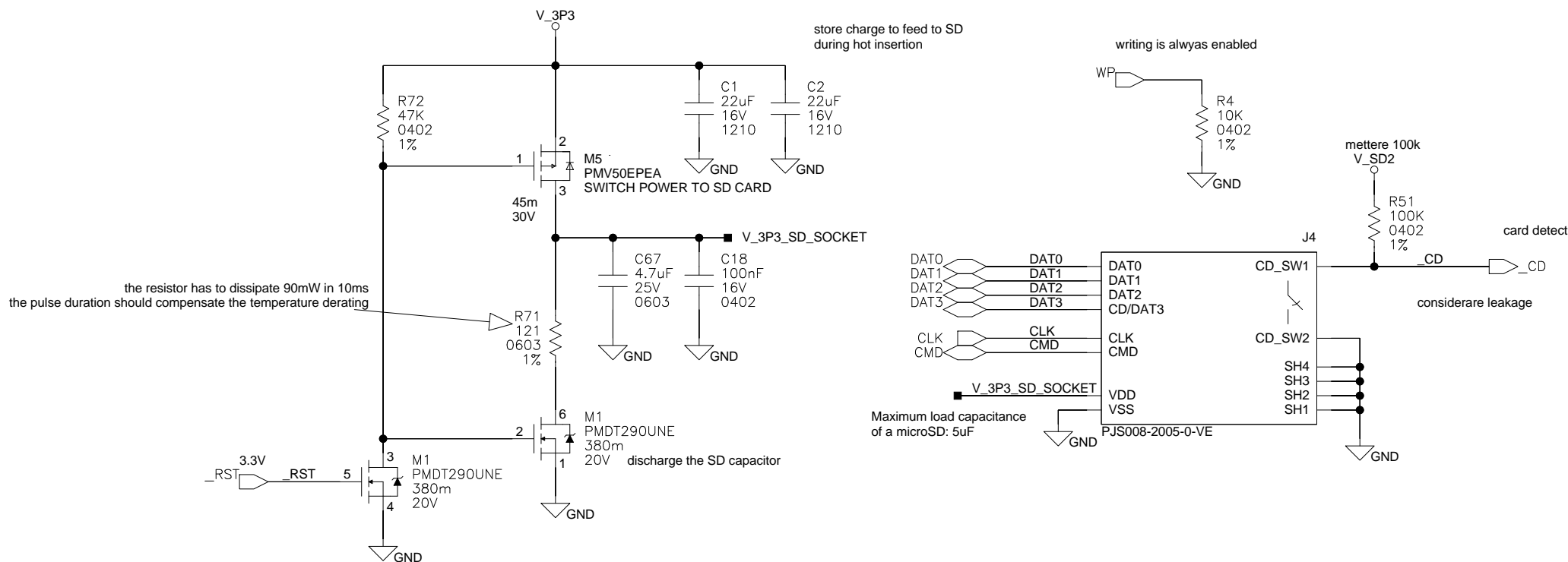

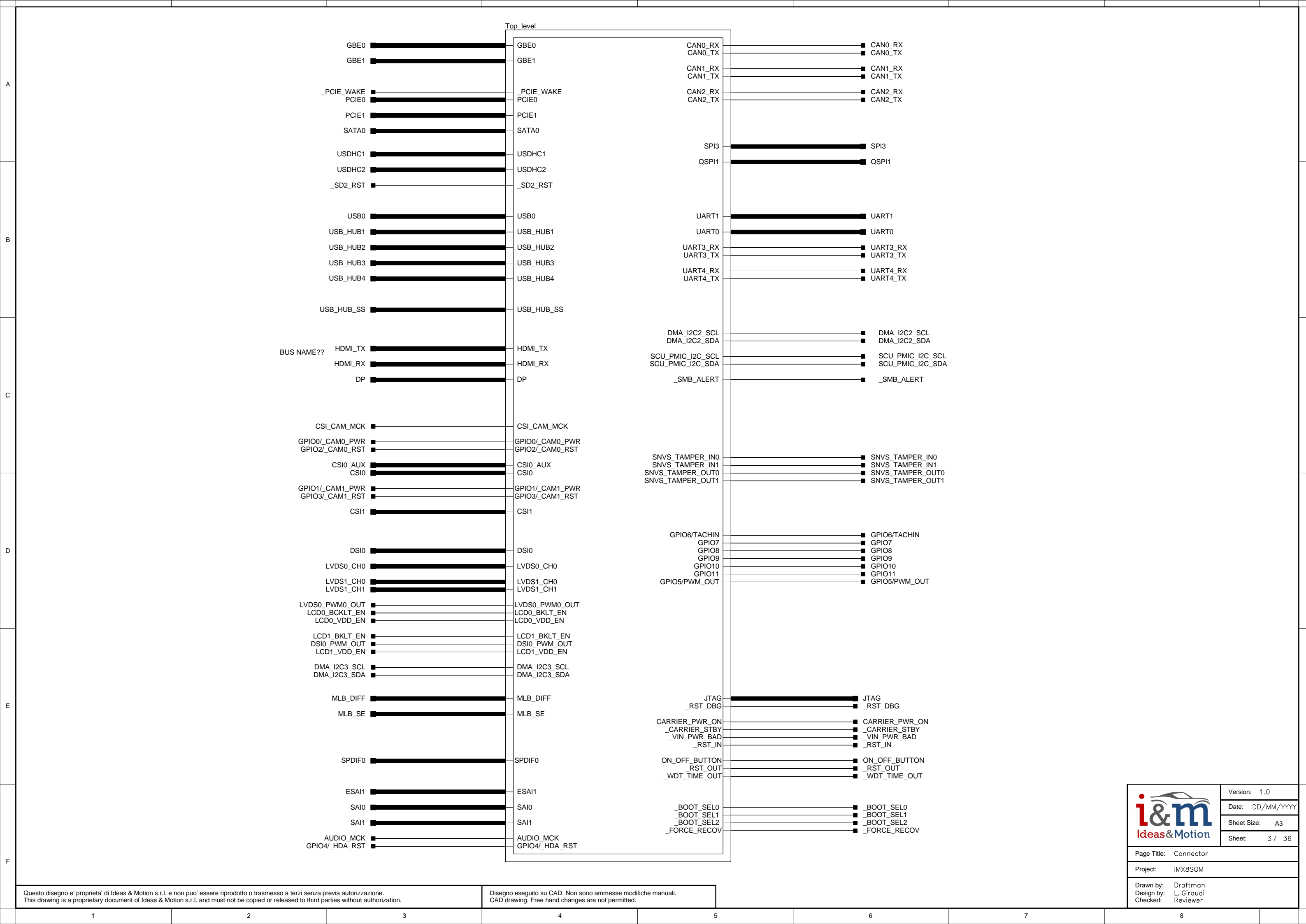


## AUX CONNECTOR

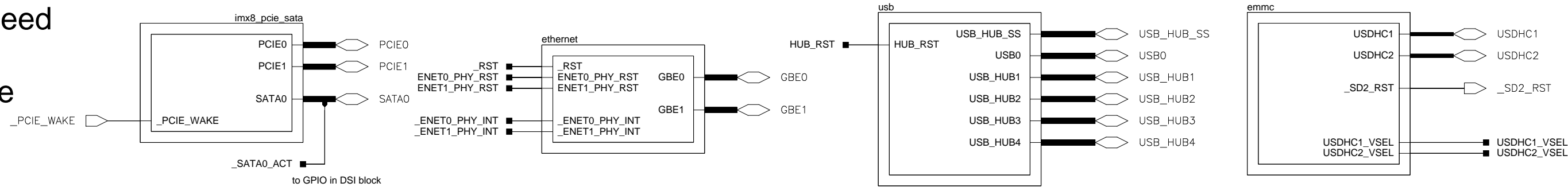




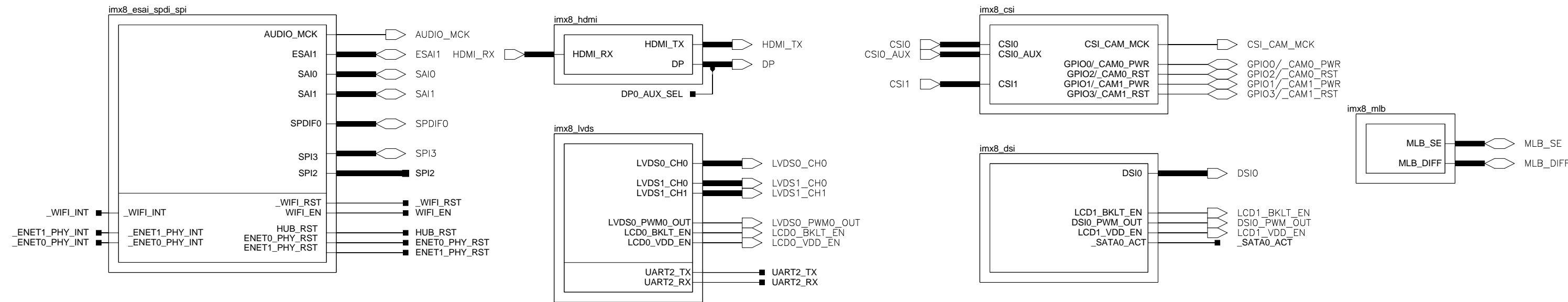
	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 2 / 36
Page Title: SD_socket	
Project: iMX8SOM	
Drawn by:	Draftman
Design by:	L. Giraudi
Checked:	Reviewer



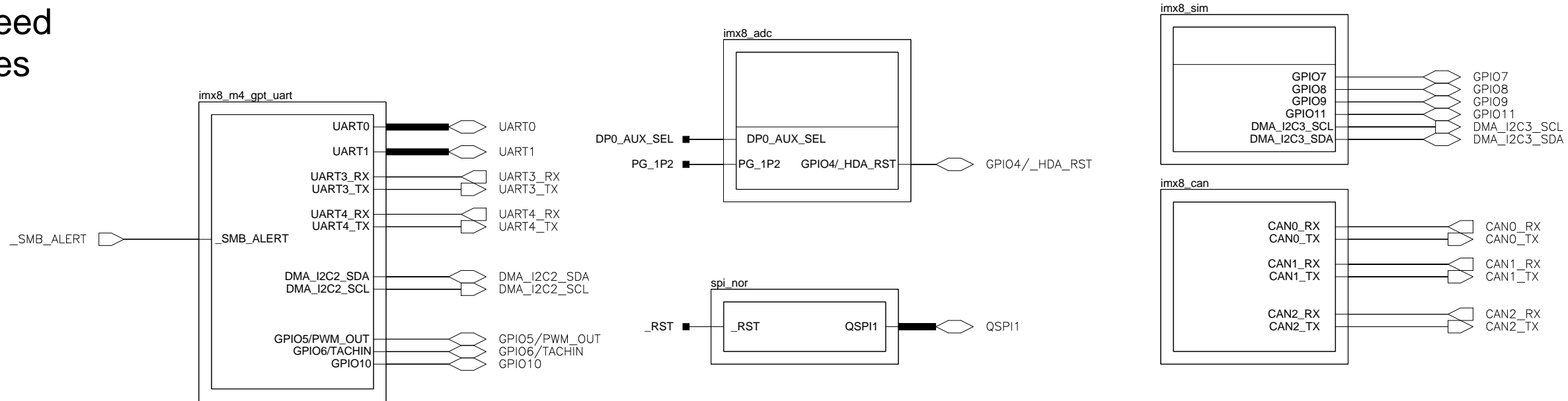
High Speed  
General  
Purpose



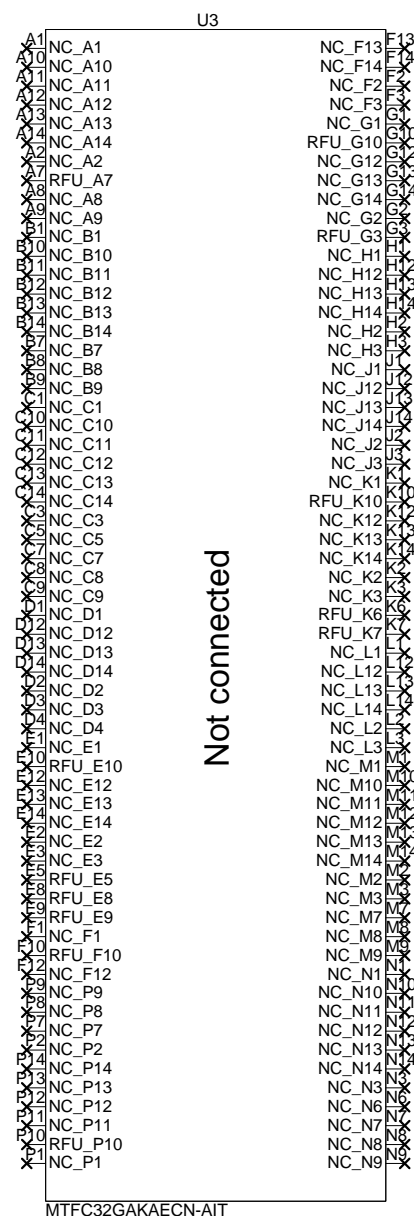
Media  
Interfaces




Low Speed  
Interfaces

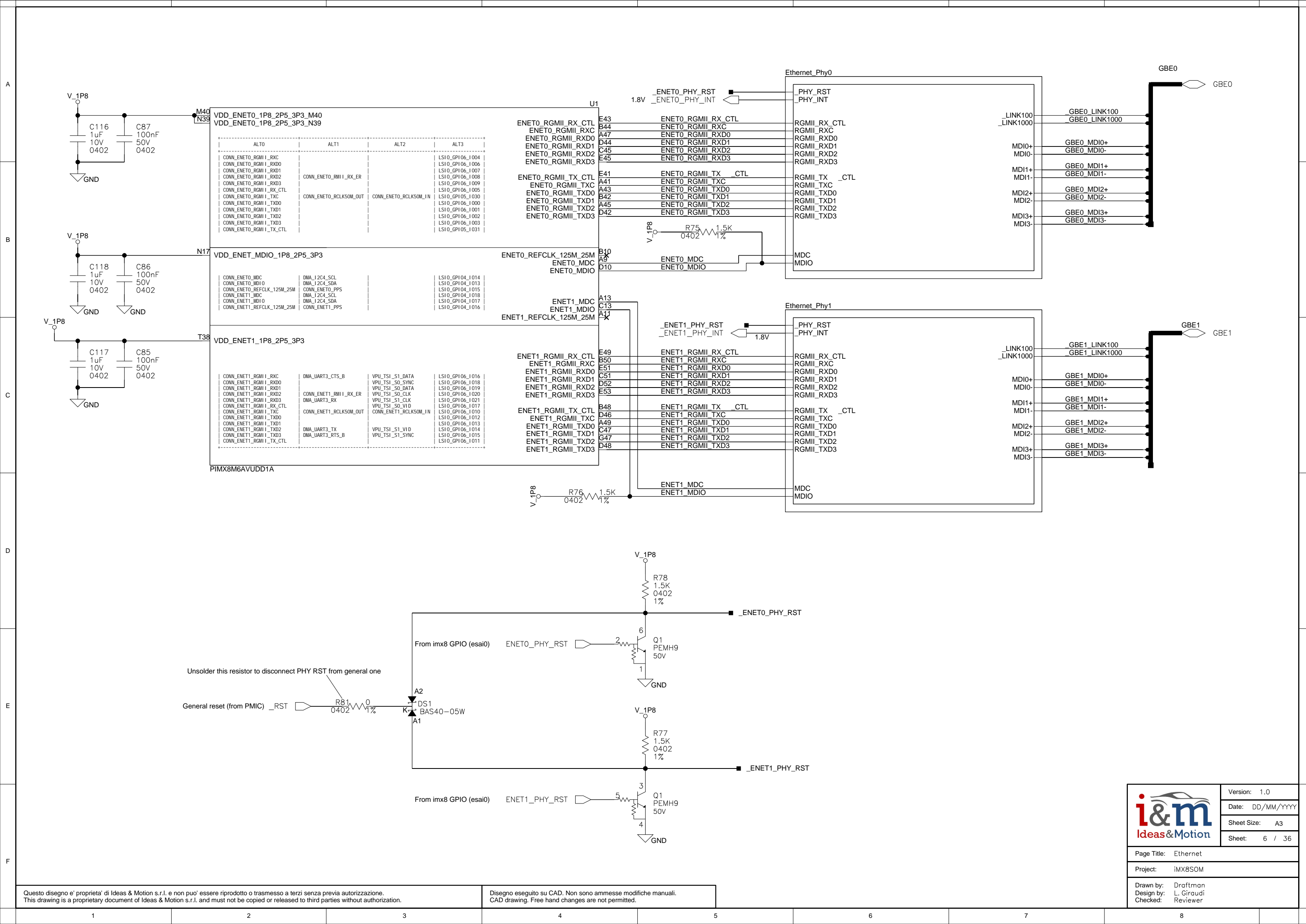


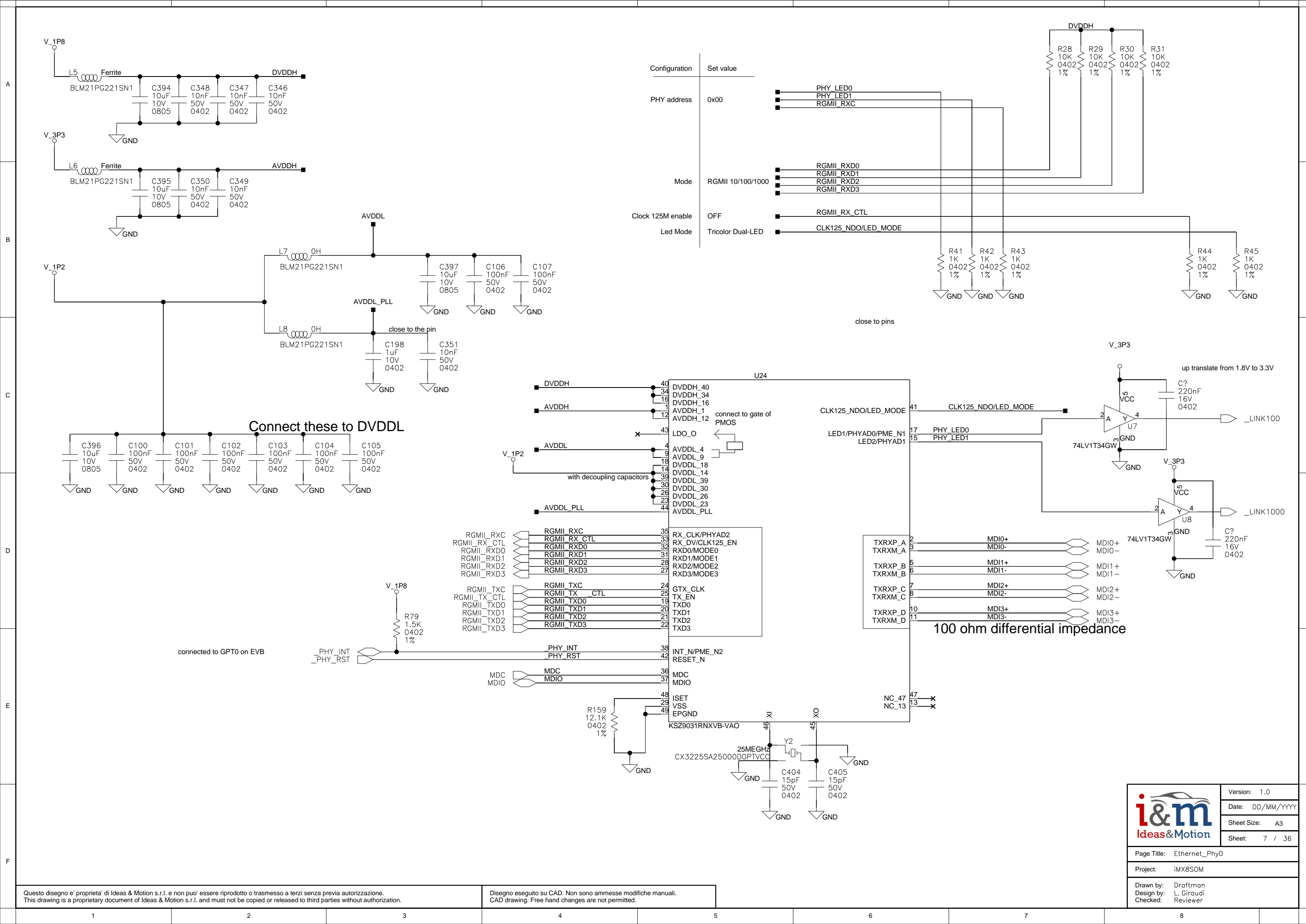
	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A3
	Sheet: 4 / 36
Page Title: Module	
Project: iMX8SOM	
Drawn by: Draftman	
Design by: L. Giraudi	
Checked: Reviewer	

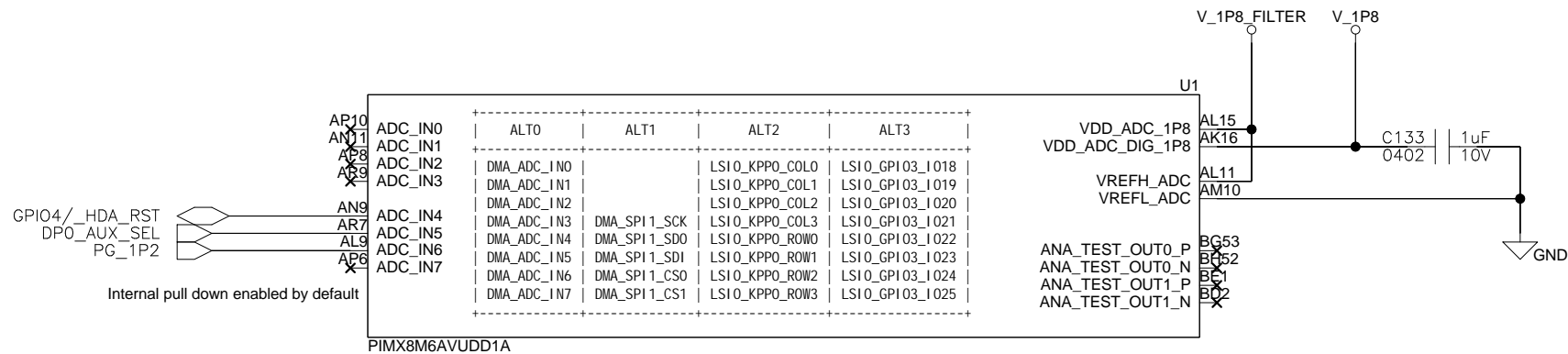


	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A3
	Sheet: 5 / 36
Page Title: eMMC	
Project: iMX8SOM	
Drawn by: Draftman Design by: L. Giroudi Checked: Reviewer	

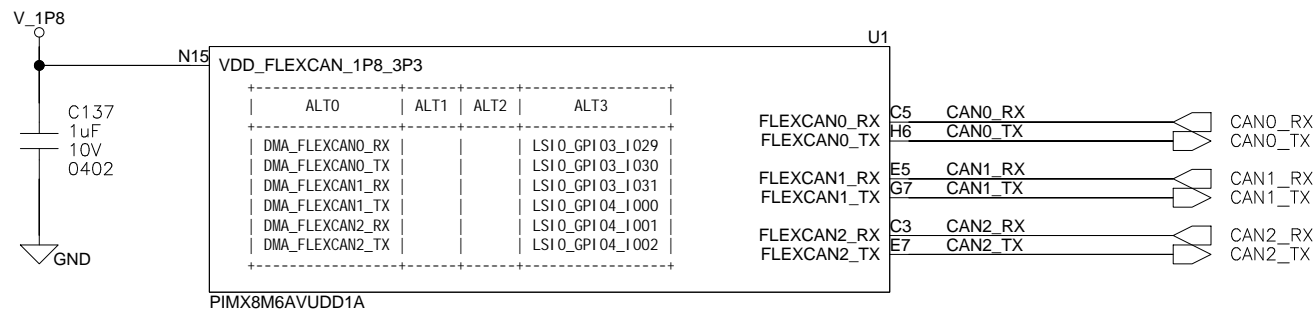







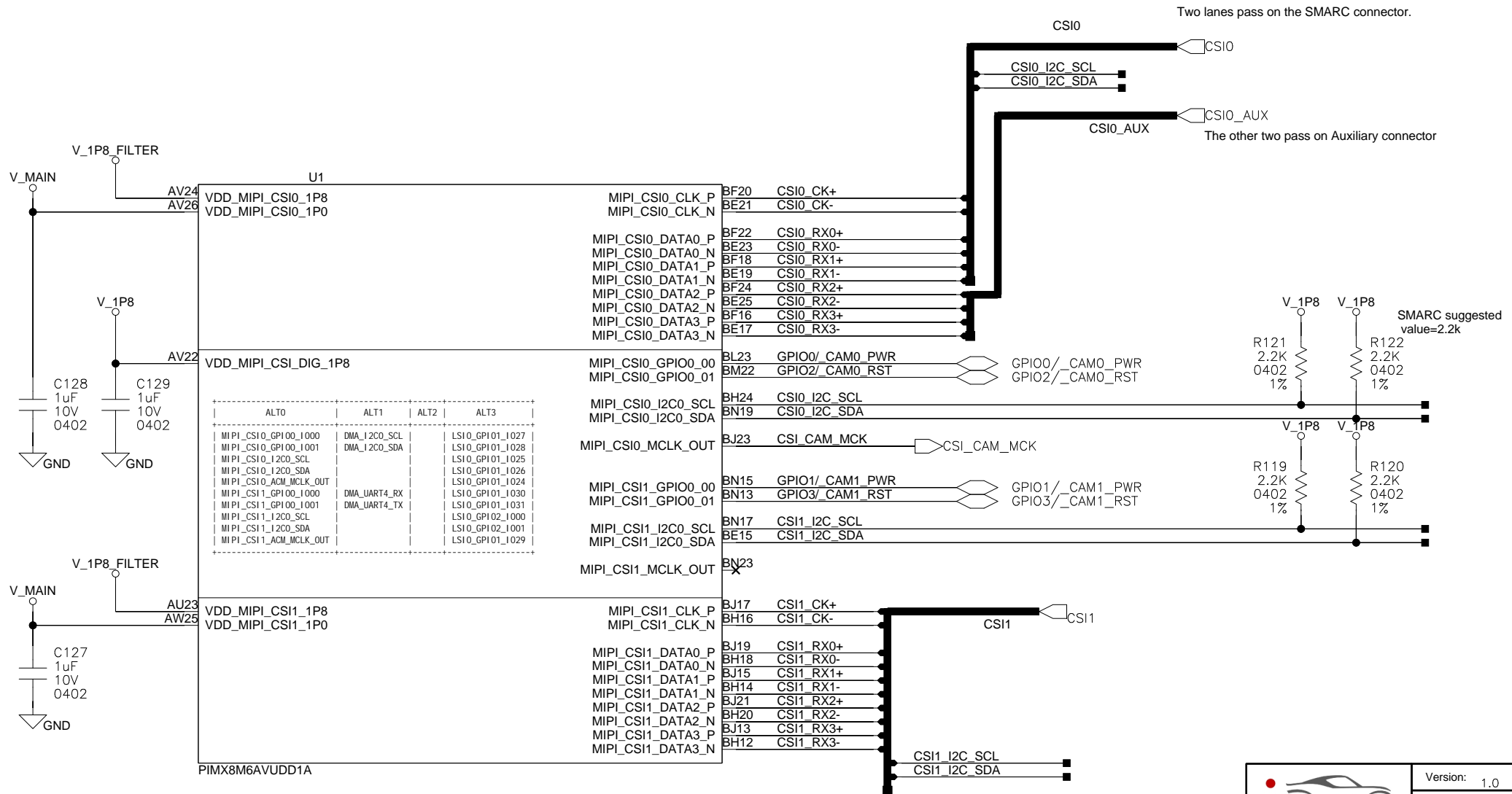






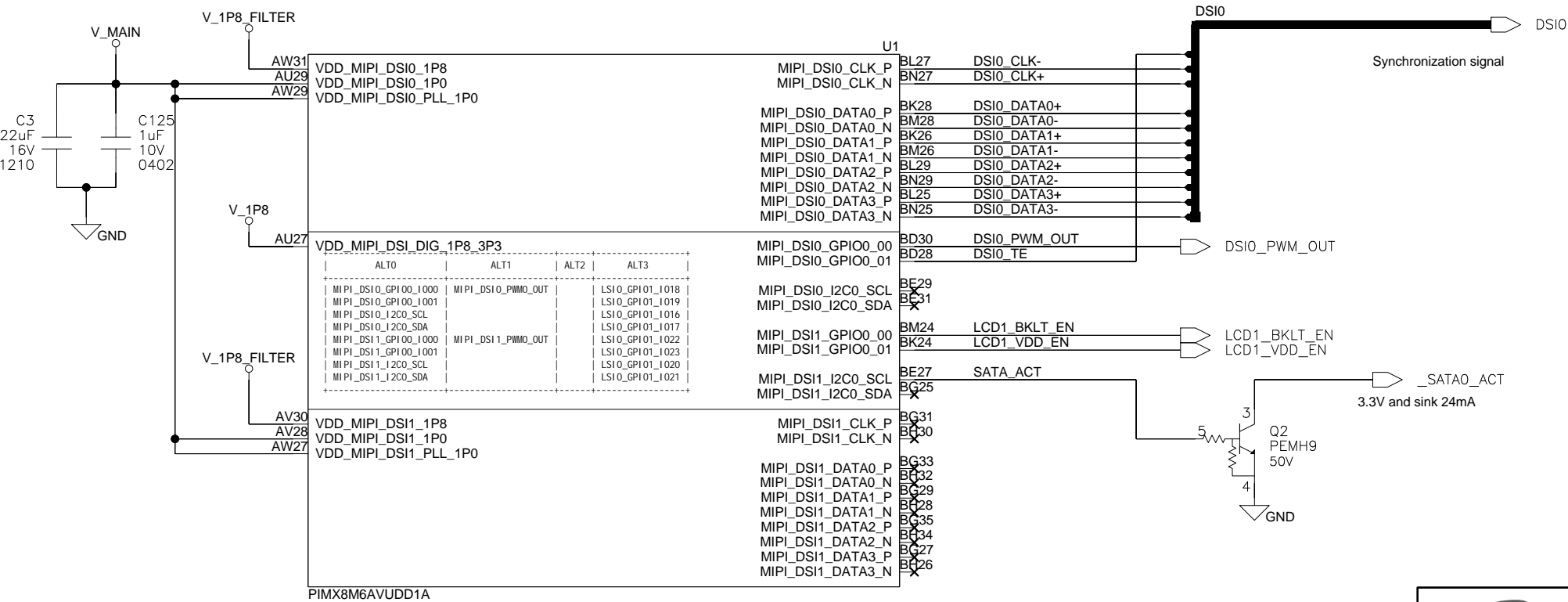
	Version: 1,0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 10 / 36
Page Title: imx8_can	
Project: iMX8SOM	
Drawn by:	Draftman
Design by:	L. Giraudi
Checked:	Reviewer

all CSI traces should be 100 ohm differential impedance



	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 11 / 36
Page Title: imx8_csi	
Project: iMX8SOM	
Drawn by: Draftman	
Design by: L. Giraudi	
Checked: Reviewer	

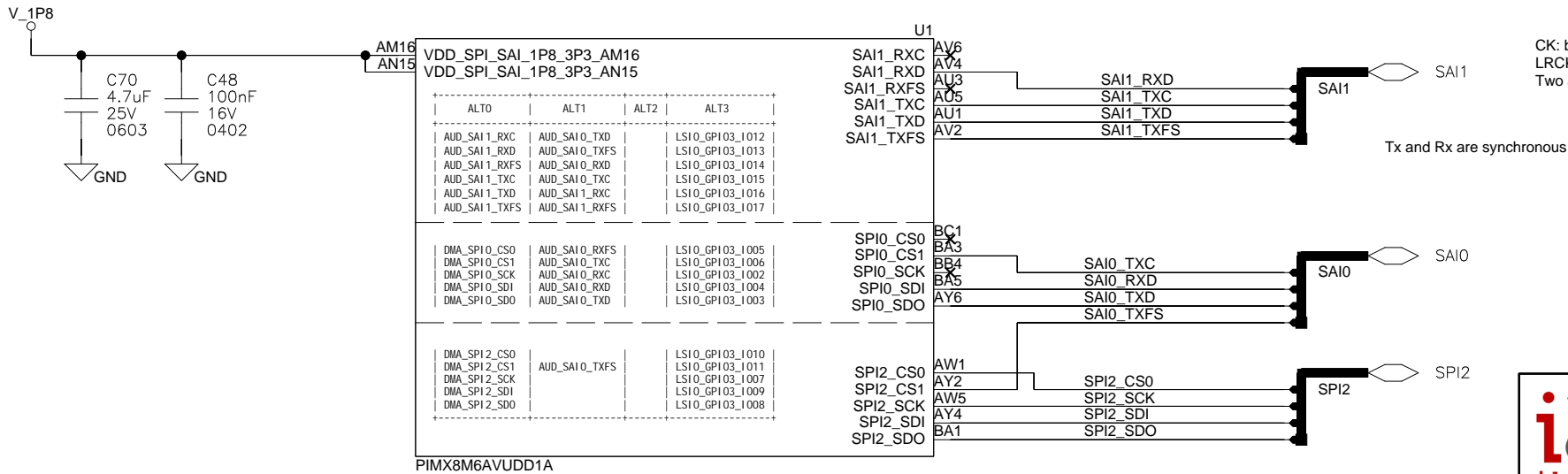
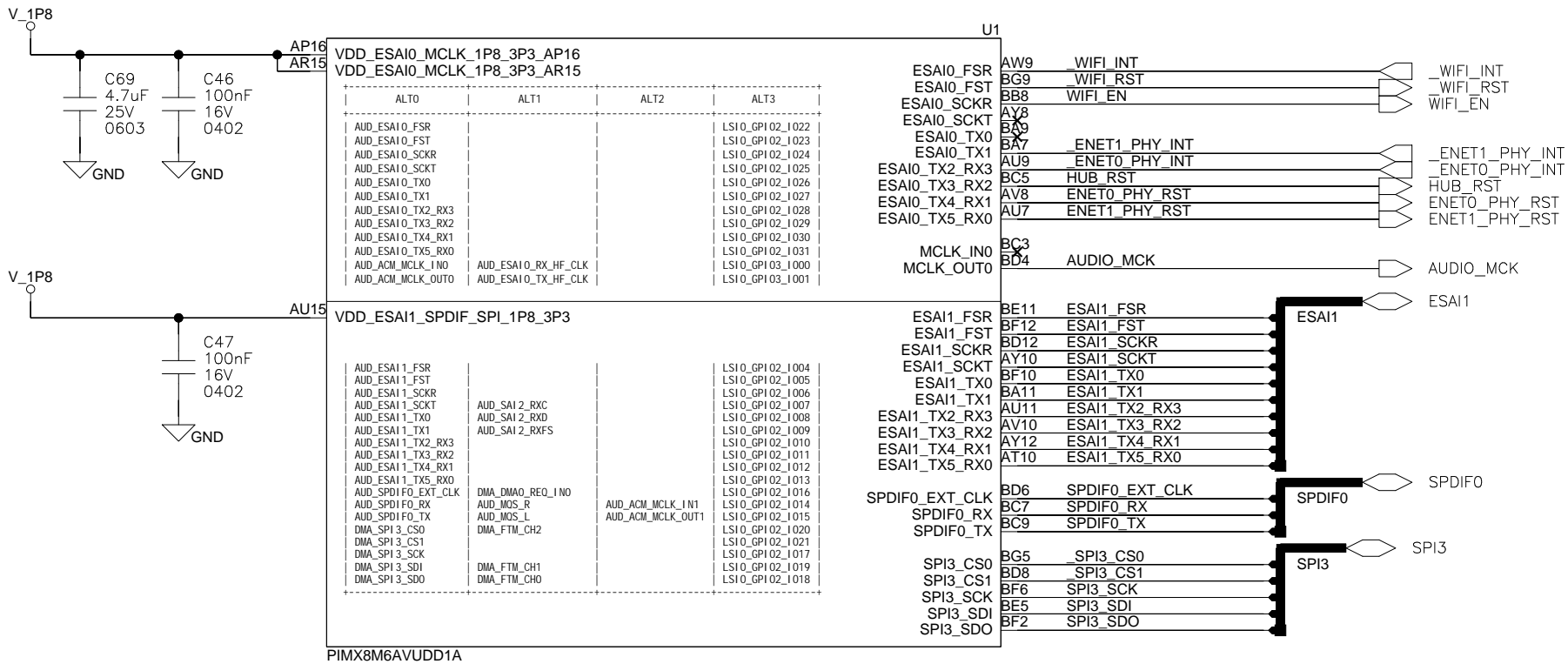
all DSI traces should be 100 ohm differential impedance



	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 12 / 36

Page Title: imx8_dsi
Project: iMX8SOM

Drawn by: L. Giraudi	Draftman
Design by: L. Giraudi	Reviewer
Checked:	



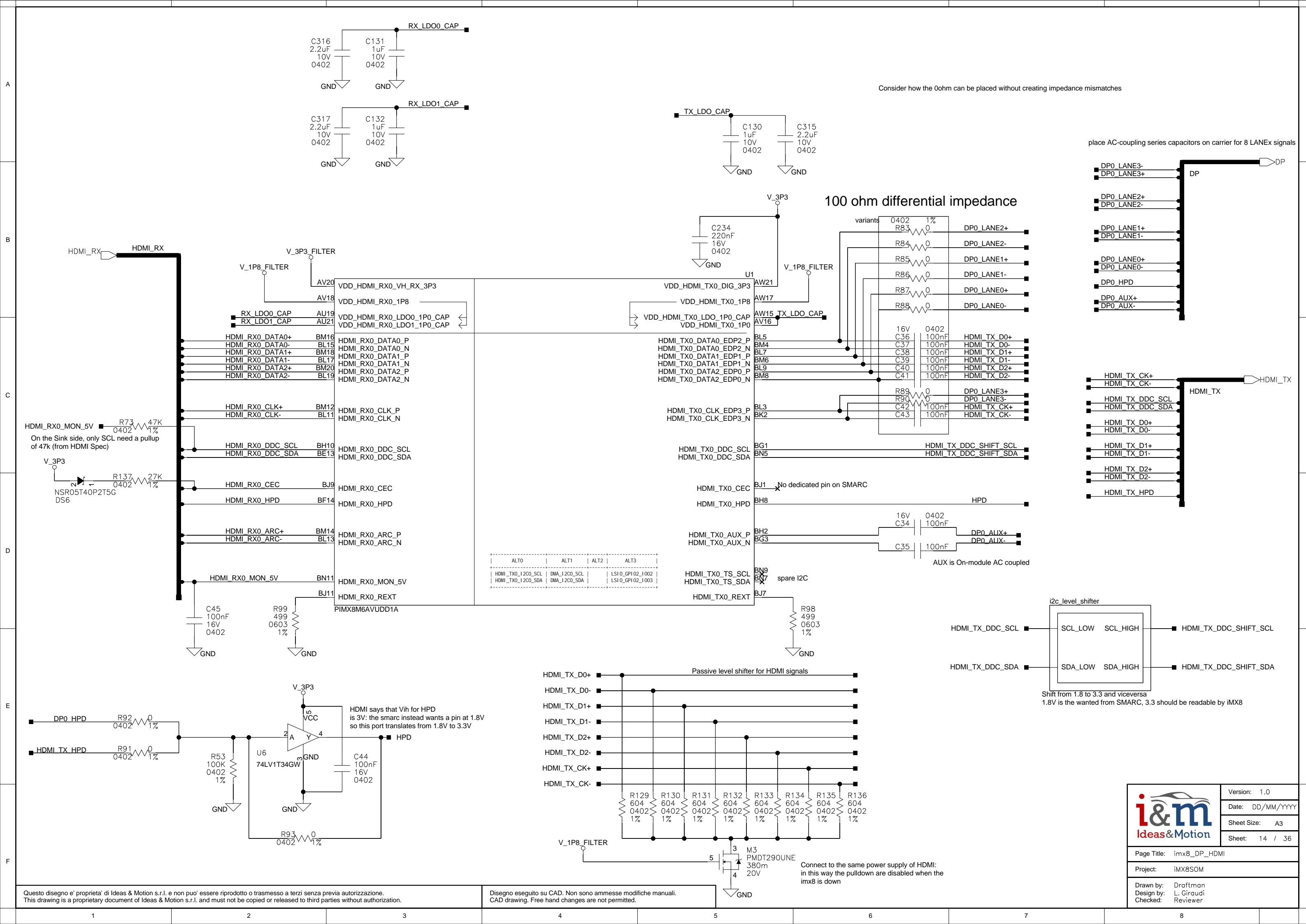
CK: bit clock  
LRCK: defines left/right channel.  
Two audio samples are sent every cycle

Tx and Rx are synchronous

Version: 1.0  
Date: DD/MM/YYYY  
Sheet Size: A4  
Sheet: 13 / 36

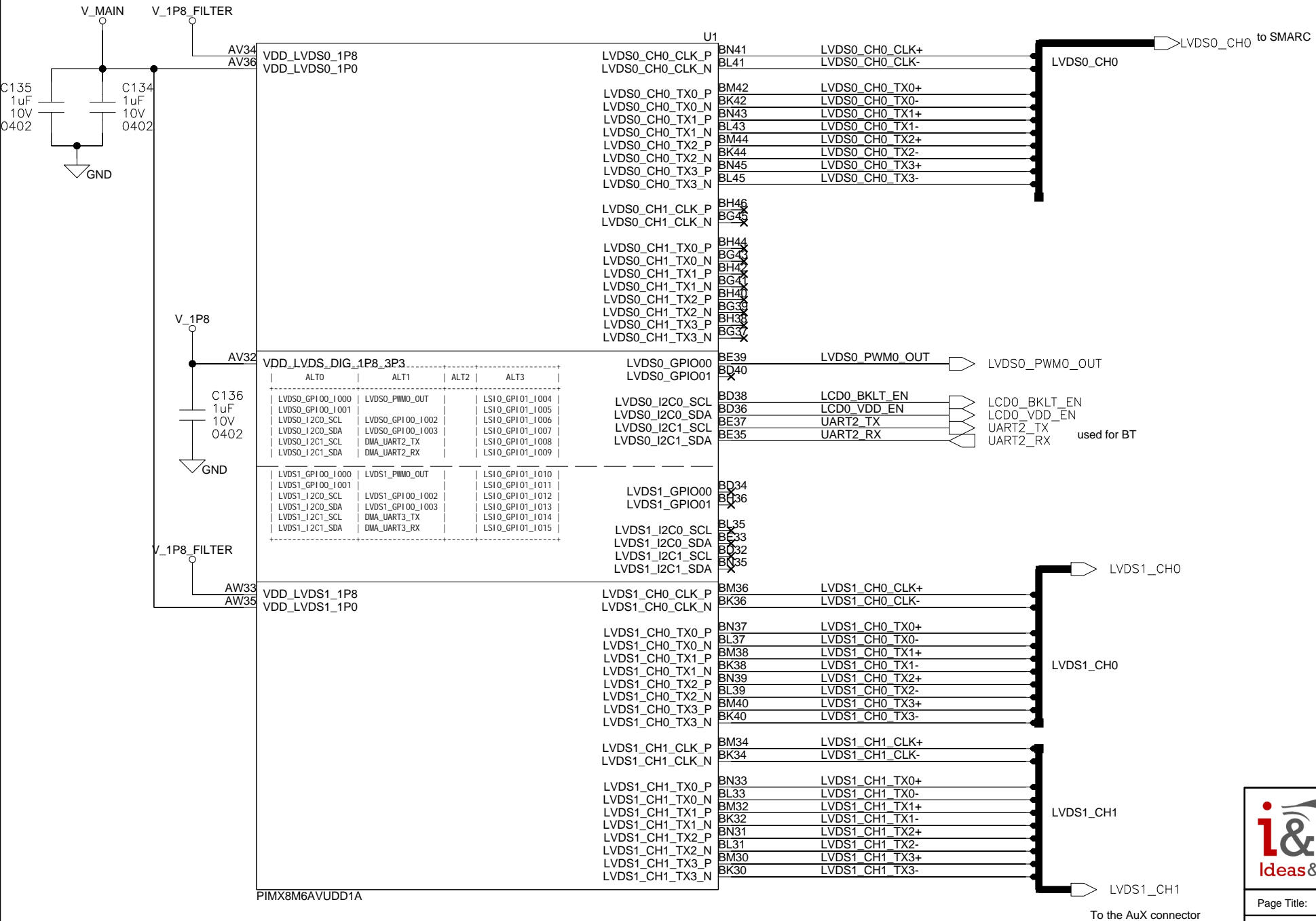
Page Title: imx8\_esai  
Project: iMX8SOM

Drawn by: Draftman  
Design by: L. Giraudi  
Checked: Reviewer

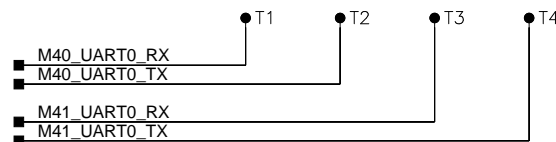
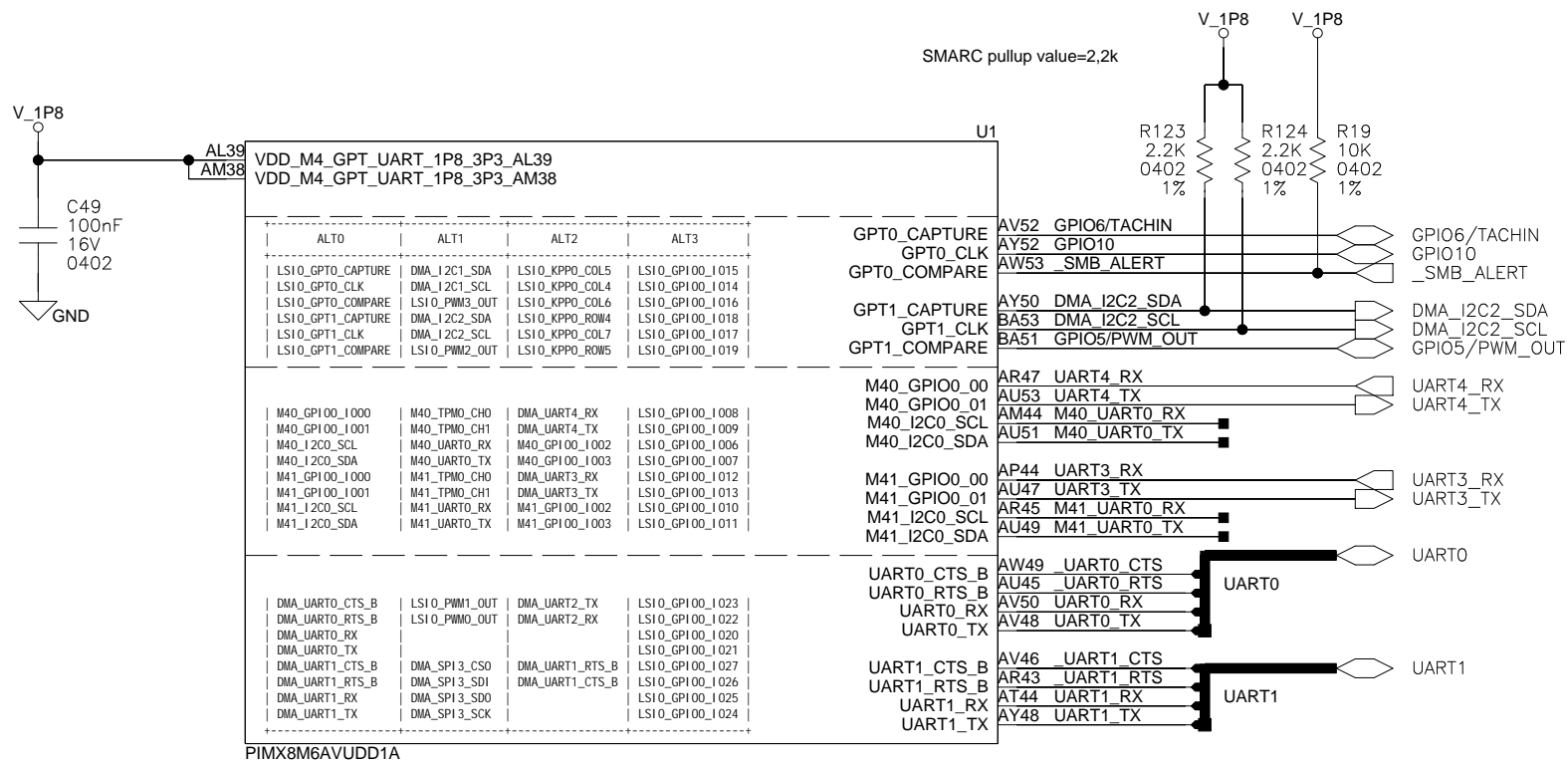




all LVDS traces should be 100 ohm differential impedance

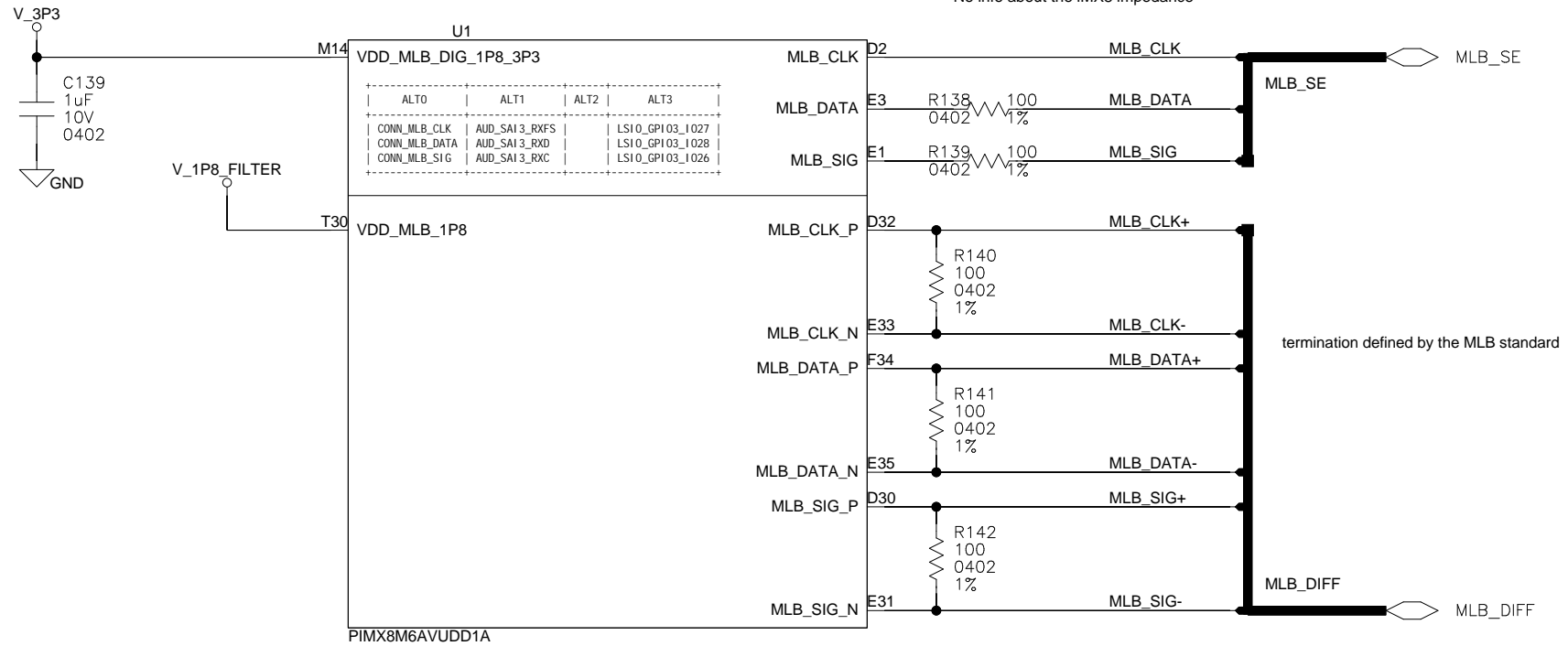



	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 15 / 36
Page Title: imx8_lvds	
Project: iMX8SOM	
Drawn by: Design by: Checked:	Draftman L. Giraudi Reviewer



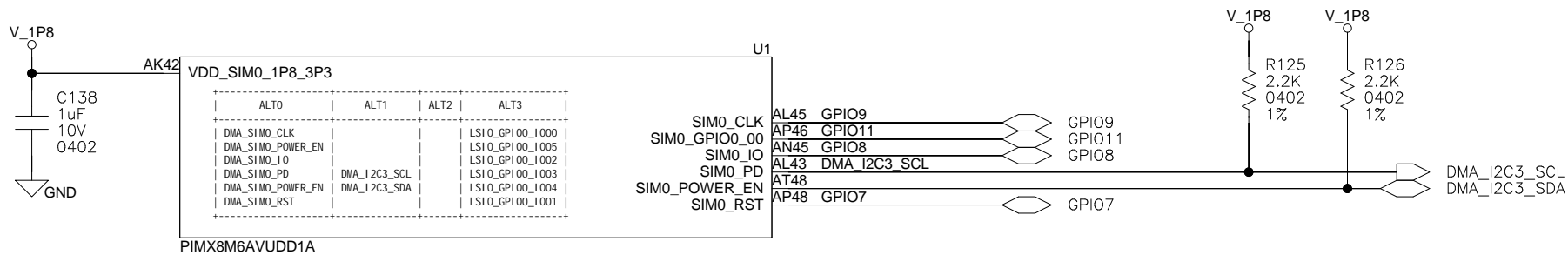
The same core has two different PHY: so they cannot be used at the same time


100ohm is the recommended value, it is not mandatory to use that.  
No info about the iMX8 impedance



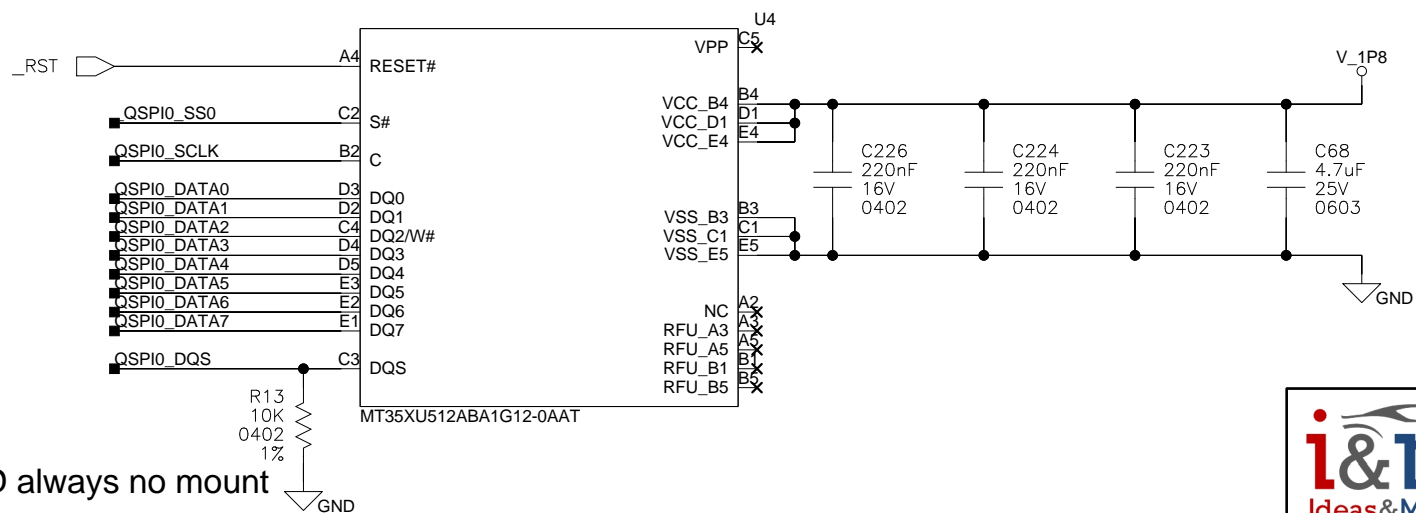
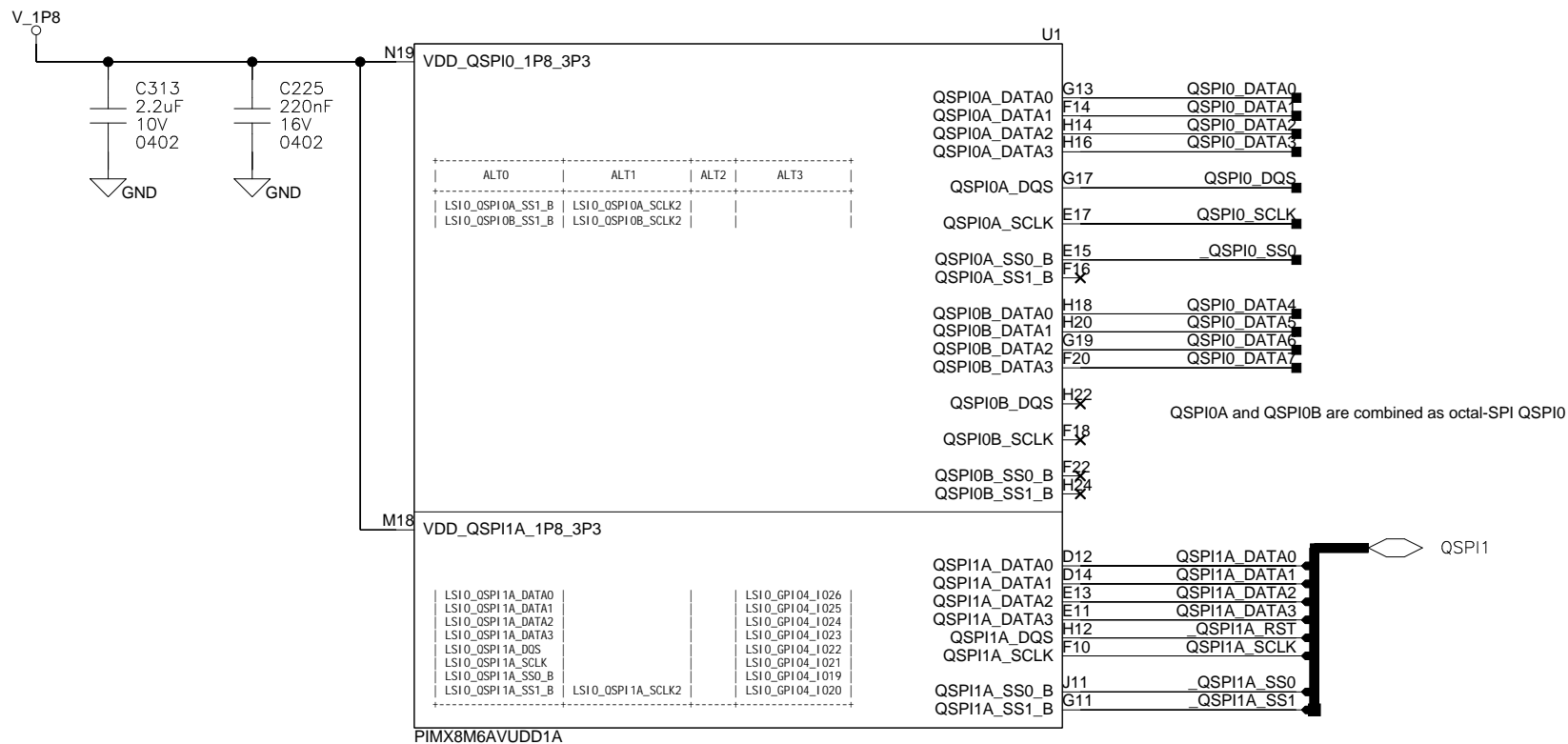
	Version: 1,0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 17 / 36
Page Title: imx8_mlb	
Project: iMX8SOM	
Drawn by:	Draftman
Design by:	L. Giraudi
Checked:	Reviewer





	Version: 1,0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 19 / 36
Page Title: imx8_sim	
Project: iMX8SOM	
Drawn by:	Draftman
Design by:	L. Giraudi
Checked:	Reviewer

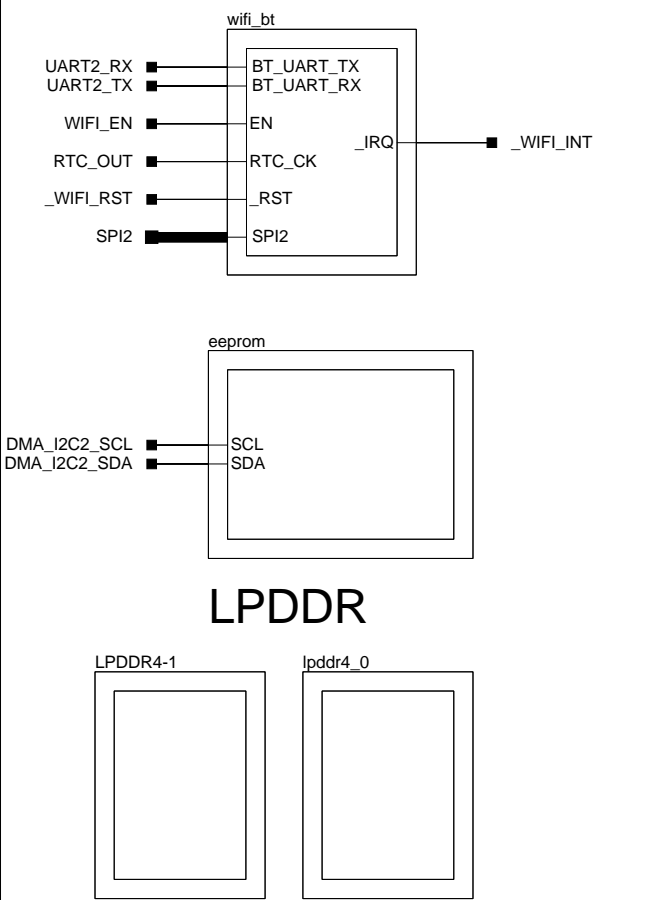
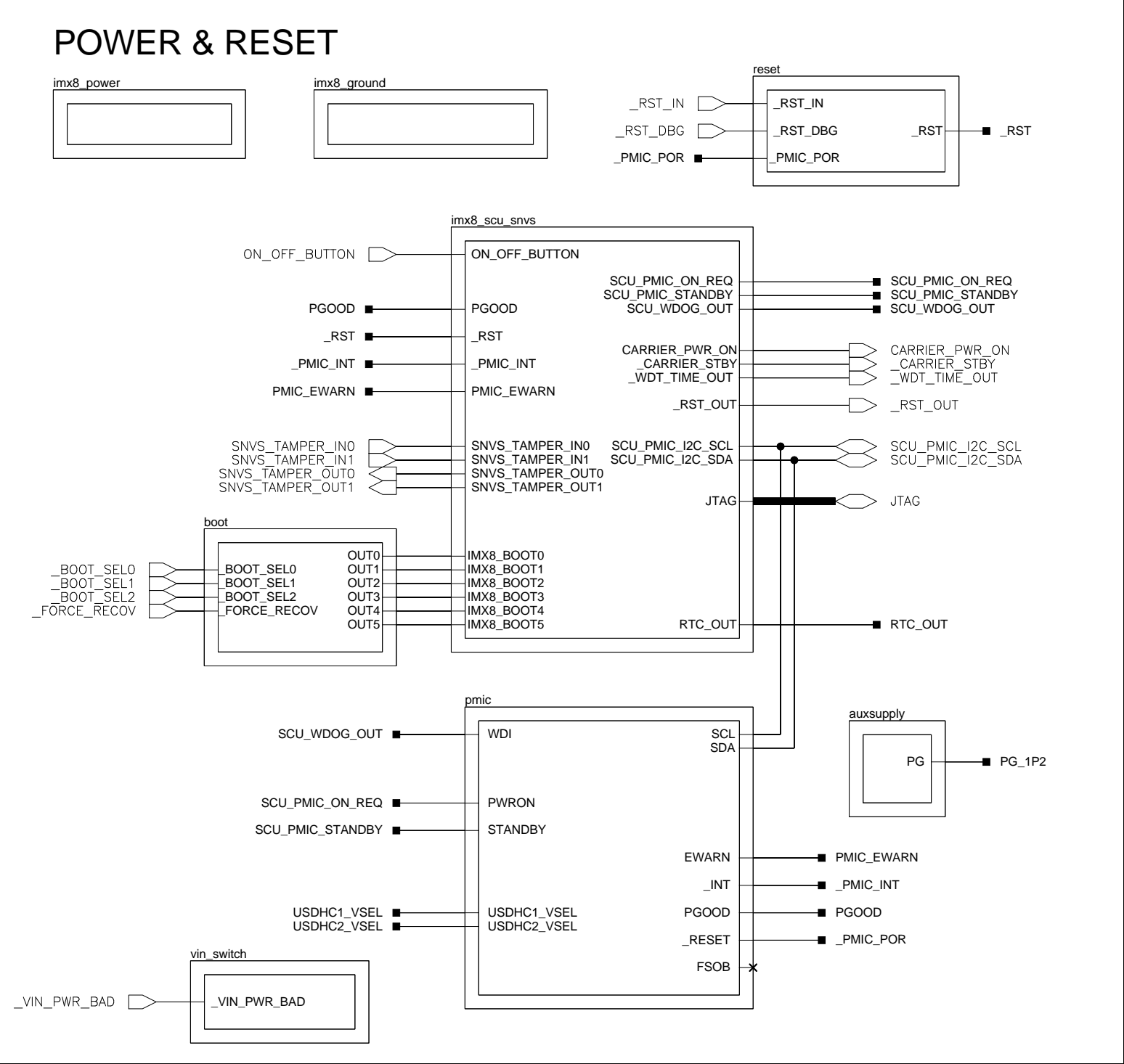




	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 20 / 36
Page Title: Flash	
Project: iMX8SOM	
Drawn by: L. Giraudi Design by: L. Giraudi Checked: L. Giraudi	Draftman Reviewer

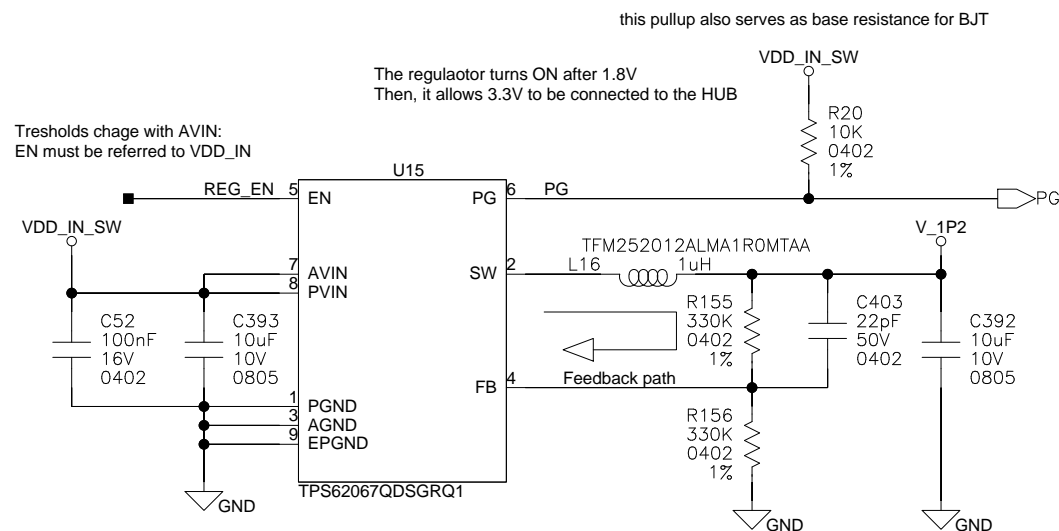
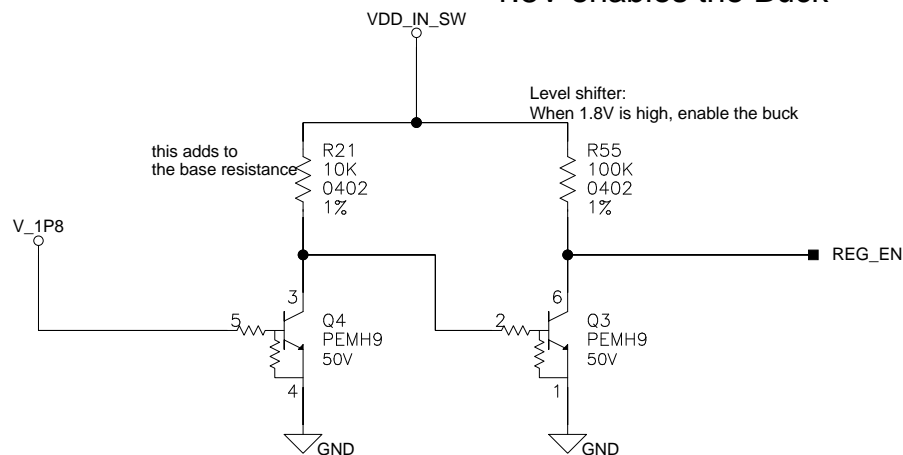


# POWER & RESET

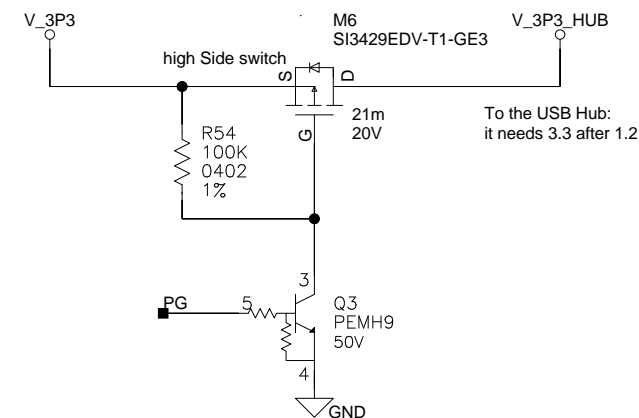



	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 22 / 36
Page Title: Module	
Project: iMX8SOM	
Drawn by:	Draftman
Design by:	L. Giraudi
Checked:	Reviewer

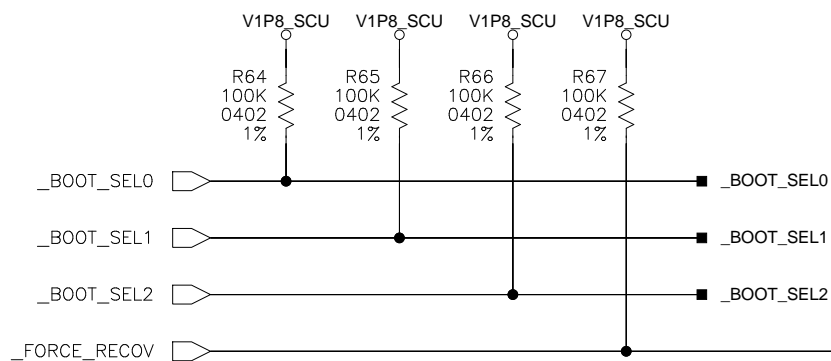
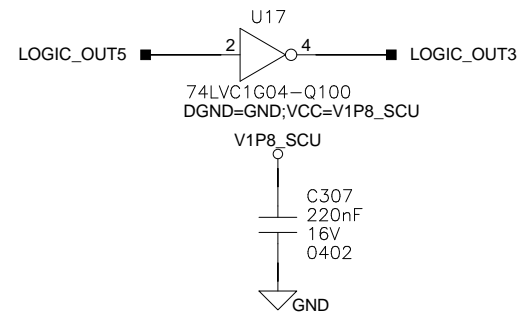
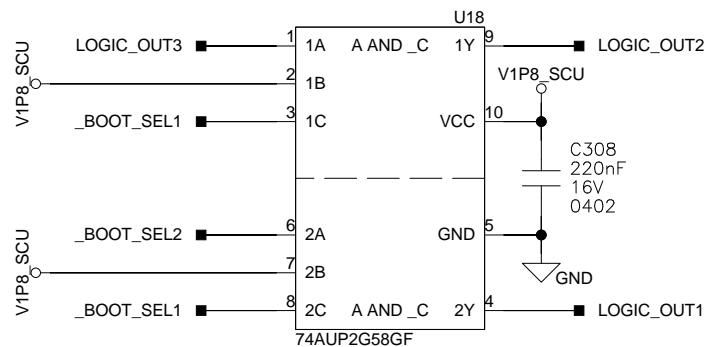
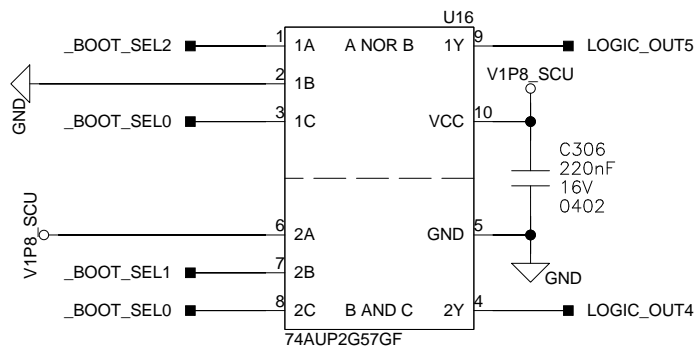
## 1.8V enables the Buck



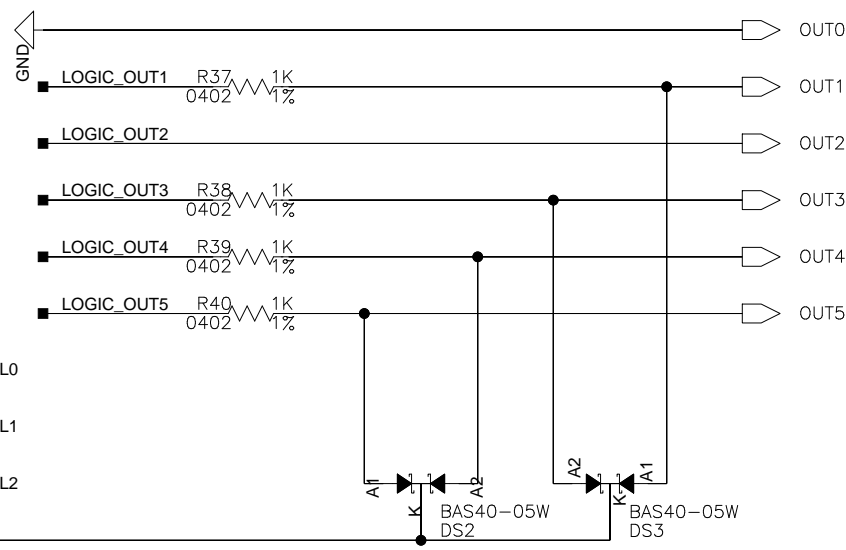
## the buck PG enables the 3.3V to USB Hub



	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 23 / 36
Page Title: SW_REG_1P2V	
Project: iMX8SOM	
Drawn by:	Draftman
Design by:	L. Giraudi
Checked:	Reviewer



\_FORCE\_RECOV pulls down every output except OUT2 which is DONT'CARE as long as fuses are not programmed



y5	y4	y3	y2	y1	y0	x2	x1	x0	Boot
1	0	0	0	0	0	0	0	0	SATA
0	0	1	1	0	0	0	0	1	USHDC1
0	0	1	1	1	0	1	0	0	USHDC2
0	0	1	0	0	0	1	1	0	eMMC0
0	1	1	0	0	0	1	1	1	SPI

y <-> OUT  
x <-> \_BOOT\_SEL

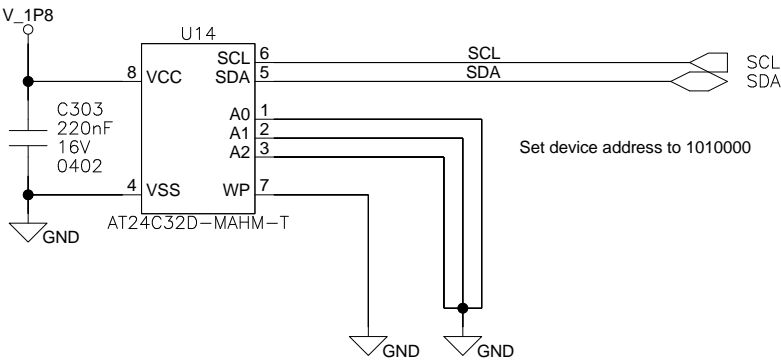
y5 = !(x2 + x0)  
y4 = x1 \* x0  
y3 = !y5

y2 = y3 \* !x1  
y1 = x2 \* !x1  
y0 = 0

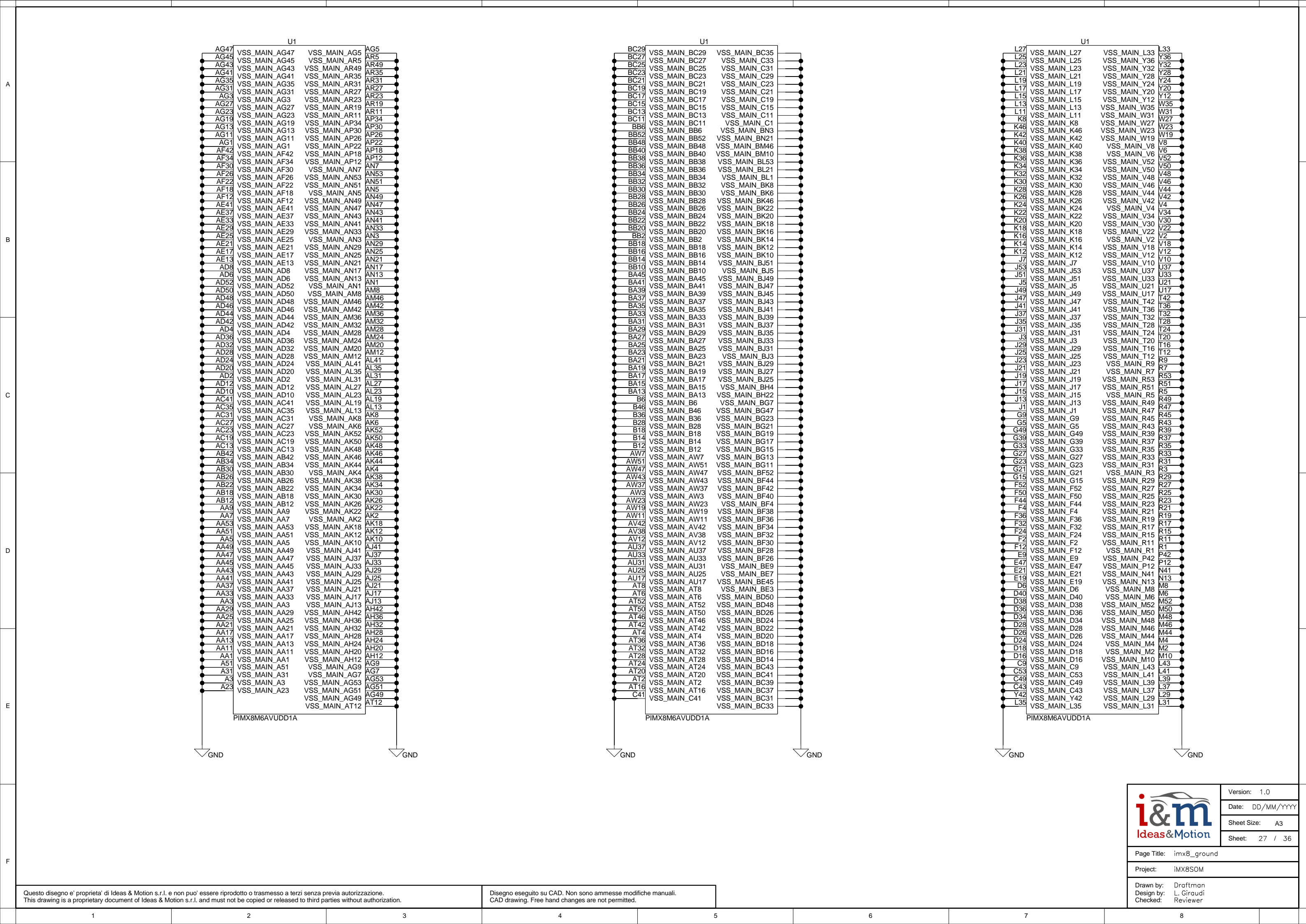
	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 24 / 36
Page Title: Boot_logic_network	
Project: iMX8SOM	
Drawn by:	Draftman
Design by:	L. Giraudi
Checked:	Reviewer

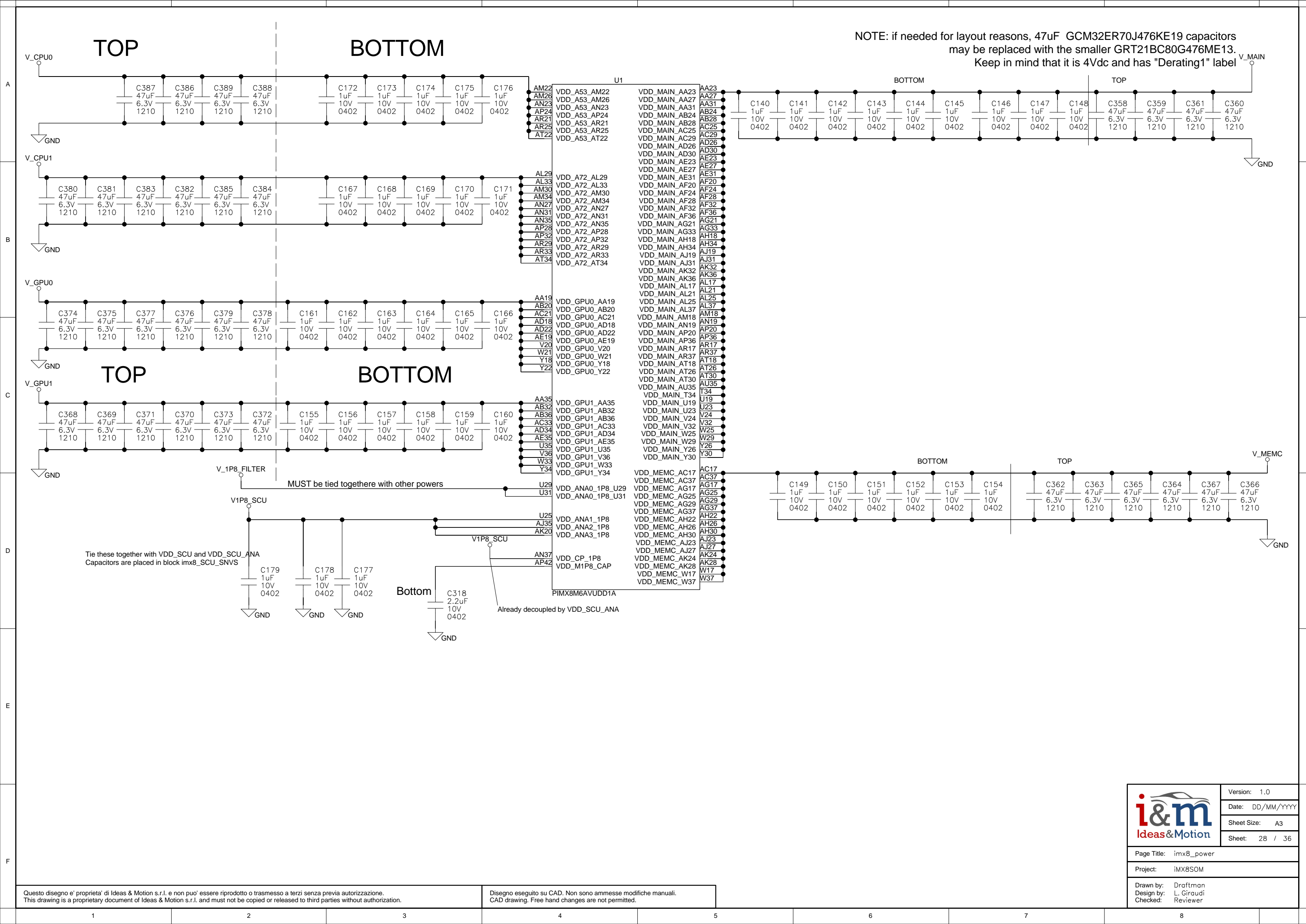


Required by SMARC standard, stores info about module.



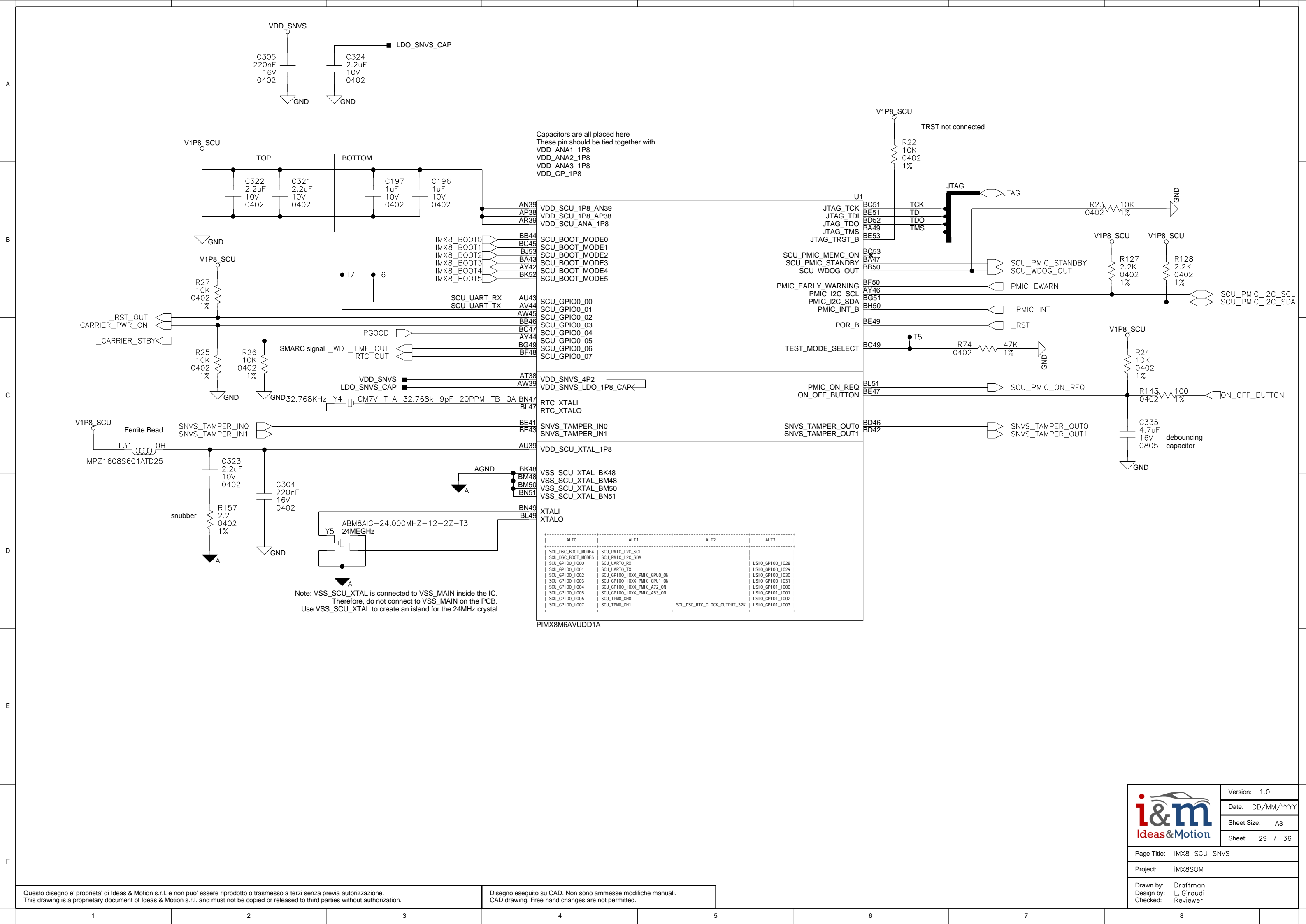
	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 26 / 36
Page Title: eeprom_i2c_1	
Project: iMX8SOM	
Drawn by: Draftman	
Design by: L. Giraudi	
Checked: Reviewer	





Version: 1.0  
Date: DD/MM/YYYY  
Sheet Size: A3  
Sheet: 28 / 36

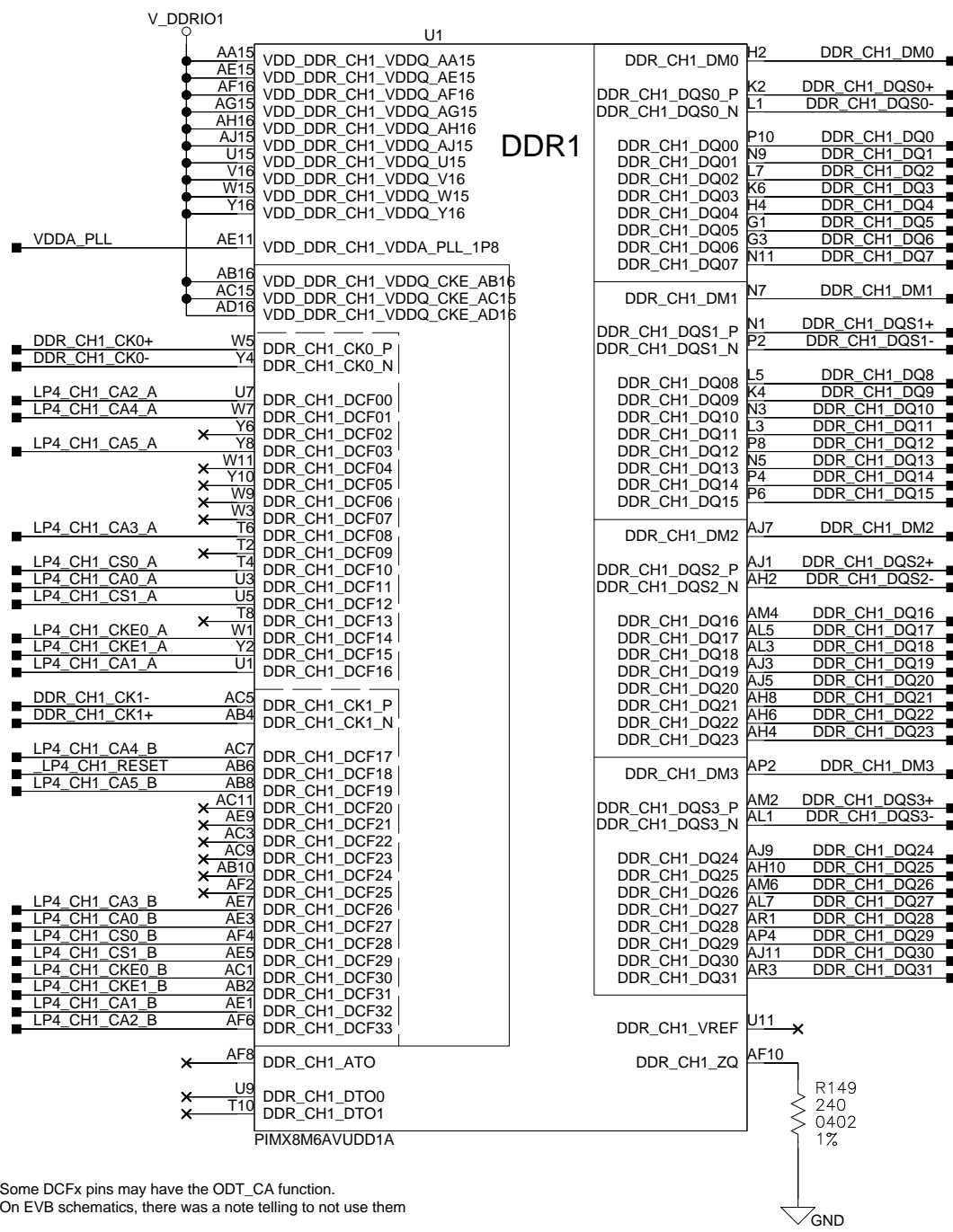
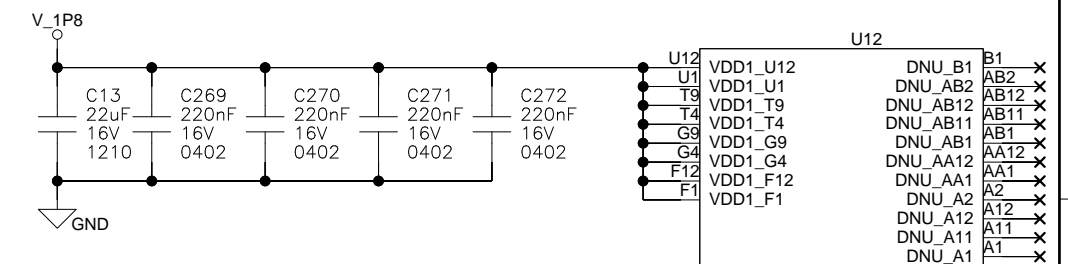
Page Title: imx8\_power  
Project: imx8S0M  
Drawn by: Draftman  
Design by: L. Giraudi  
Checked: Reviewer




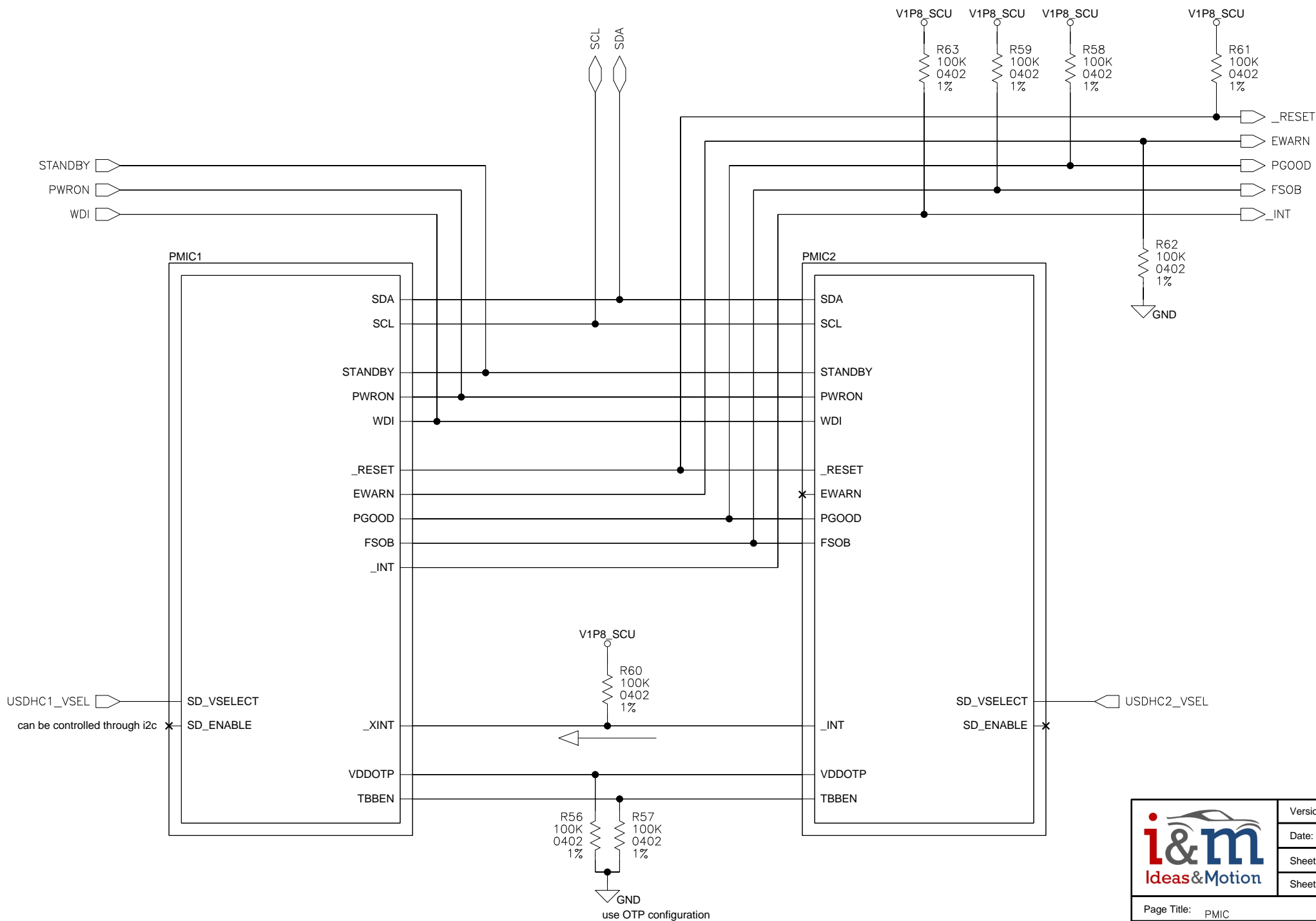





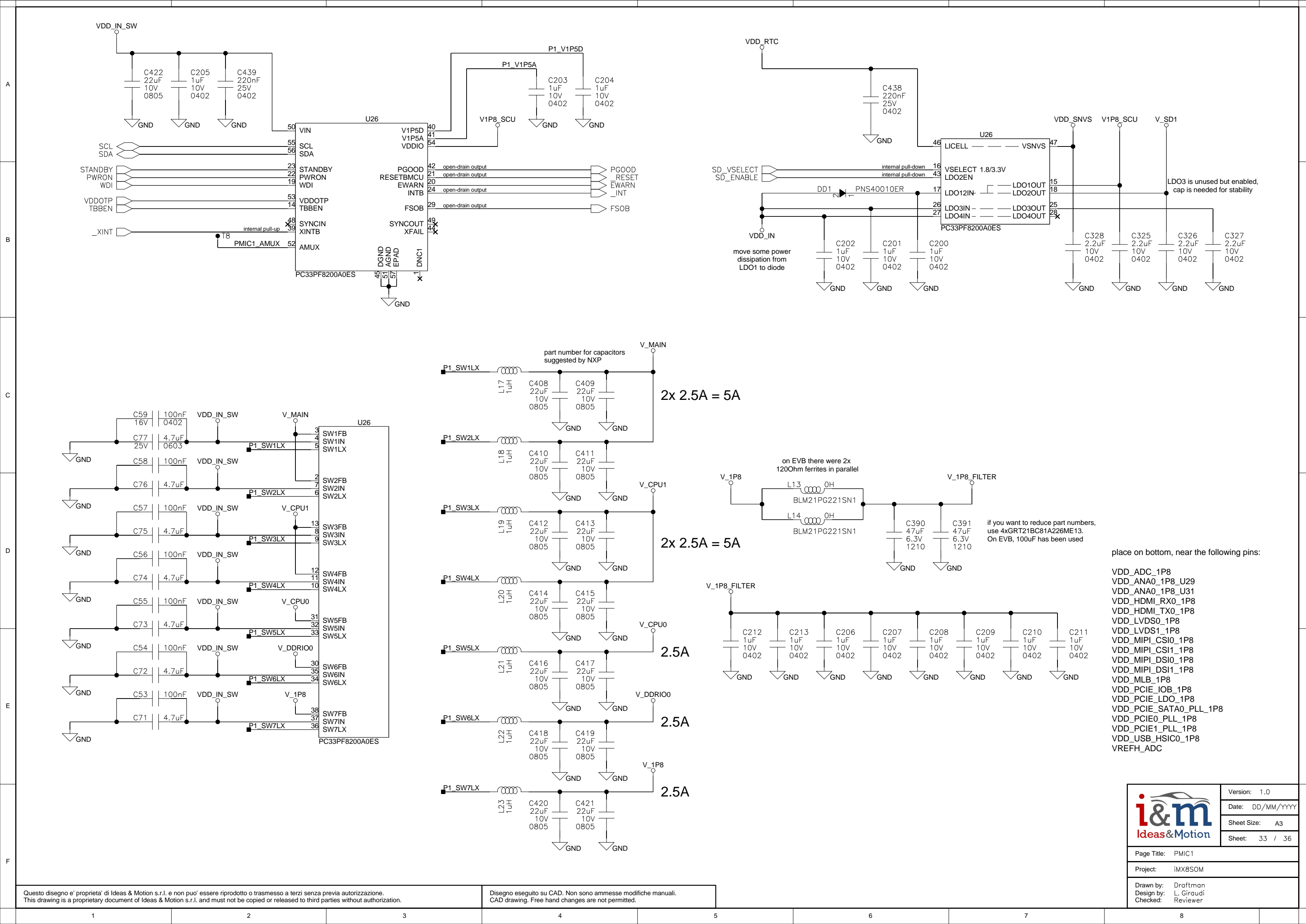


[illegible]

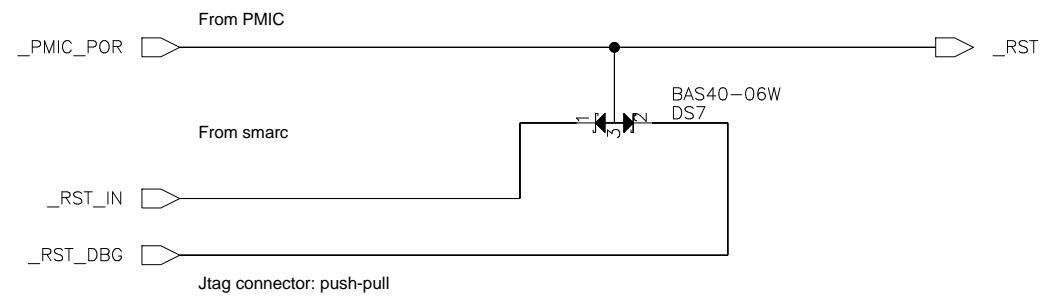
	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A3
	Sheet: 31 / 36
Page Title: LPDDR4	
Project: iMX8SOM	
Drawn by: Draftman Design by: L. Giraudi Checked: Reviewer	




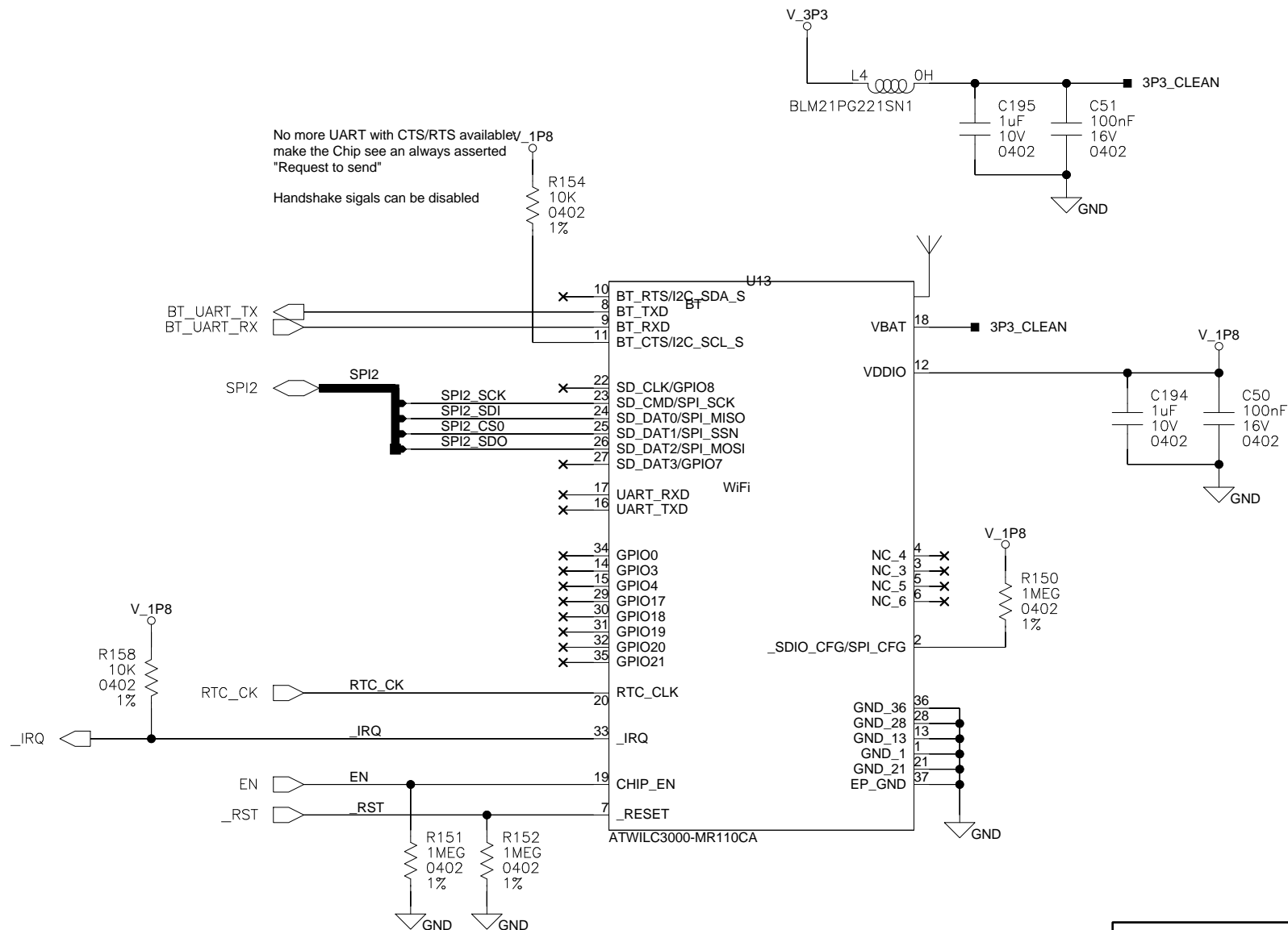
	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 32 / 36
Page Title: PMIC	
Project: iMX8SOM	
Drawn by:	Draftman
Design by:	L. Giraudi
Checked:	Reviewer




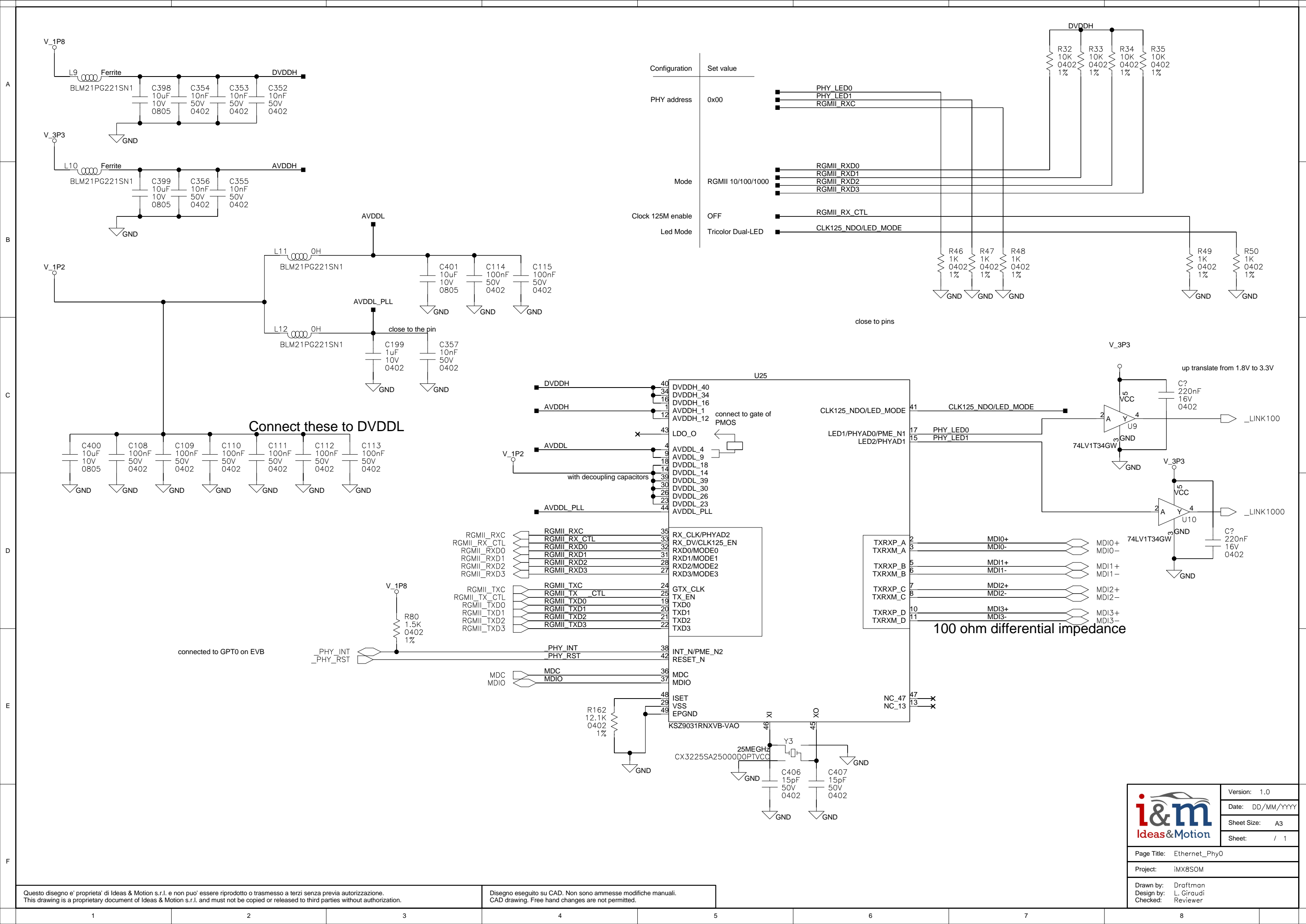




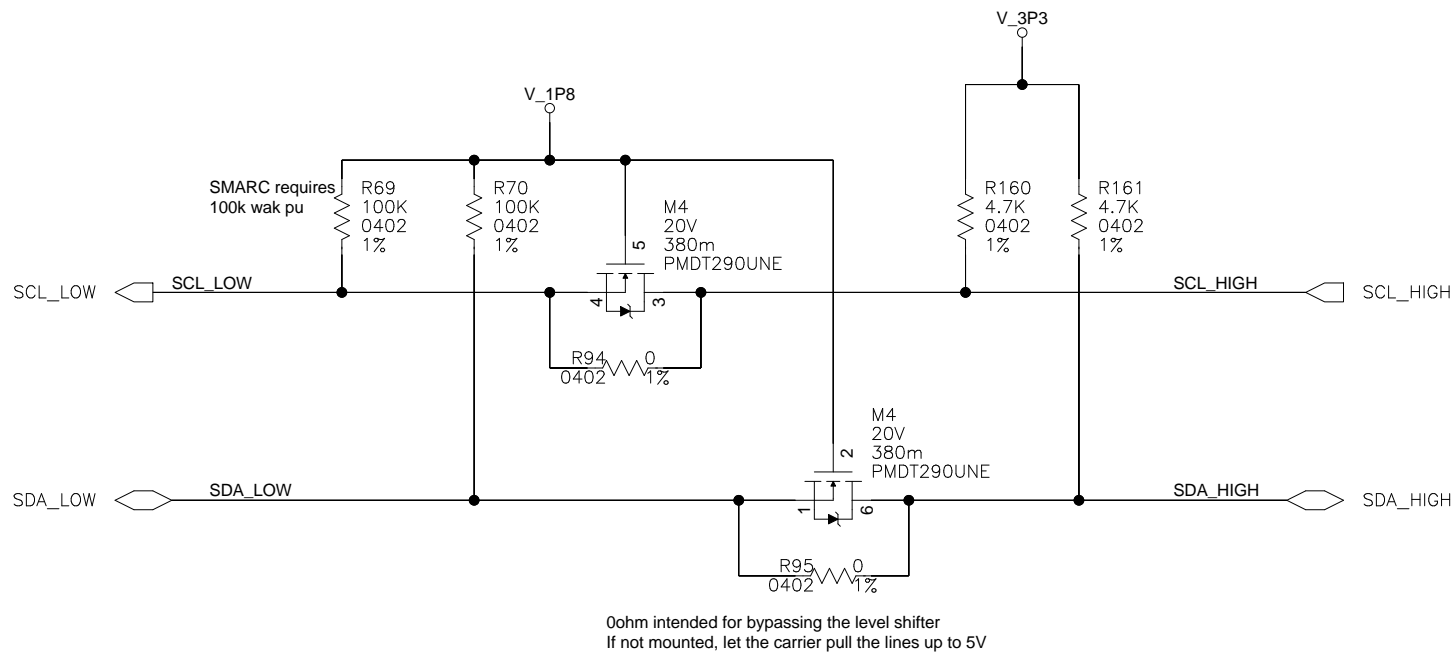
	Version: 1,0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 35 / 36
Page Title: reset_circuit	
Project: iMX8SOM	
Drawn by: Draftman Design by: L. Giraudi Checked: Reviewer	




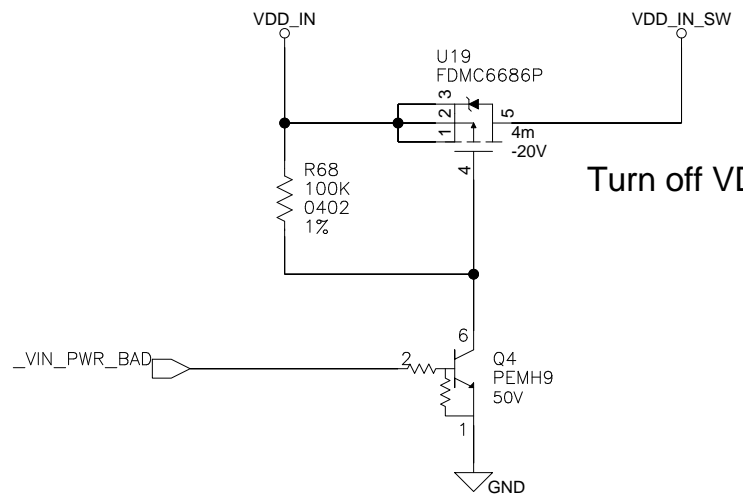
	Version: 1,0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: 36 / 36
Page Title: Wireless	
Project: iMX8SOM	
Drawn by:	Draftman
Design by:	L. Giraudi
Checked:	Reviewer








	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: / 37
Page Title: i2c_level_shifter	
Project: iMX8SOM	
Drawn by: Draftman	
Design by: L. Giraudi	
Checked: Reviewer	



Turn off VDD\_IN\_SW when \_VIN\_PWR\_BAD is low

	Version: 1.0
	Date: DD/MM/YYYY
	Sheet Size: A4
	Sheet: / 37
Page Title: vin_switch	
Project: iMX8S0M	
Drawn by: Draftman	
Design by: L. Giraudi	
Checked: Reviewer	