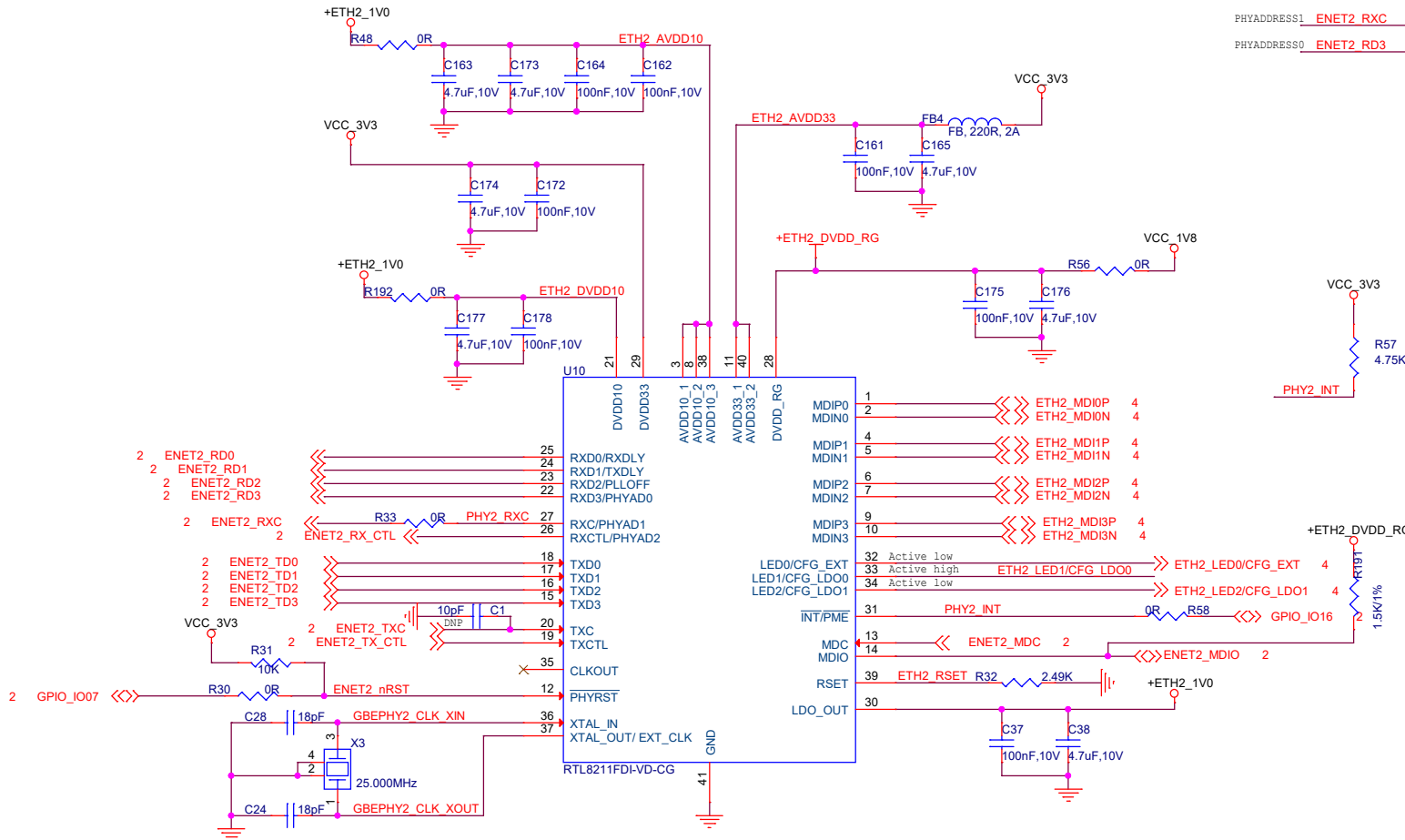


### Power-on Strapping Pins CFG

RGMII Power Source	CFG_EXT	CFG_LDO[1:0]
External 3.3V (Default)	1	00
External 1.8V	1	10
Internal 1.8V	0	10



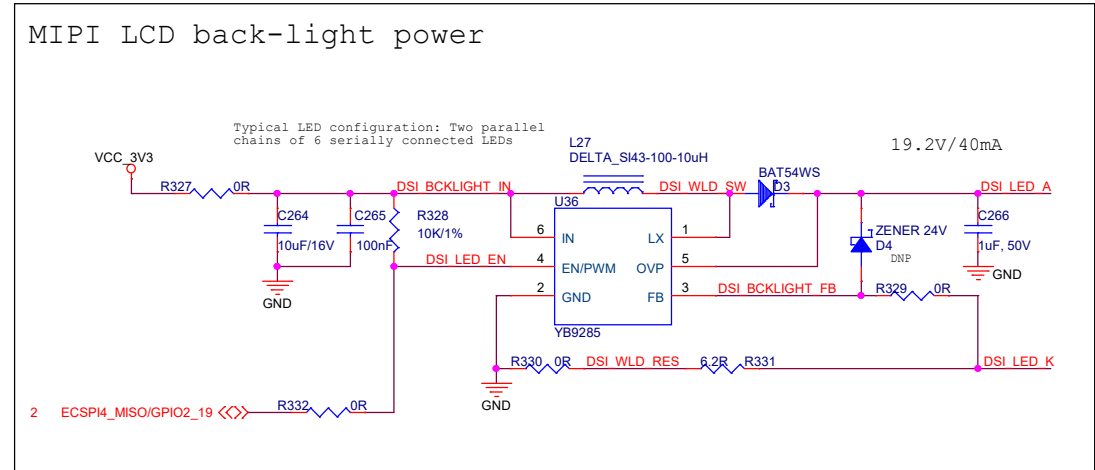
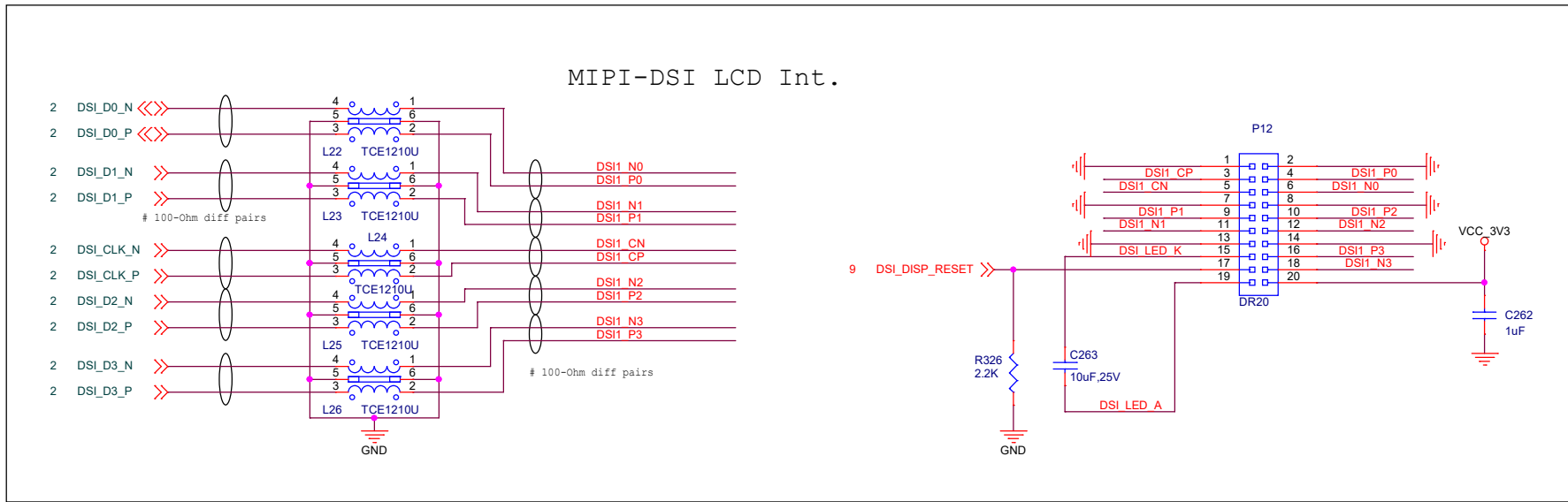
PHY ADDRESS = [1,0,1]  
 PHY support addresses from 00001 to 00111.  
 PHY address 0 is a broadcast from the MAC  
 PLLOFF: Pull-up to disable PLL @ ALDPS mode

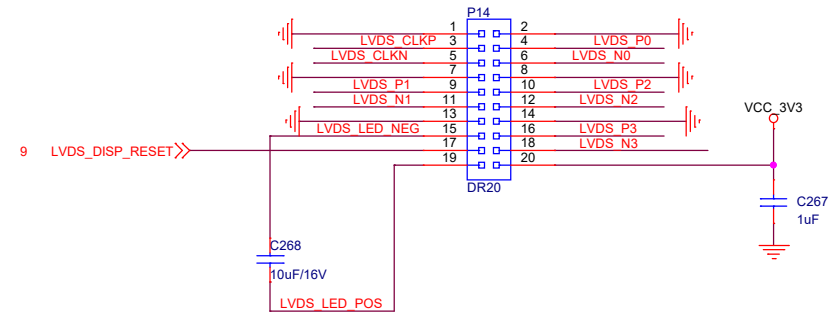
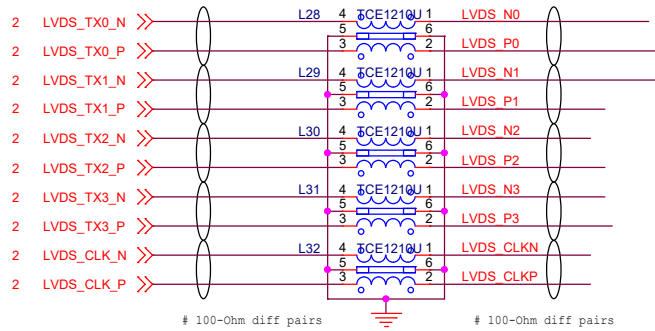


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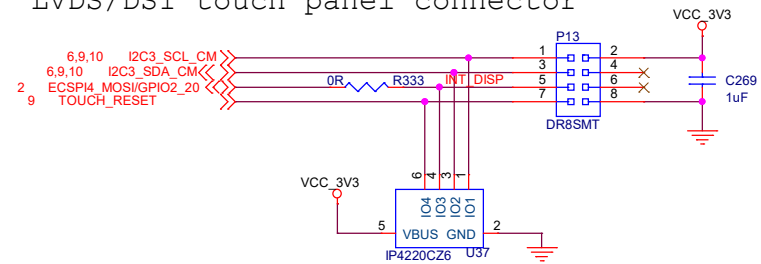
Size B	Title SBEV-UCMIMX93 5. Gbe PHY2	Rev 1.0
Date: Monday, November 11, 2024	Document Number: 8000245000	
	Sheet 5 of 13	



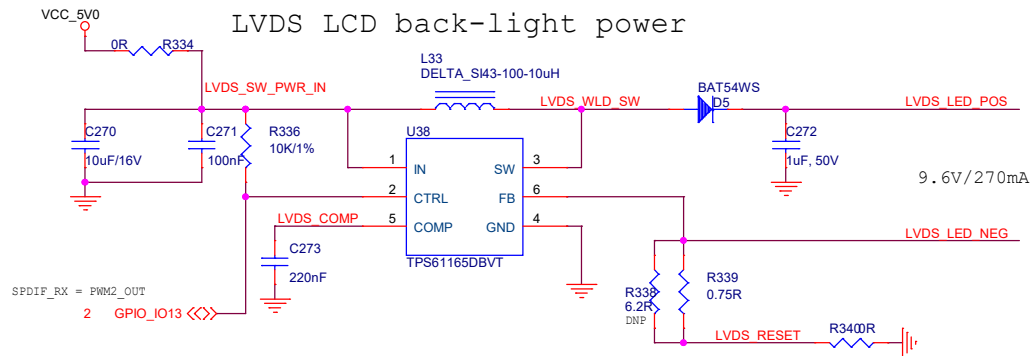




### LVDS/DSI touch panel connector



### LVDS LCD back-light power

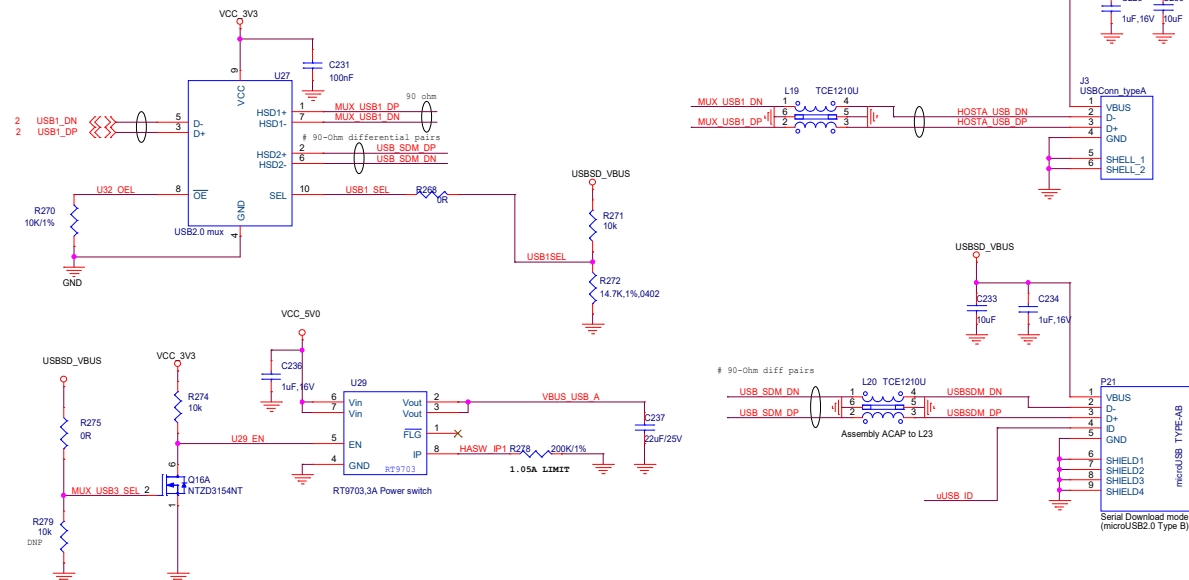








NOTE: USB1 multiplexing is controlled by presence of VBUS on connector P21



The image contains two circuit diagrams for the NCT75B3157, showing the connection of the USB ID pin.

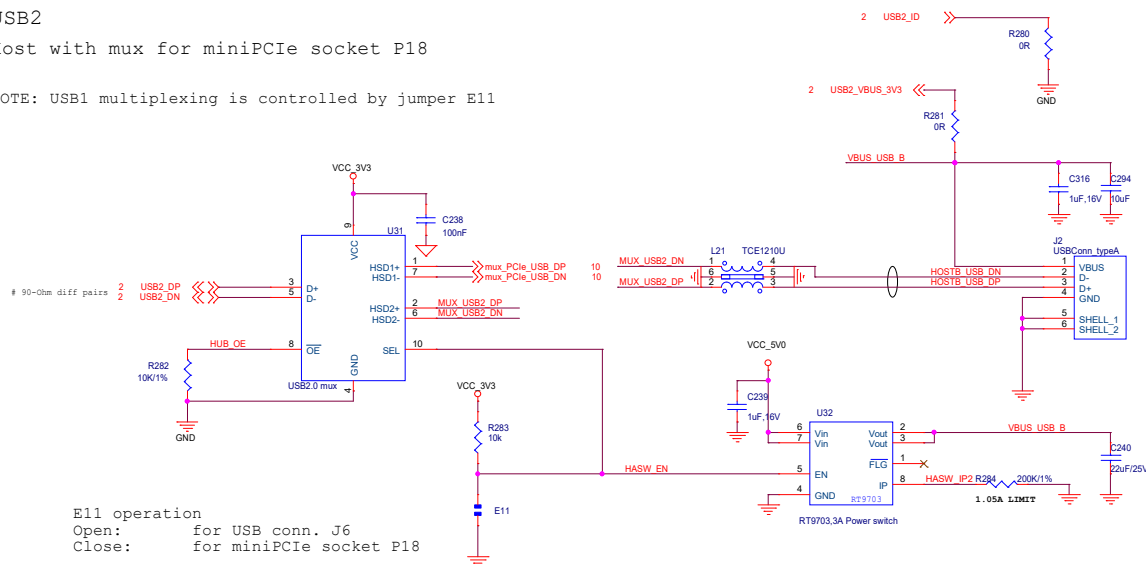
**Top Diagram (USB1\_VBUS\_3V3):**

- U31:** NCT75B3157. Pin 5 (VCC) is connected to VCC\_5V0. Pin 2 (GND) is connected to GND. Pin 4 (U31\_OUT) is connected to USB1\_VBUS\_3V3 through resistor R264 (1K). Pin 1 (U31\_IN1) is connected to USBSD\_VBUS through resistor R264 (1K). Pin 3 (U31\_IN0) is connected to USBSD\_VBUS through resistor R265 (1K). Pin 6 (ID\_VBUS\_SEL) is connected to USBSD\_VBUS through resistor R267 (1K). Pin 6 is also connected to GND through resistor R269 (14.7K, 1%, 0402).
- USBSD\_VBUS:** Connected to the top of the circuit.
- Resistors:** R264 (1K), R265 (1K), R267 (1K), R269 (14.7K, 1%, 0402).

**Bottom Diagram (USB1\_ID):**

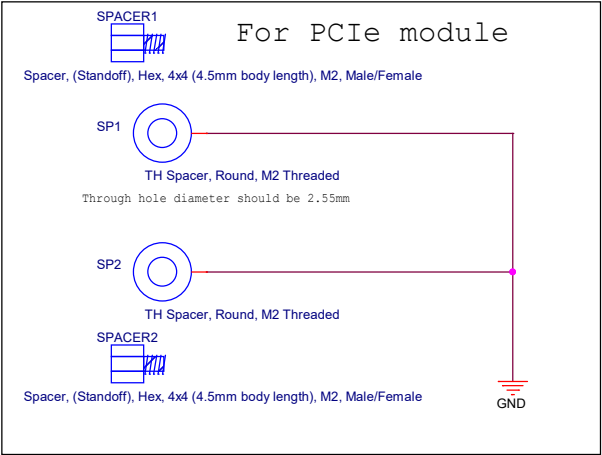
- U28:** NCT75B3157. Pin 5 (VCC) is connected to VCC\_5V0. Pin 2 (GND) is connected to GND. Pin 4 (U28\_OUT) is connected to USB1\_ID through resistor R275 (1K). Pin 1 (uUSB\_ID) is connected to VCC\_3V3 through resistor R273 (10K). Pin 3 (U28\_IN0) is connected to VCC\_3V3 through resistor R273 (10K). Pin 6 (ID\_VBUS\_SEL) is connected to GND through resistor R275 (1K).
- VCC\_3V3:** Connected to the top of the circuit.
- Resistors:** R273 (10K), R275 (1K).

NOTE: USB1 multiplexing is controlled by jumper E11

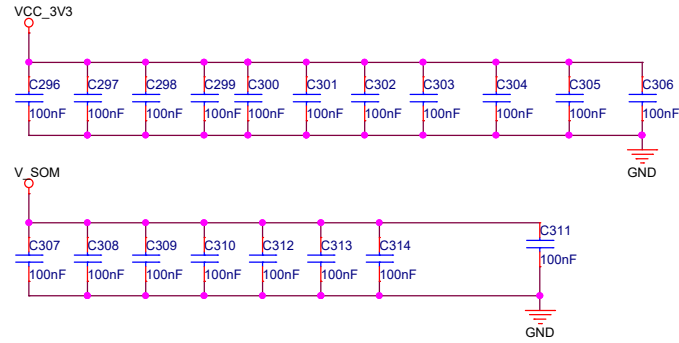


E11 operation  
Open: for USB conn. J6  
Close: for miniPCIE socket P18

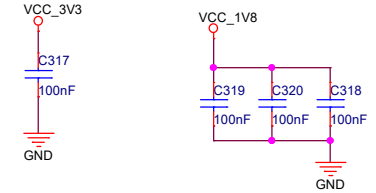




## Decoupling capacitors



## Stitching capacitors



## For UCM-iMX93 module



## For UCM-iMX93L module



## 12 Jumper Plugs

