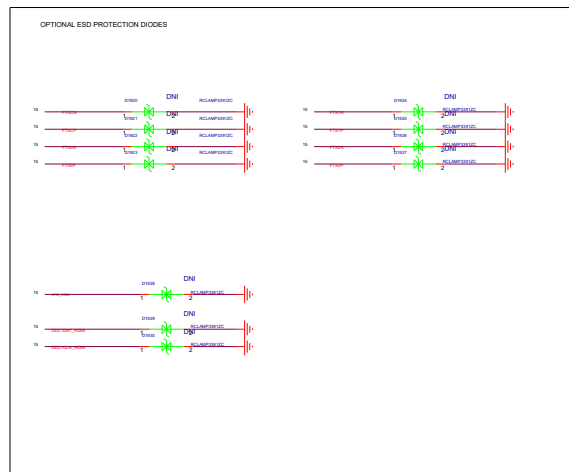
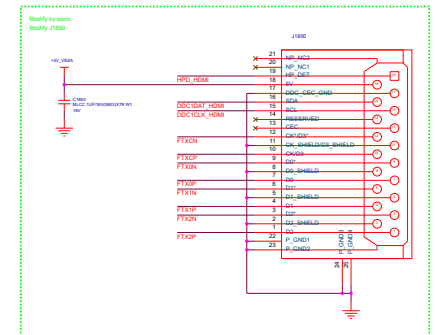
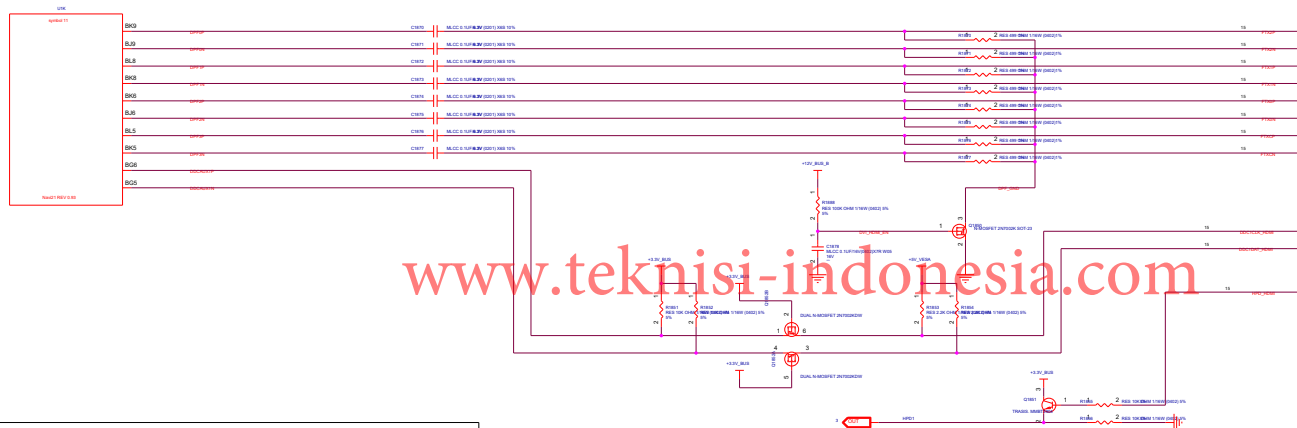
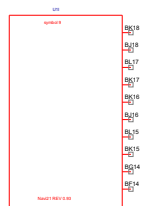
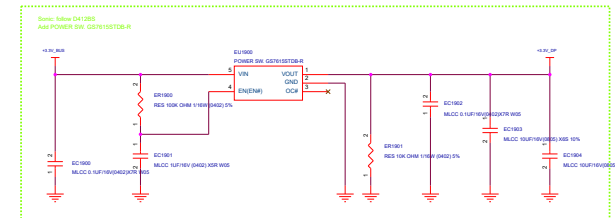
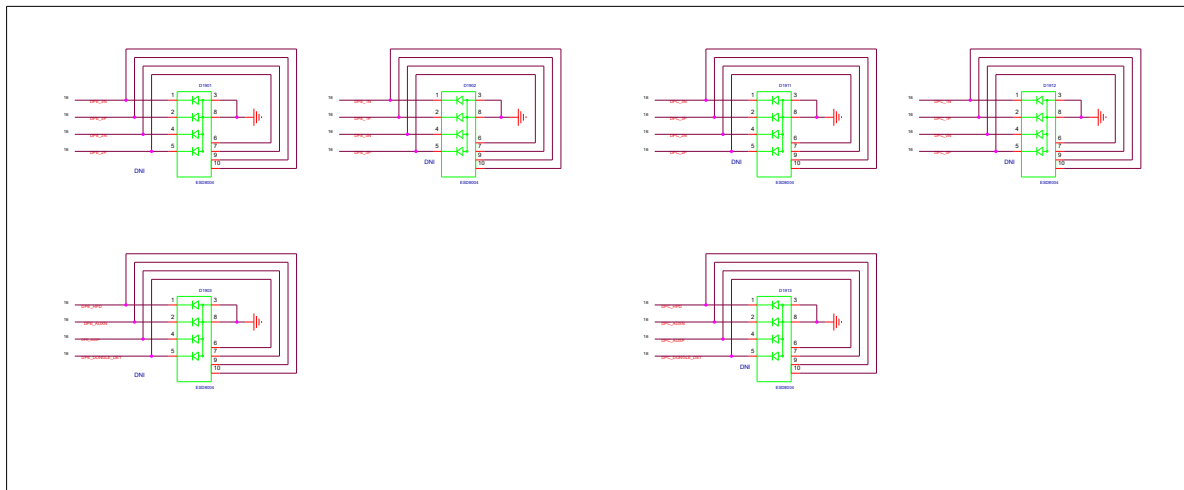
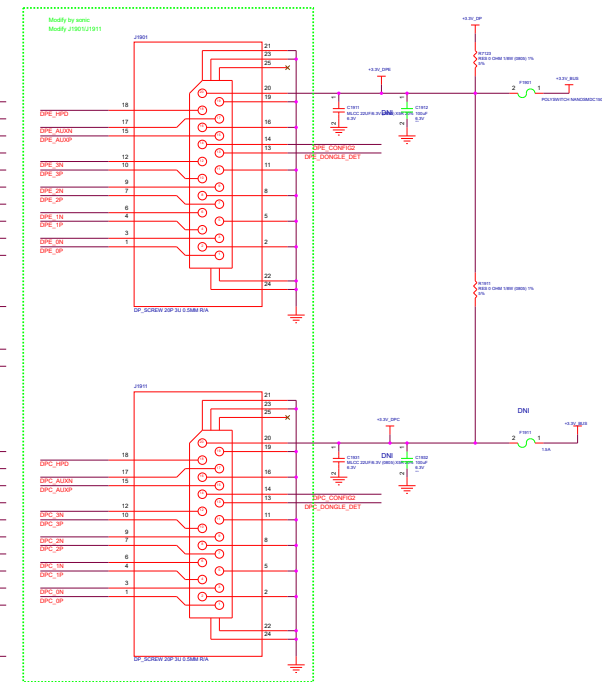
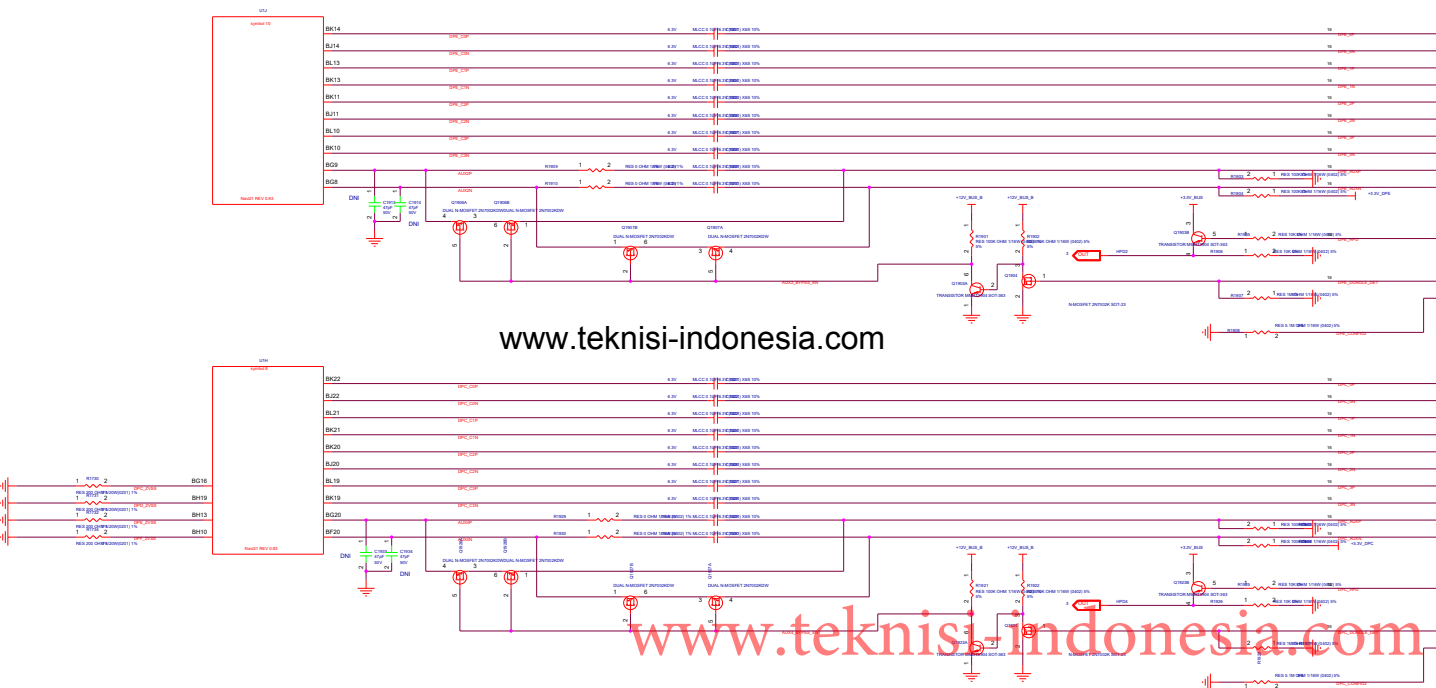


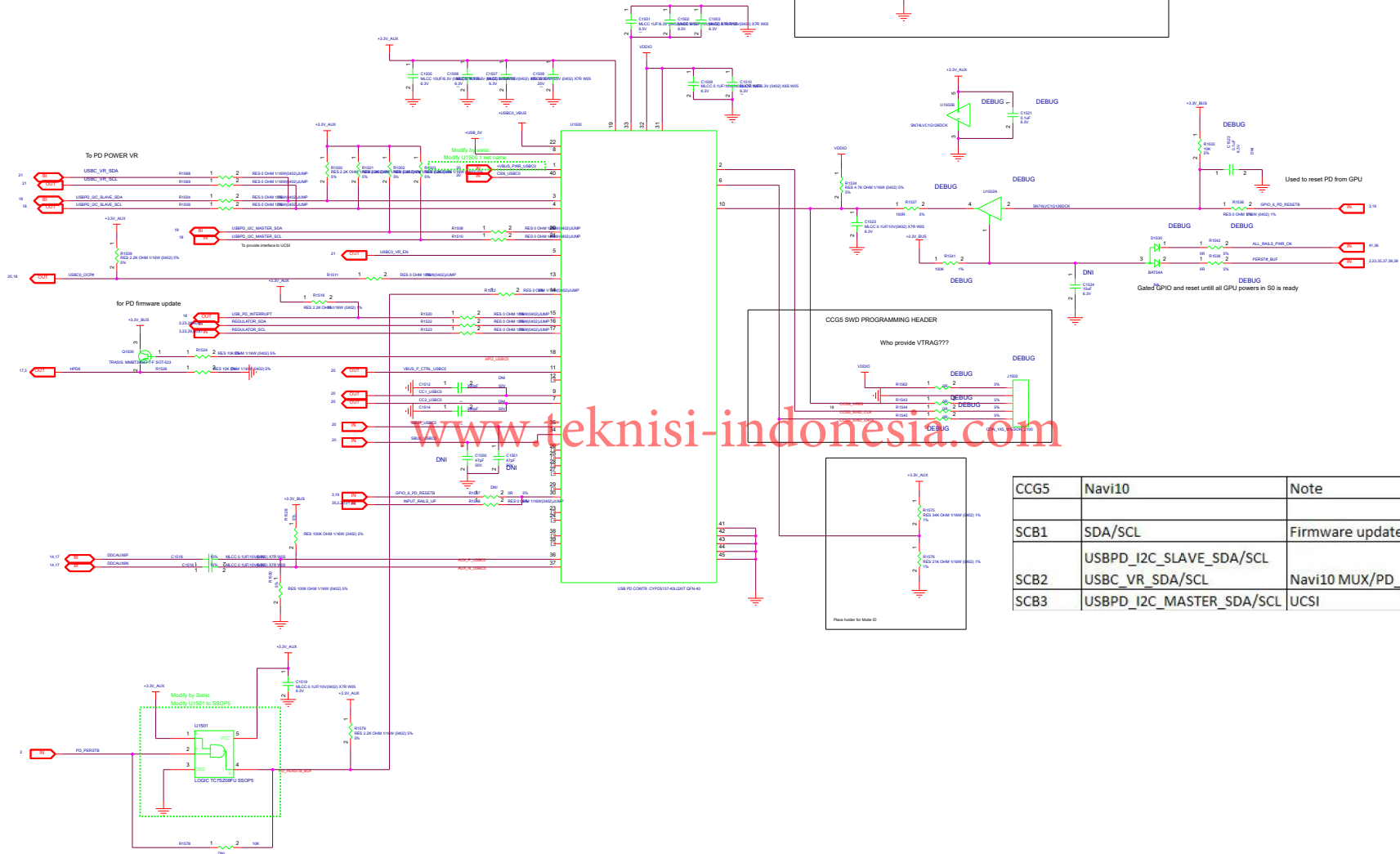
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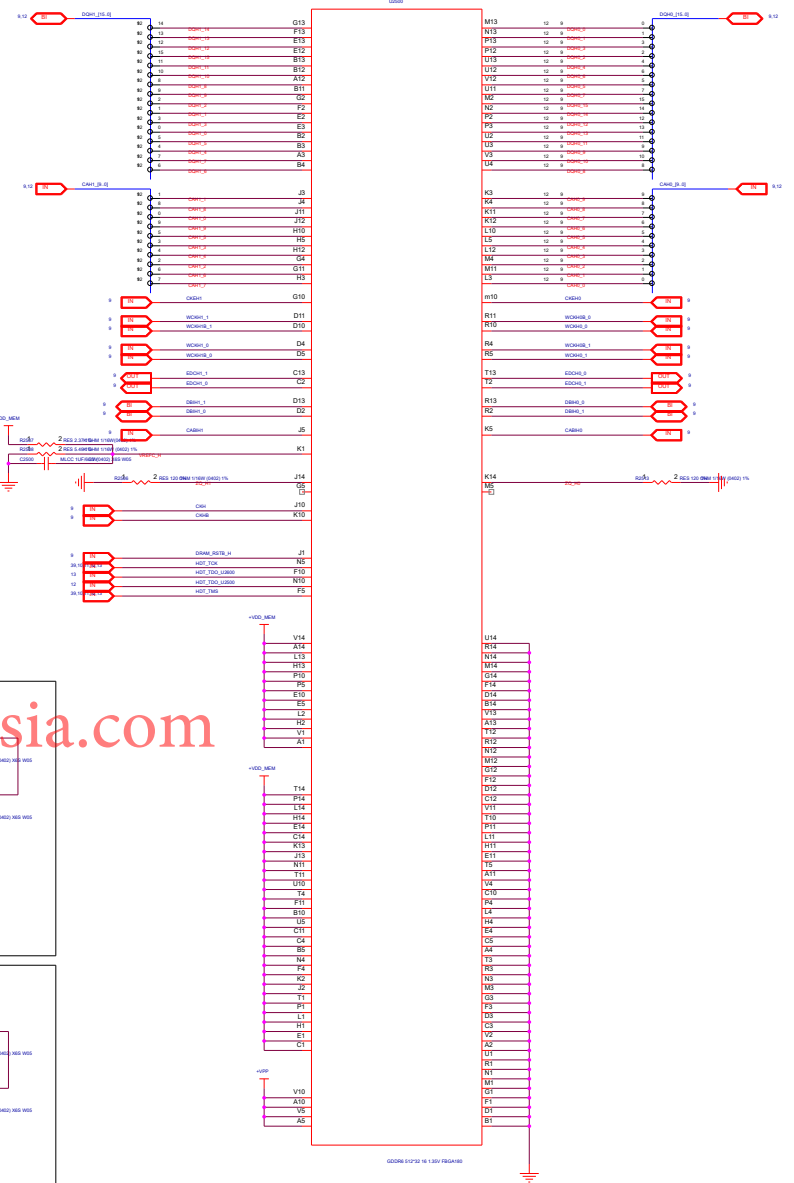
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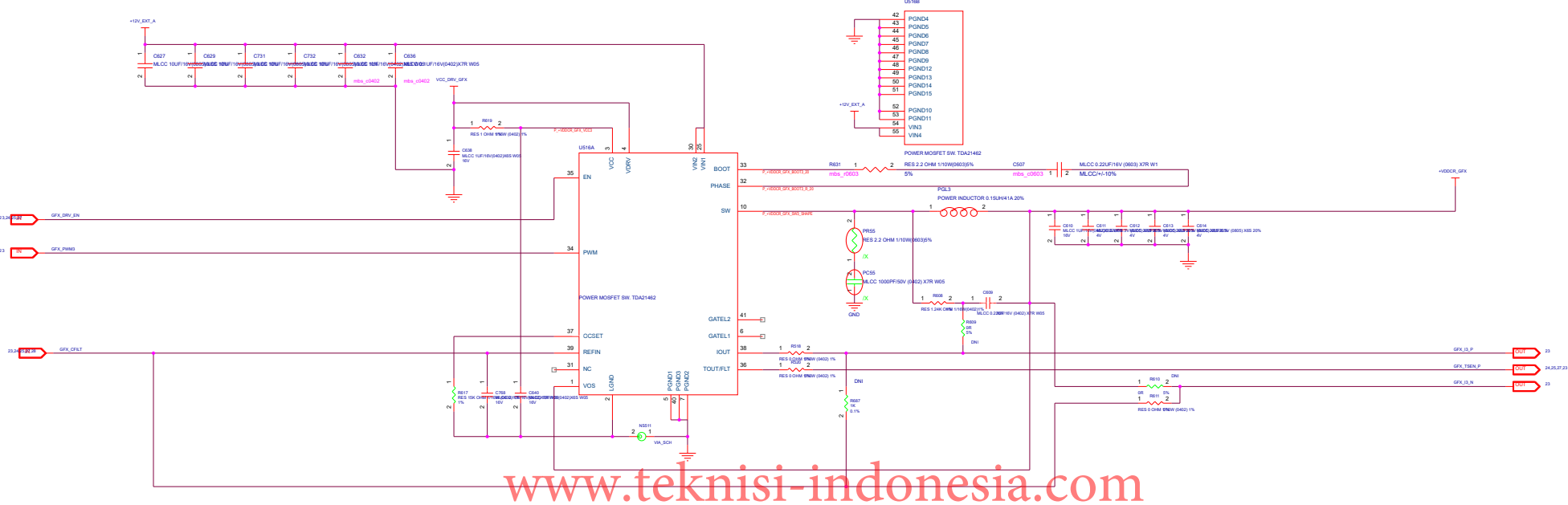
for GPU DP/USB COMBY PHY





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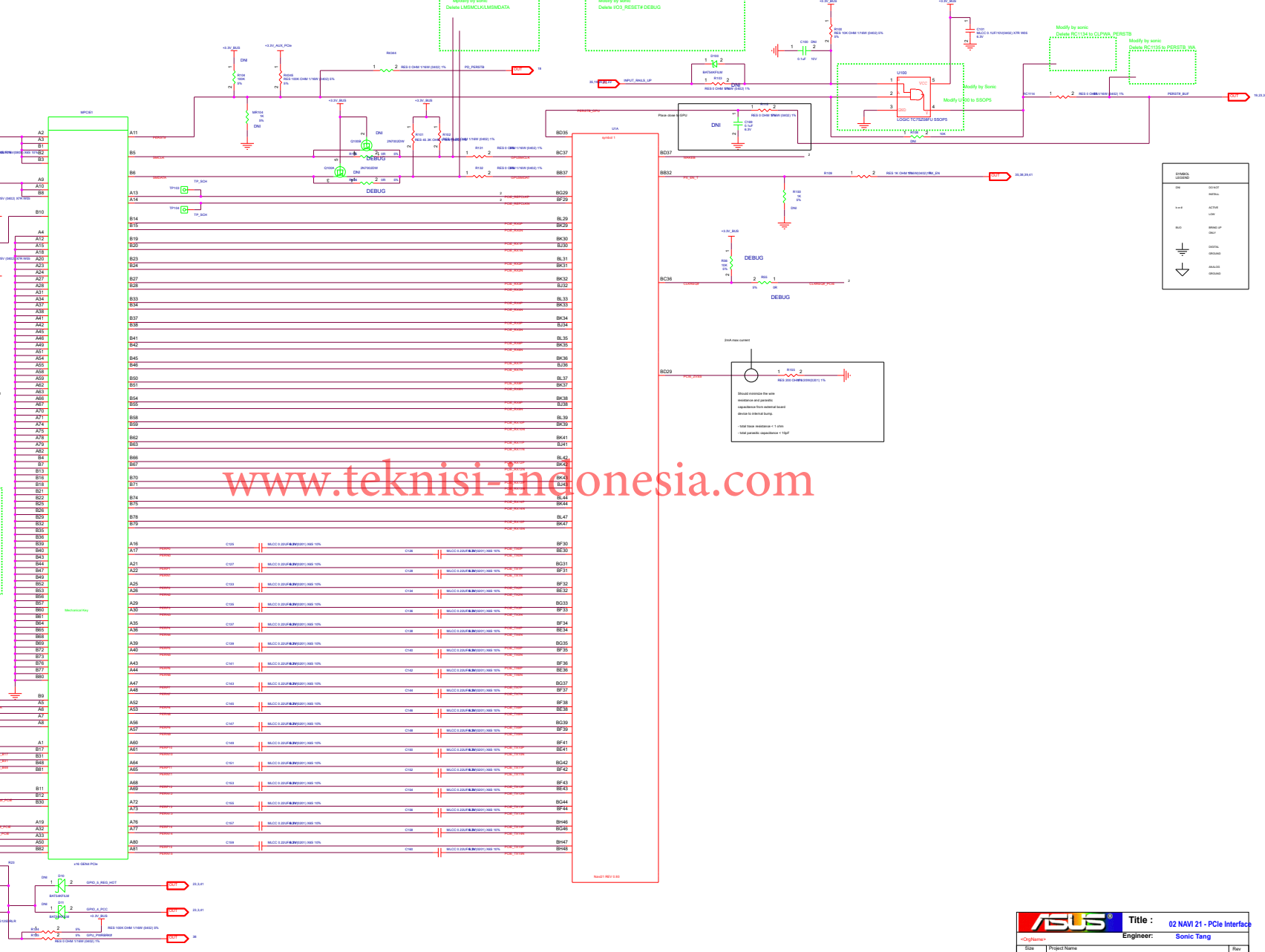
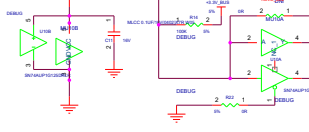
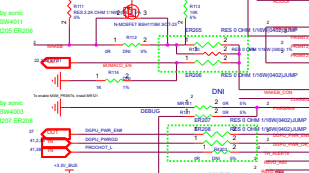
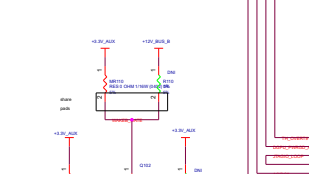
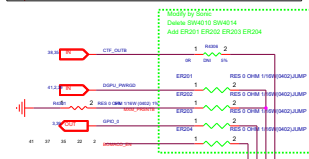


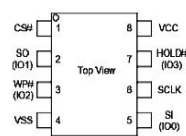
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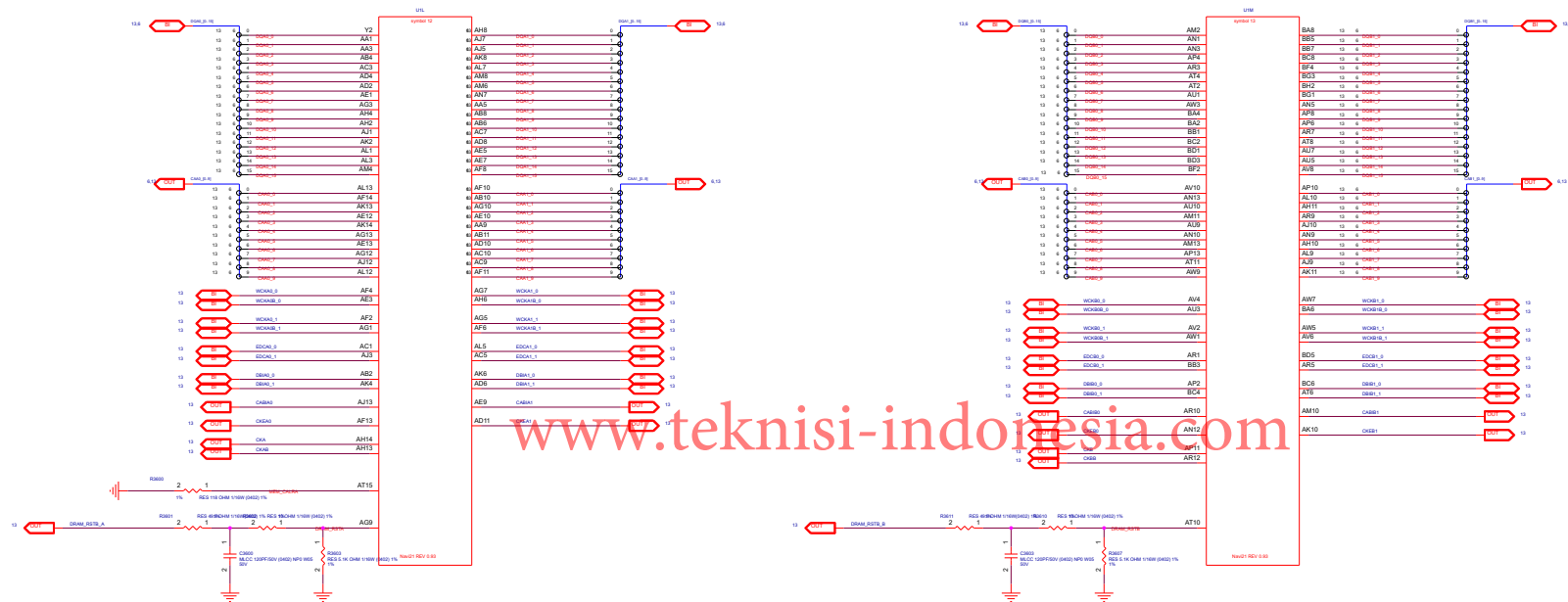




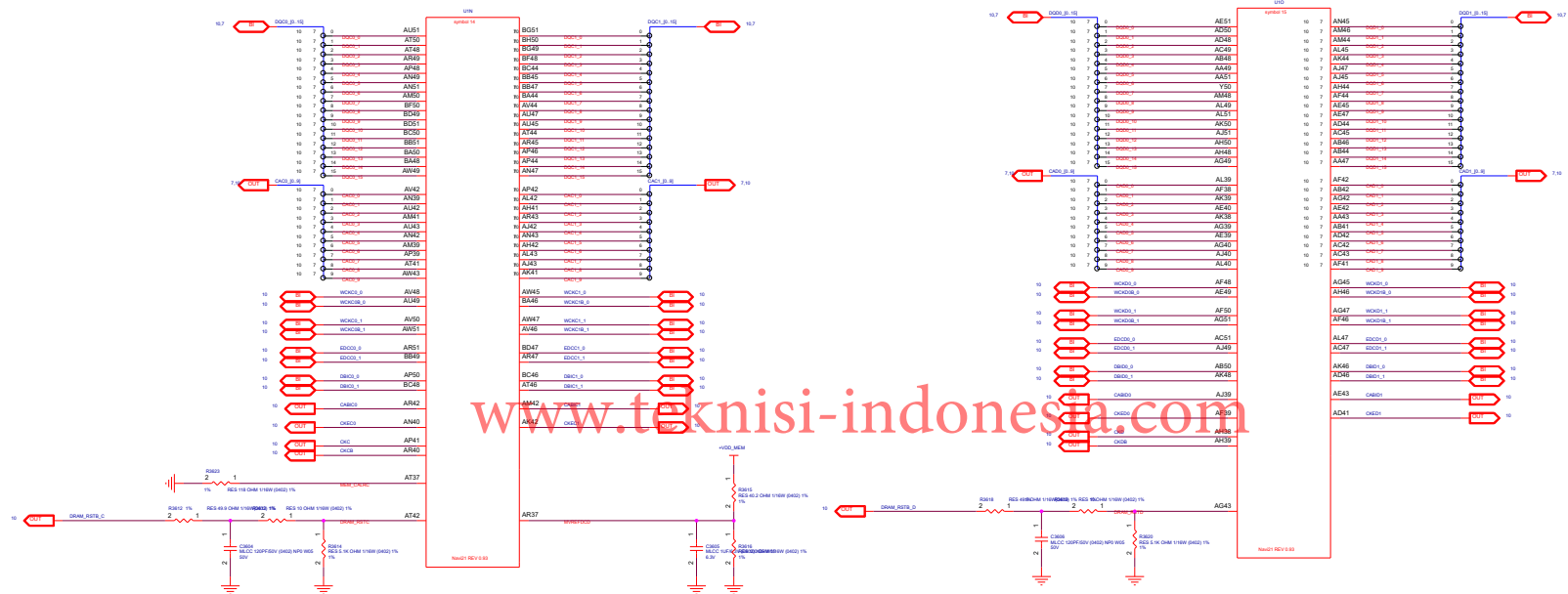
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<b>&lt;OrigName&gt;</b>		<b>Engineer:</b> Sonic Tang	
Size Custom	Project Name <b>D414S</b>		Rev 1.01X
Date: Wednesday, August 26, 2020		Sheet: 14 of 50	



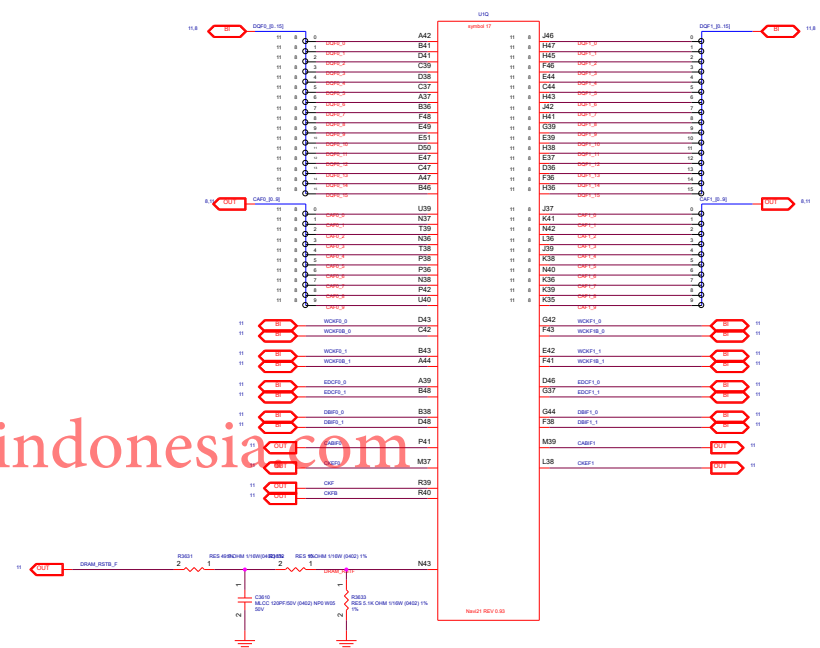


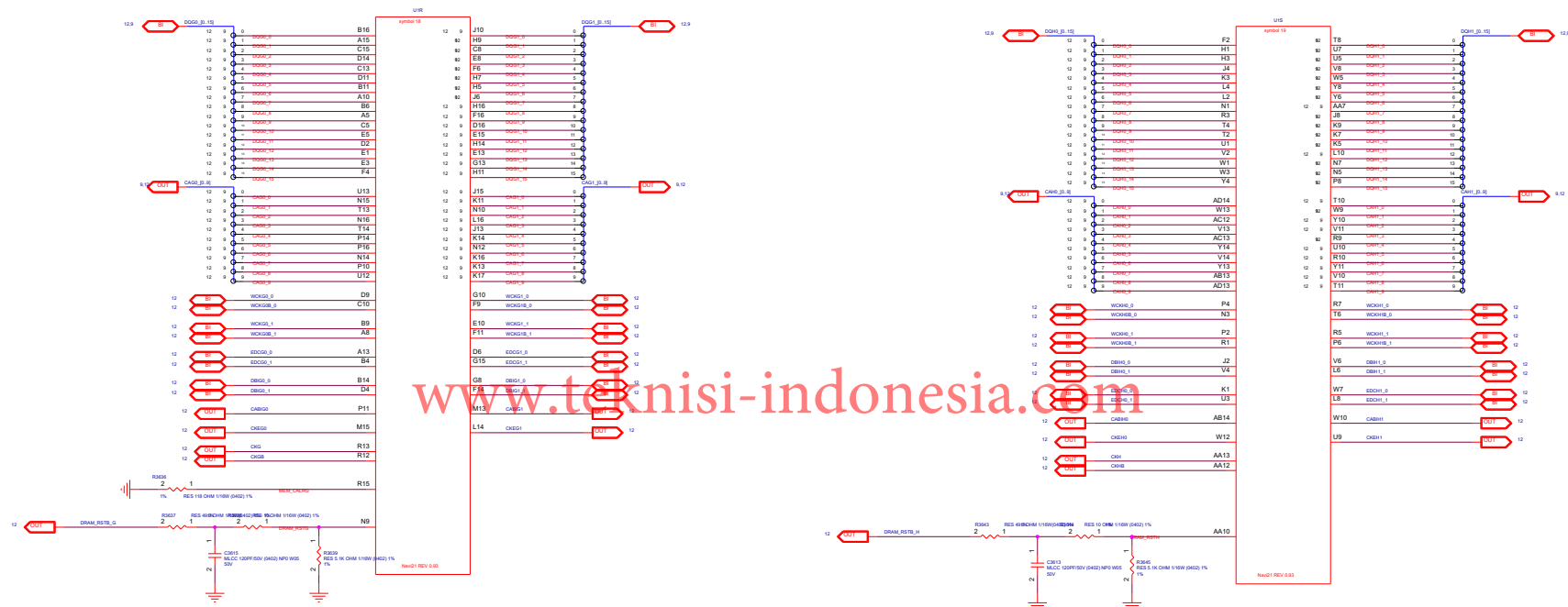


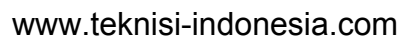




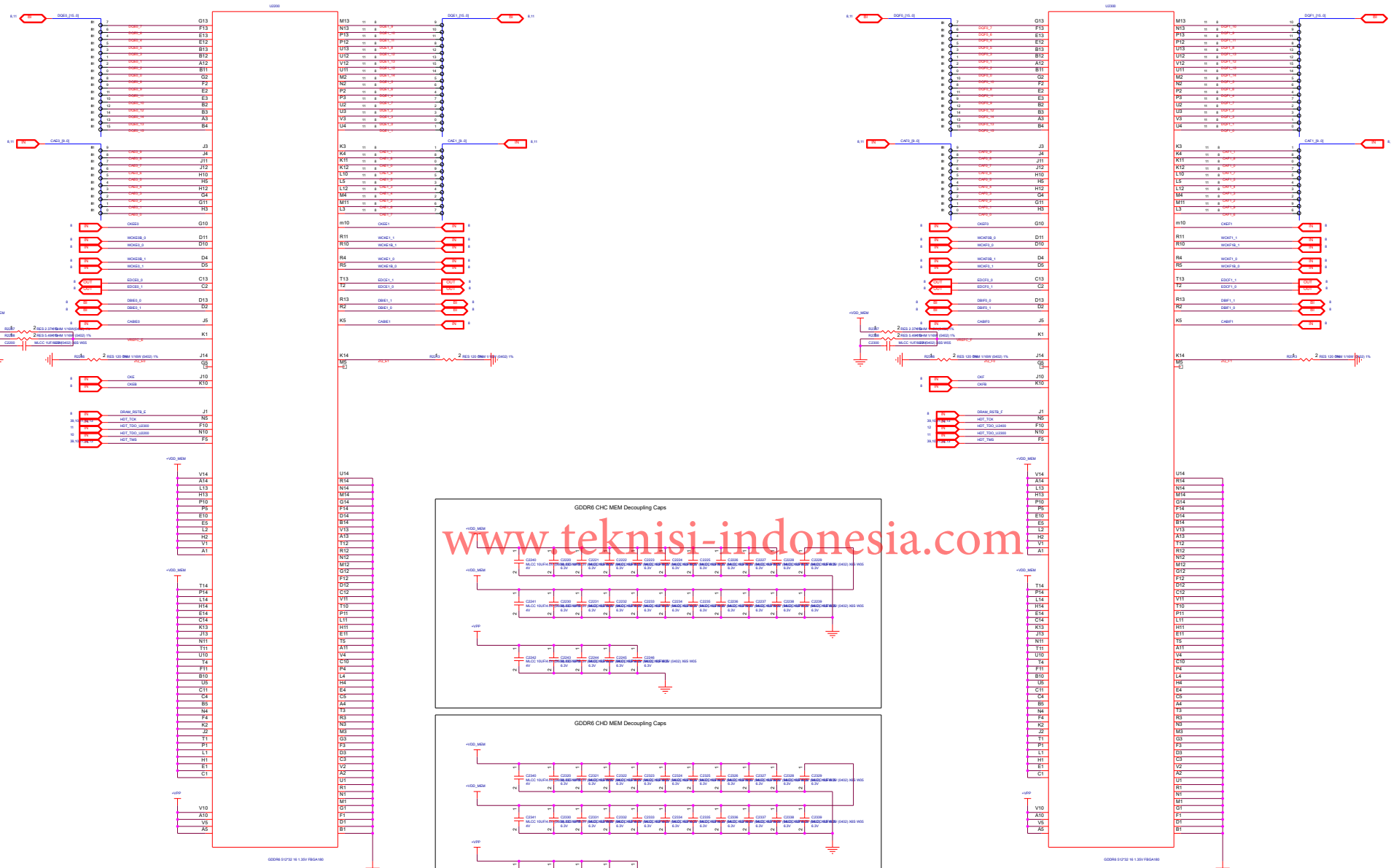
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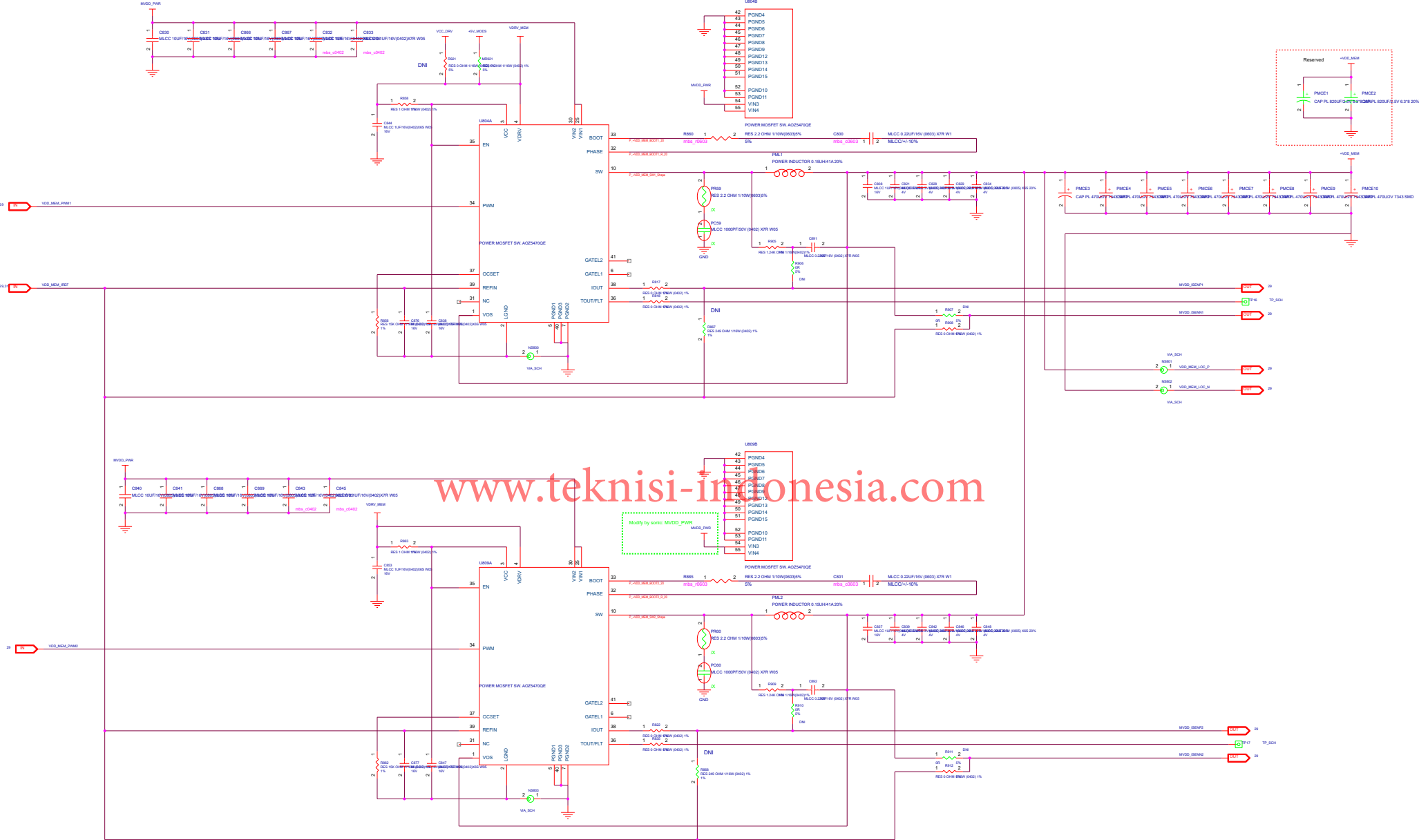


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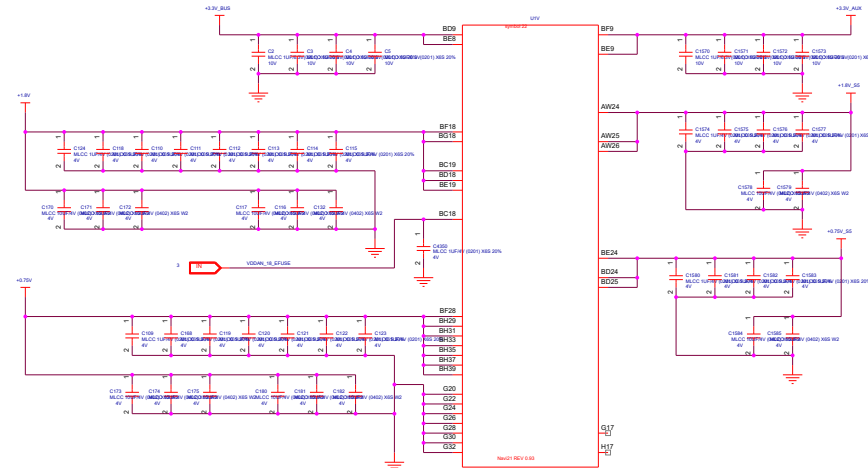
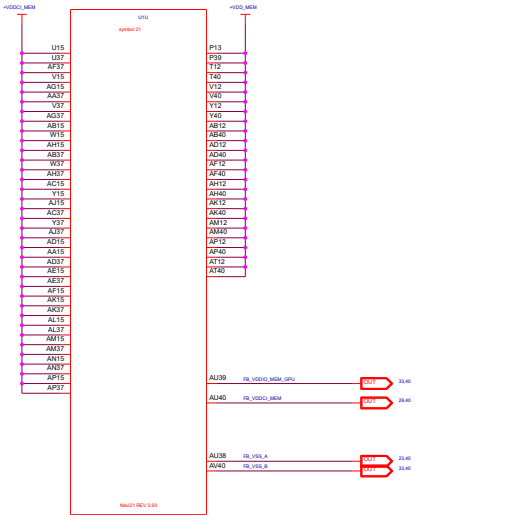






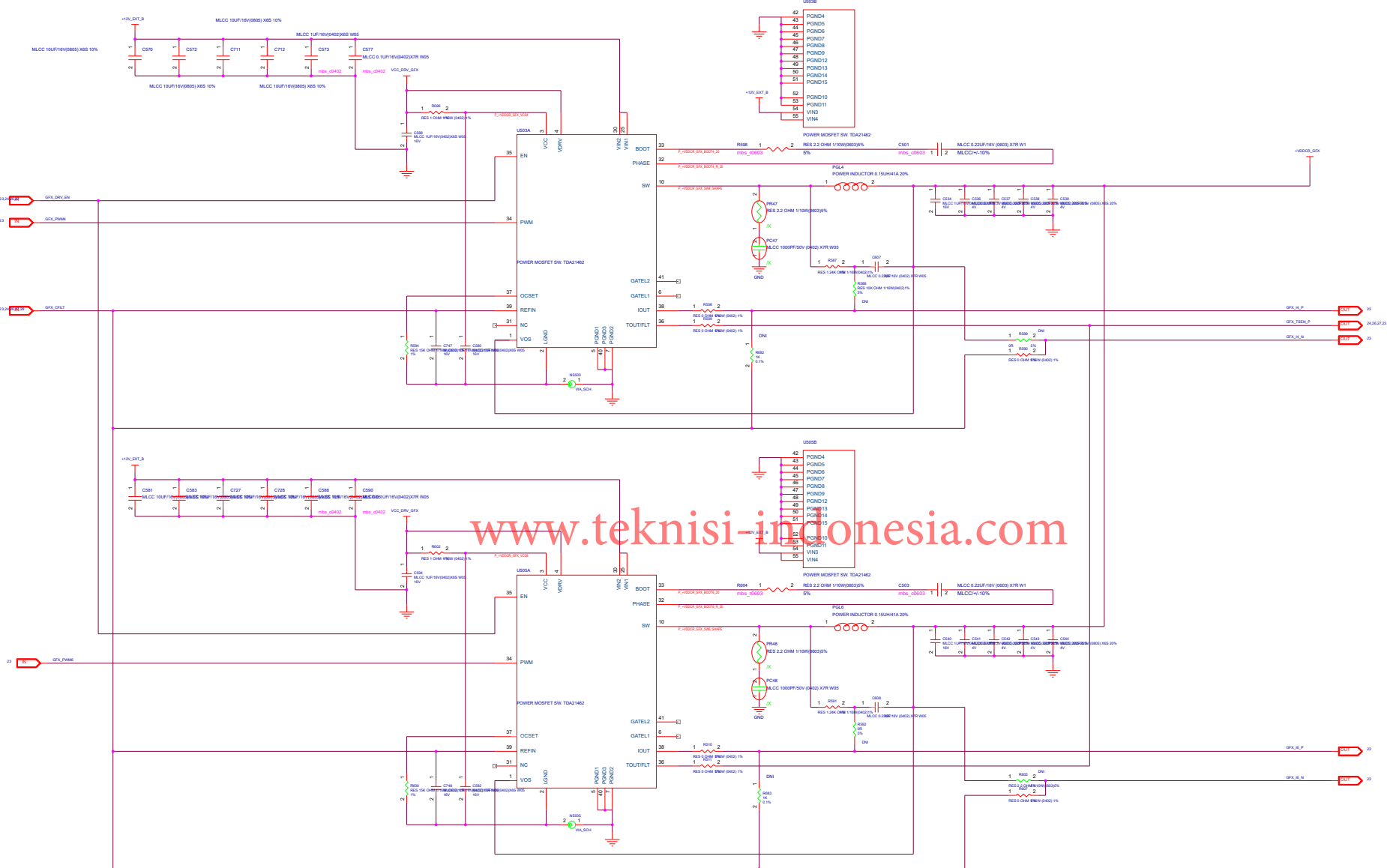




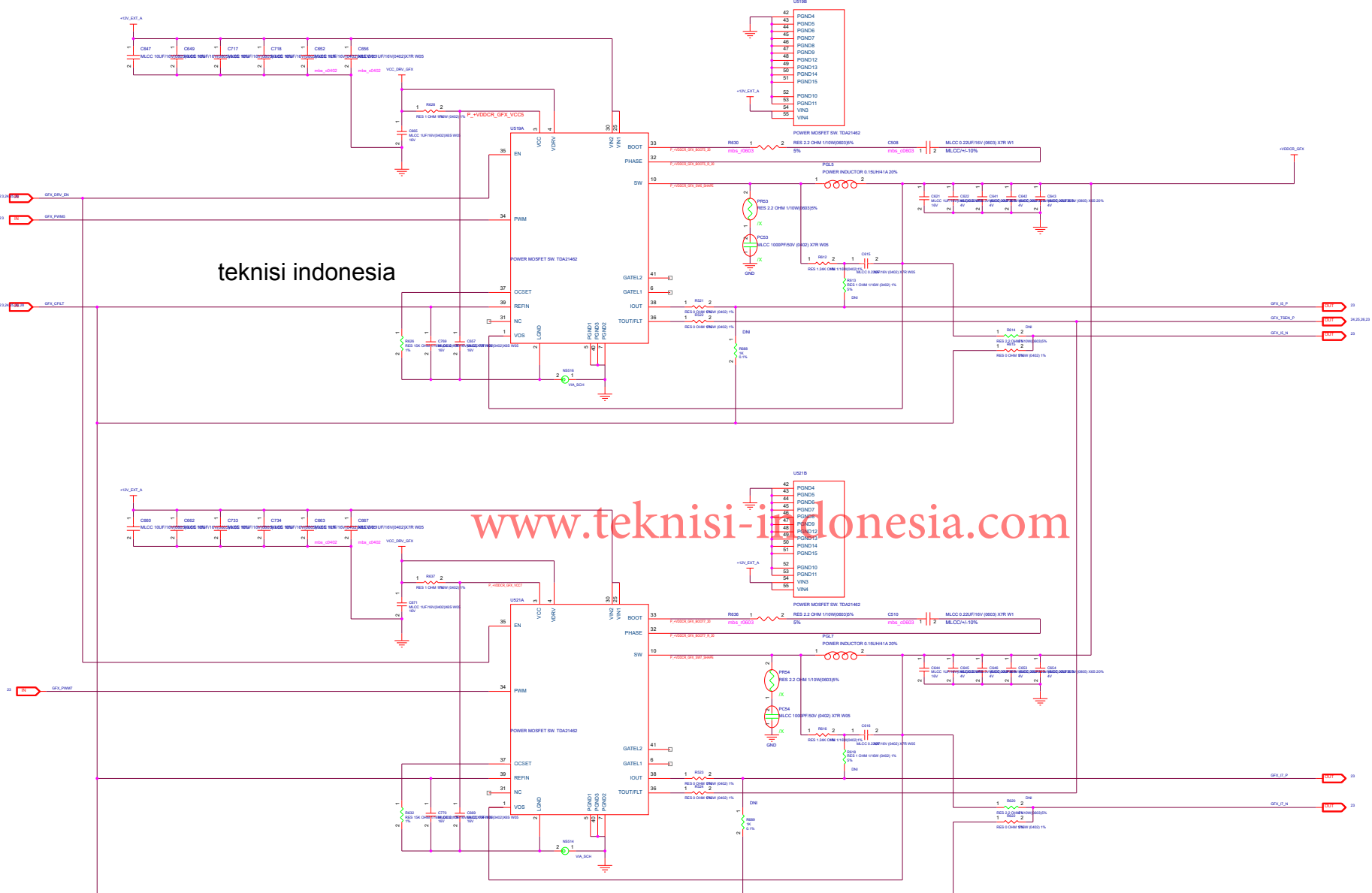


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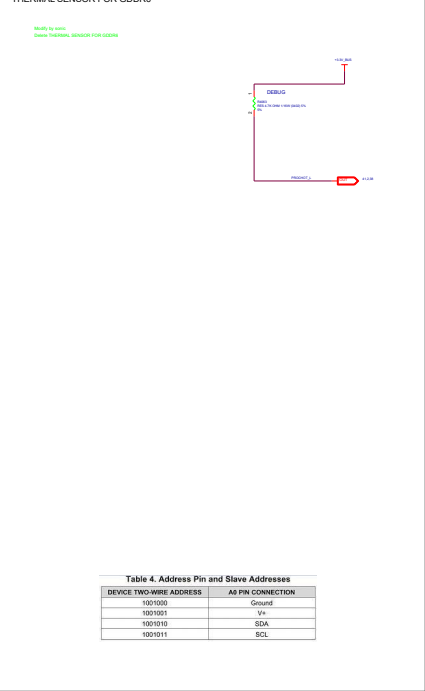
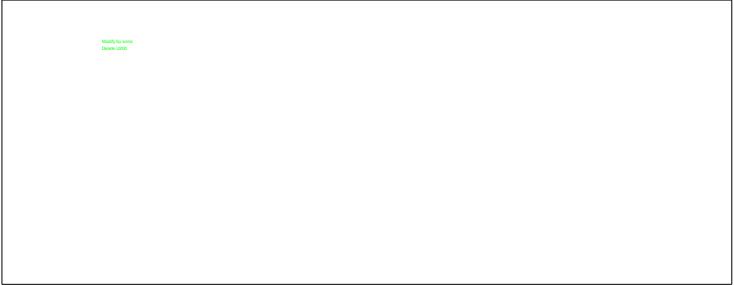
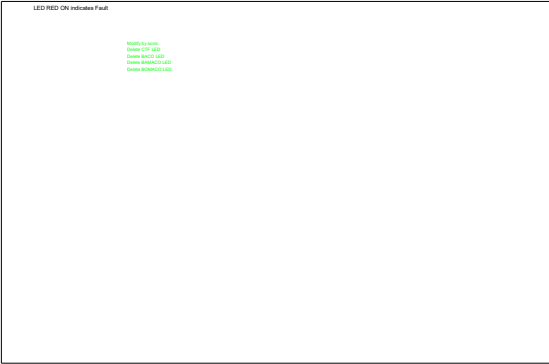
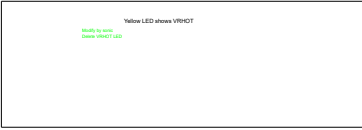
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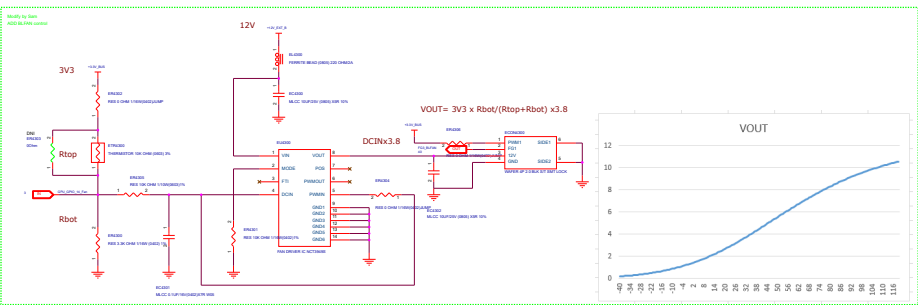
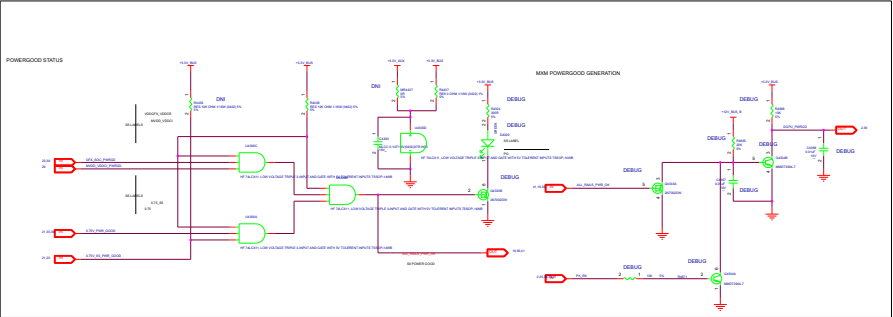
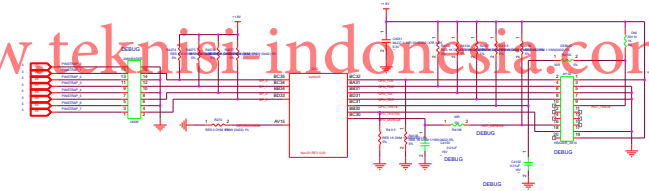






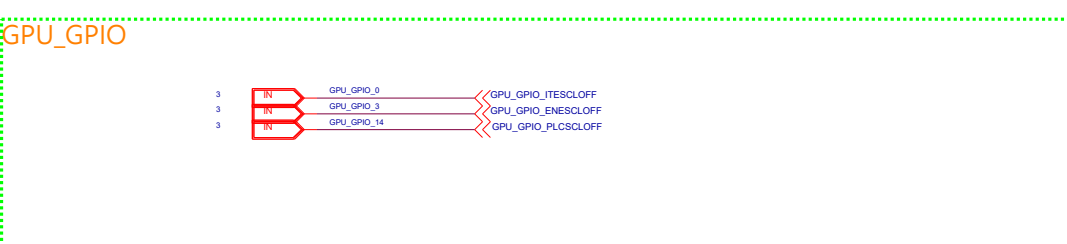
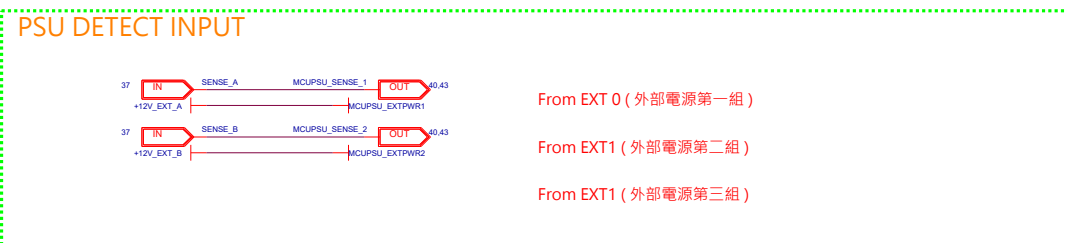


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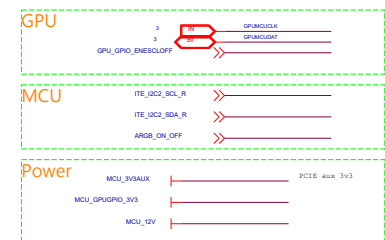
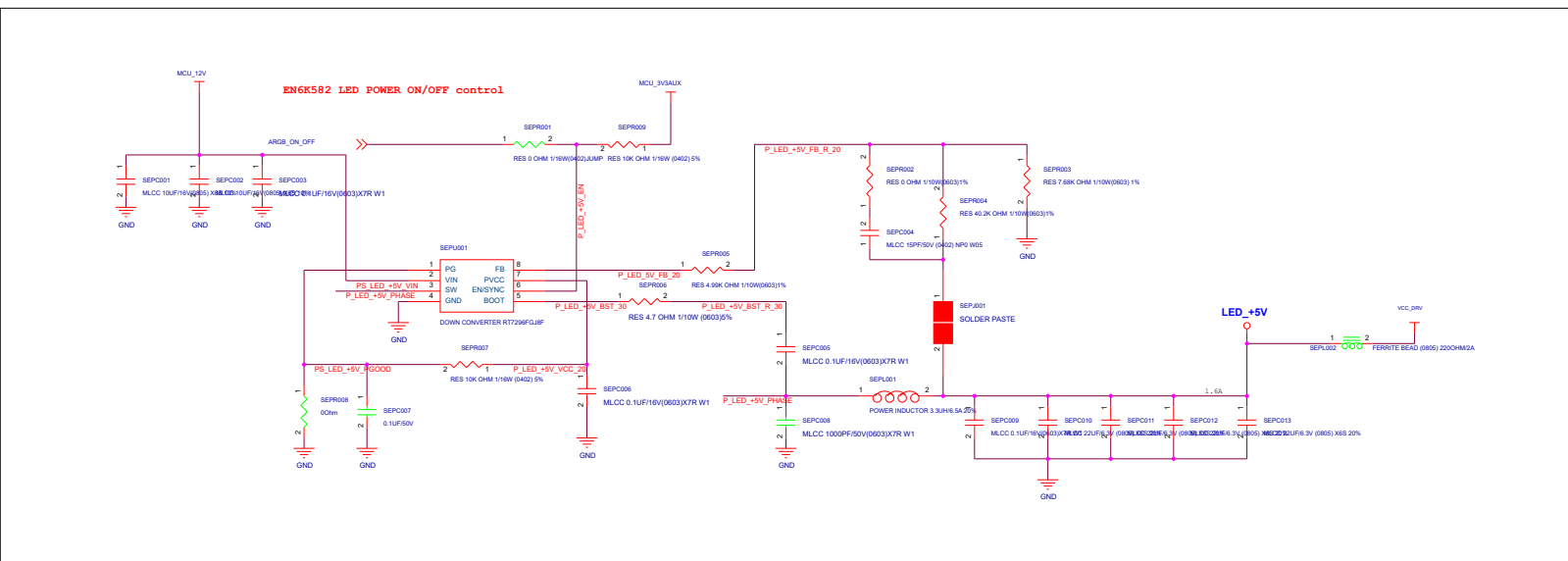
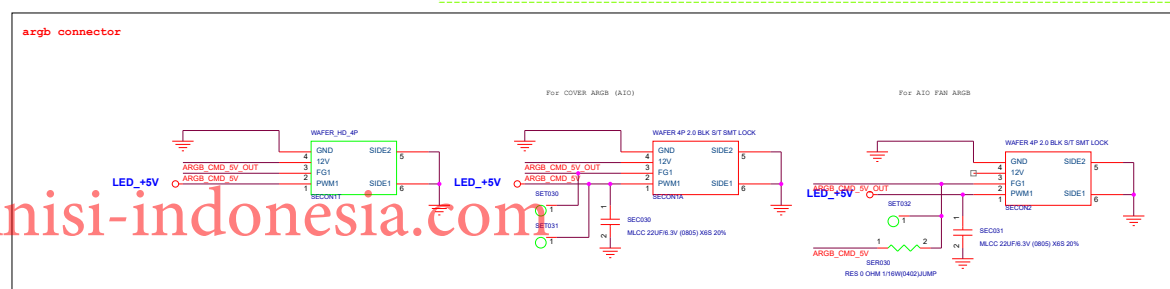
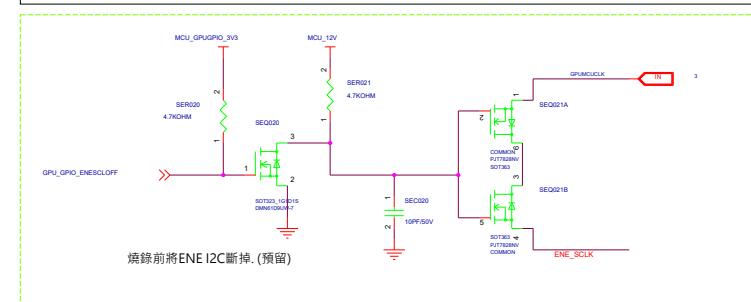
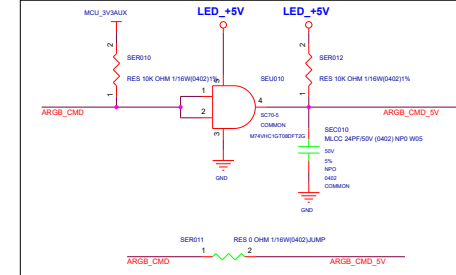
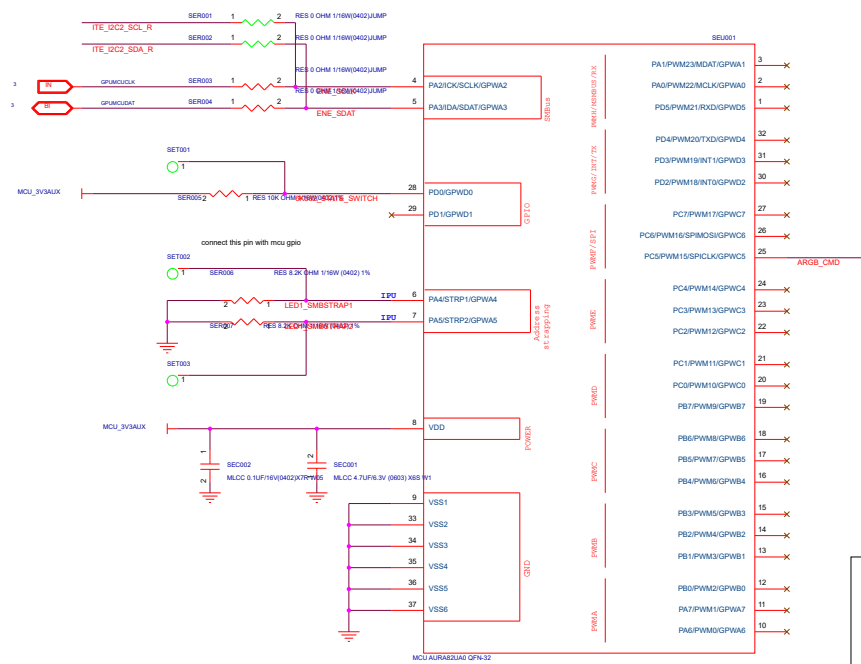




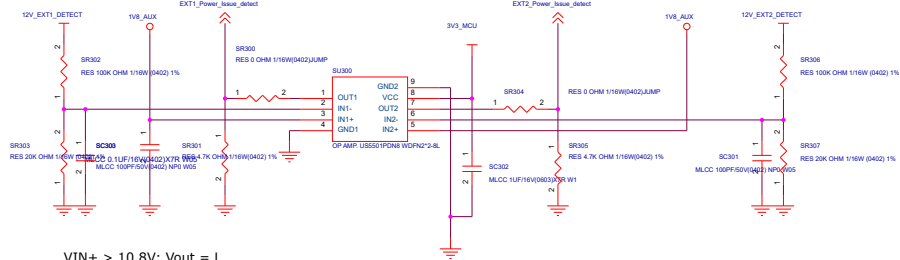
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## EXT1



VIN+ > 10.8V: Vout = L

VIN+ < 10.8V: Vout = H

10.8V x 20Kohm / (100Kohm+20Kohm) = 1.8V

SR301/SR311, 若僅需做一組連接座偵測, 其他零件可以移除, 但SR301/SR310/SR328需上件4.7K



MCU\_3V3AUX pcie 3v3 aux

3V3\_MCU

EXT POWER connected DETECT PIN



EXT12V INPUT

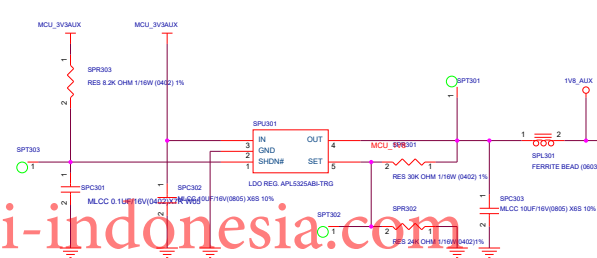
OUTPUT: AS ITE8915 INPUT

EXT1\_Power\_Issue\_Detect  
EXT1\_Power\_Issue\_Detect

from ite8915

ITE\_EXT1\_ISSUE\_LED  
ITE\_EXT2\_ISSUE\_LED

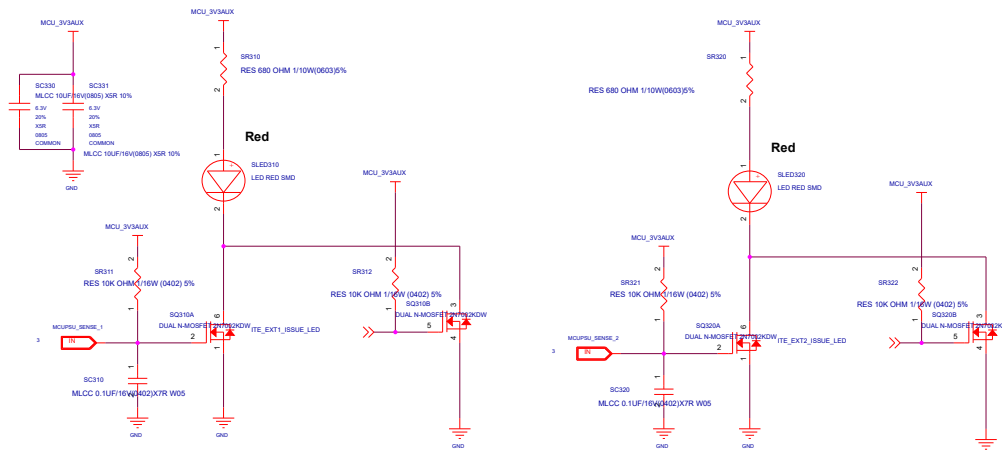
1v8\_ref



$$V_{out} = 0.8 \cdot \left(1 + \frac{R1}{R2}\right)$$

$$0.8 \times (1 + 30K/24K) = 1.8V$$

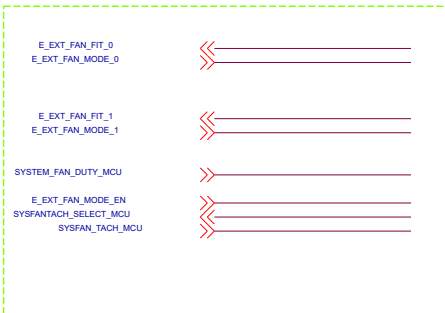
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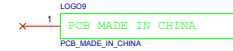
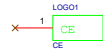
1.EXT power is not connected,  
the led is always on  
2.EXT power is connected  
EXT 12V is over 10.8V, the led turns off  
EXT 12v is below 10.8v.the led blink



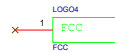
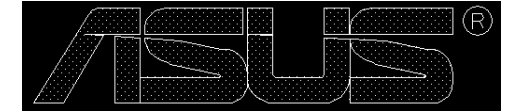
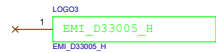
## 12V\_FAN0



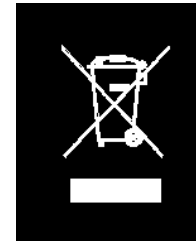
# ASUS VGA PCB Logo



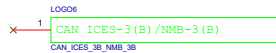
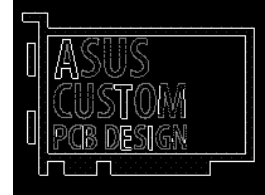
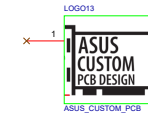
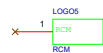
PCB MADE IN CHINA



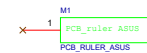
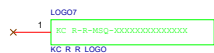
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ASUS Re-design logo  
Do not place this on reference board

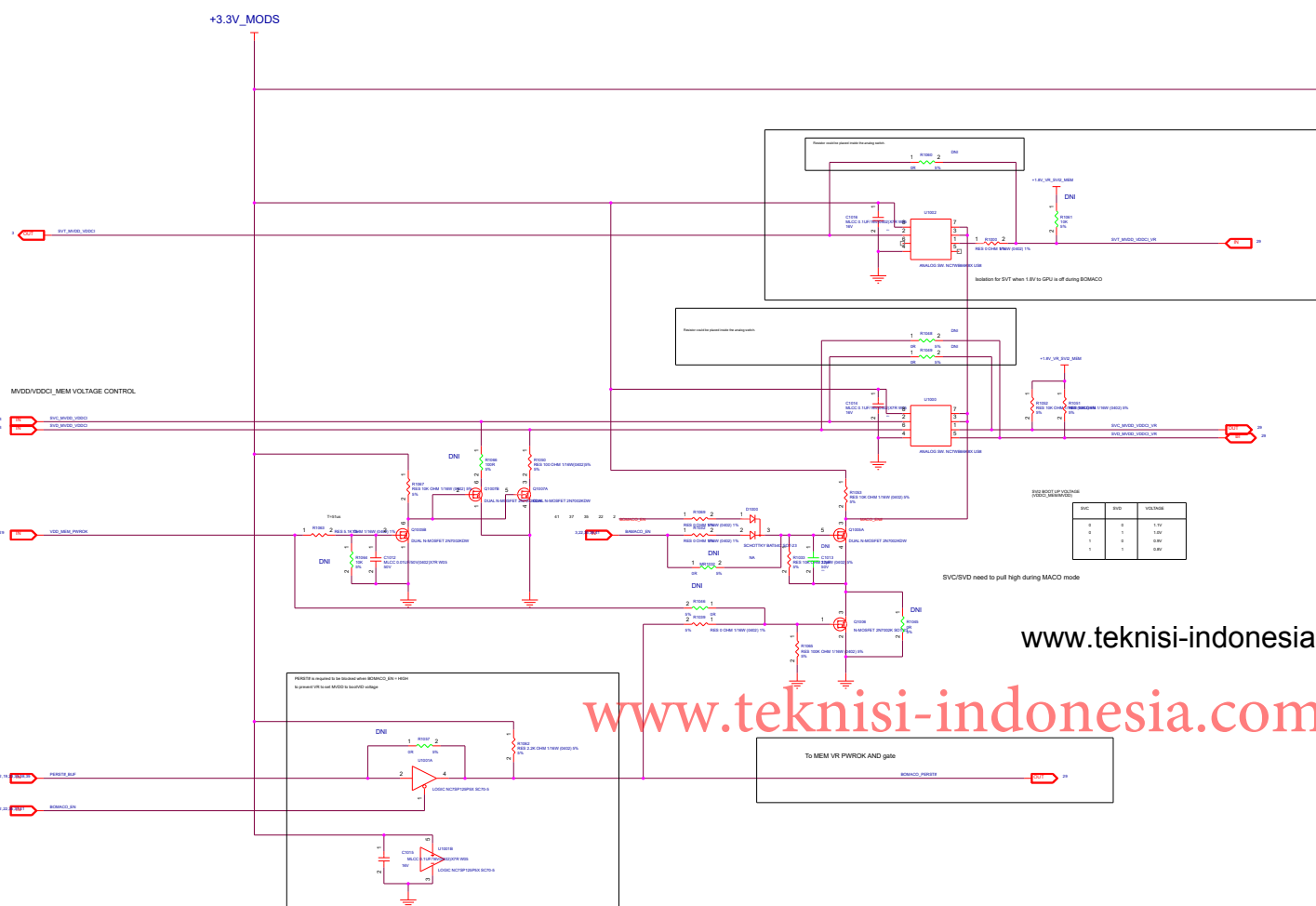


CAN ICES-3 (B) / NMB-3 (B)



		Title : XX ASUS PCB Logo	
<OrigName>		Engineer: Sonic Tang	
Size A3	Project Name D414S	Rev 1.01X	
Date: Wednesday, August 26, 2020	Sheet 90	of 90	

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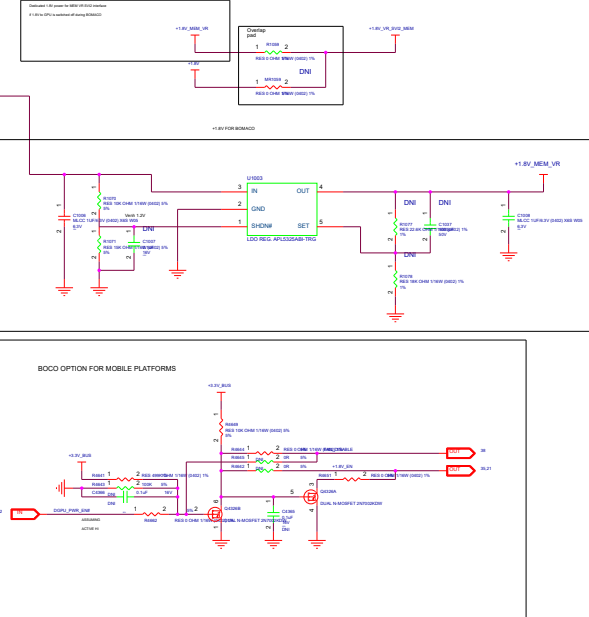


Table 3 Power Rails Status at BOMACO Mode

Power Rail at ASIC	Used logic	ON/OFF Status
VDDCR_GFX	GFX IP, SDMA, GFXCLK CLKIP	OFF
VDDCR_SOC	SYS IPs	OFF
VDDCI_MEM	MEM PHY	OFF
VDDIO_MEM	MEM PHY	ON
MVDDC/MVDDQ/VPP	DRAM	ON
VDDCR_BACO	NBIO/THM/MP1/USB	ON
VDDIO_PCIE	PCIe PHY	ON
VDDAN_C	PHY	ON
VDDAN_18	PLL, PHY, etc	ON
VDDIO_18	1.8V GPIO, I2C, etc	ON
VDDIO_33	3.3V GPIO	ON
VDDAN * EFUSE	EFUSE	ON
VDDCR_S5*	USB	ON

Table 3 Power Rails Status at BOMACO Mode

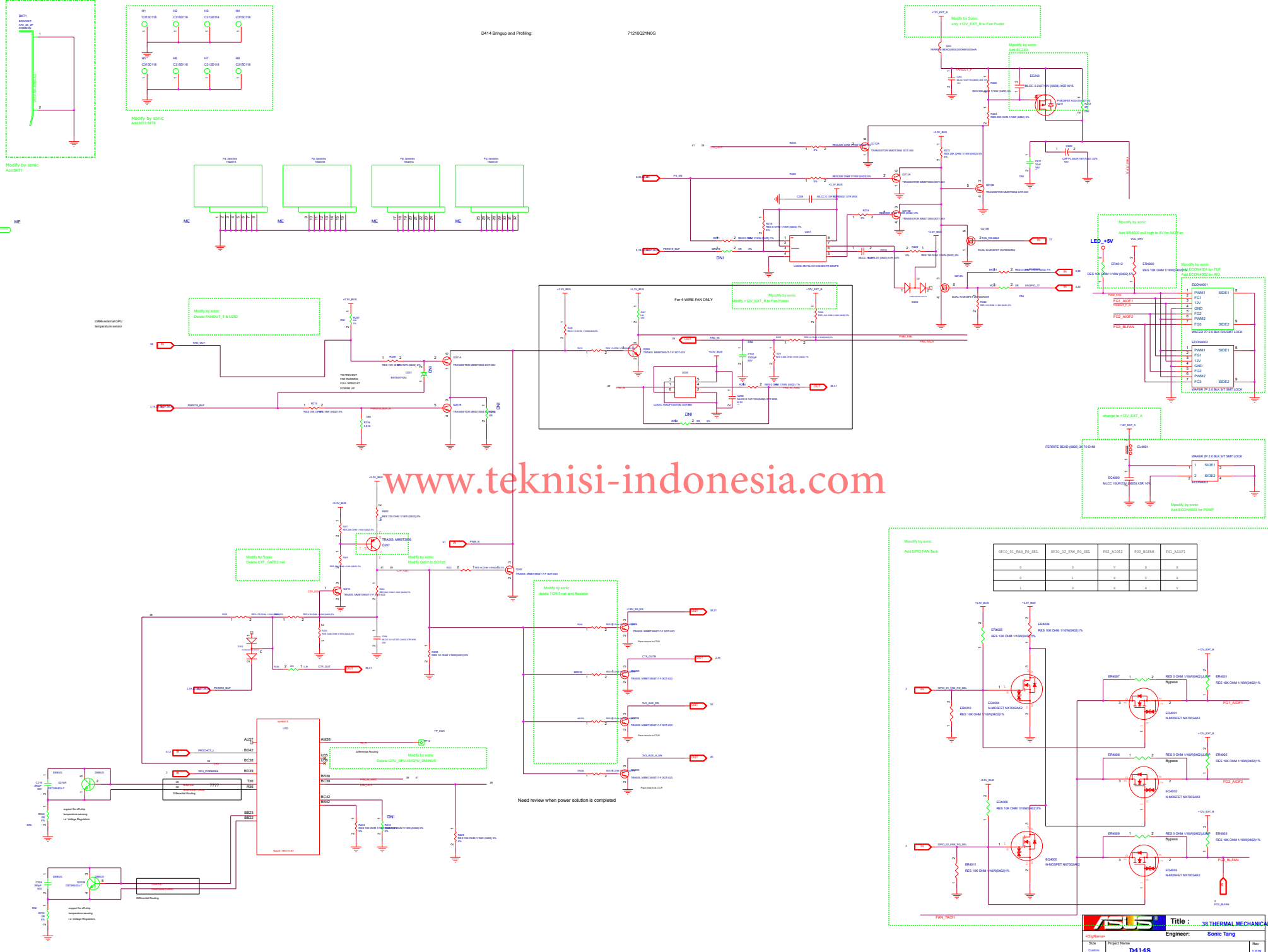
Power Rail at ASIC	Used logic	ON/OFF Status for BOMACO-A
VDDCR_GFX	GFX IP, SDMA, GFXCLK CLKIP	OFF
VDDCR_SOC	SYS IPs	OFF
VDDCI_MEM	MEM PHY	OFF
VDDIO_MEM	MEM PHY	ON
MVDDC/MVDDQ/VPP	DRAM	ON
VDDCR_BACO	NBIO/THM/MP1/USB	OFF
VDDIO_PCIE	PCIe PHY	OFF
VDDAN_C	PHY	OFF
VDDAN_18	PLL, PHY, etc	OFF
VDDIO_18	1.8V GPIO, I2C, etc	OFF
VDDIO_33	3.3V GPIO	OFF
VDDAN * EFUSE	EFUSE	OFF
VDDCR_S5*	USB	ON

Table 4 Key Signals at Different PM Modes

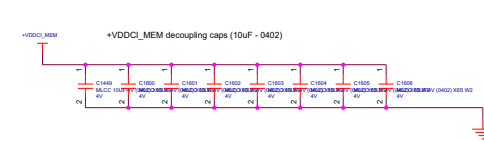
Signals	Default	BOCO	BOMACO
PX_EN	LOW	N/A	N/A
MACO_EN	N/A	N/A	N/A
PERST	HIGH	1->0->1	1->0->1
PWR_EN	HIGH	LOW	LOW
BOMACO_EN	LOW	LOW	HIGH

Table 5 Platform to Support BOMACO

BOMACO_EN	SVC PU/PD	SVD PU/PD
HIGH	PU	PU
LOW	bootVID	bootVID

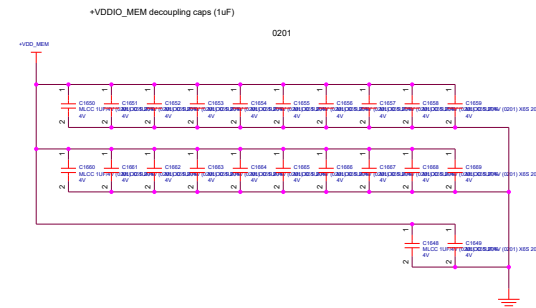
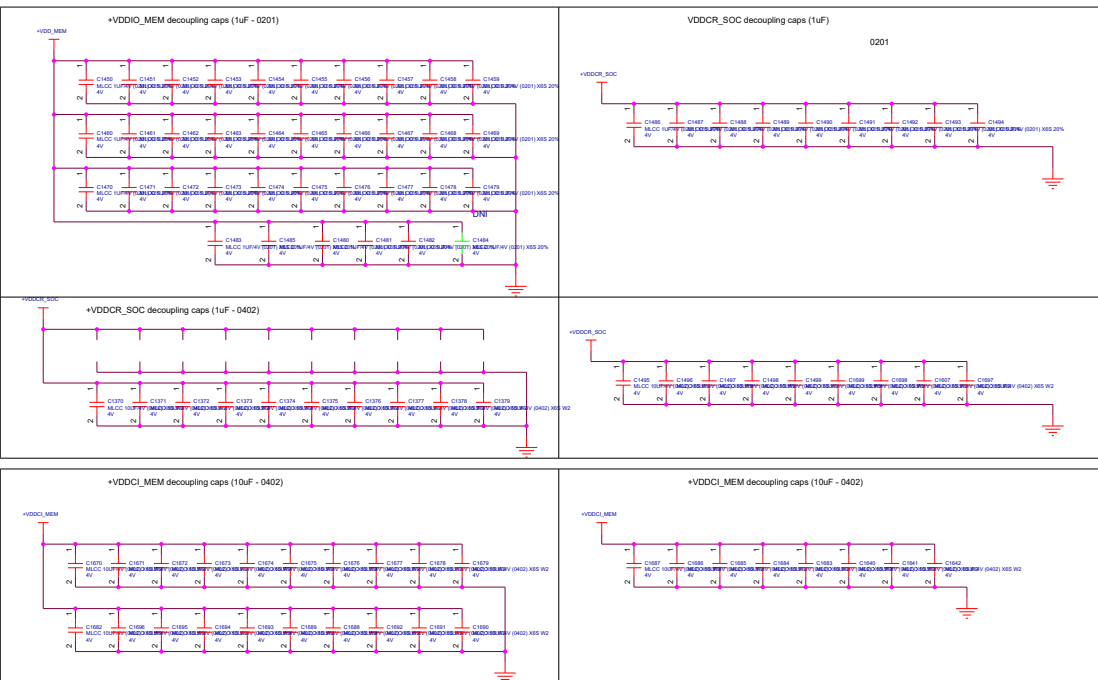


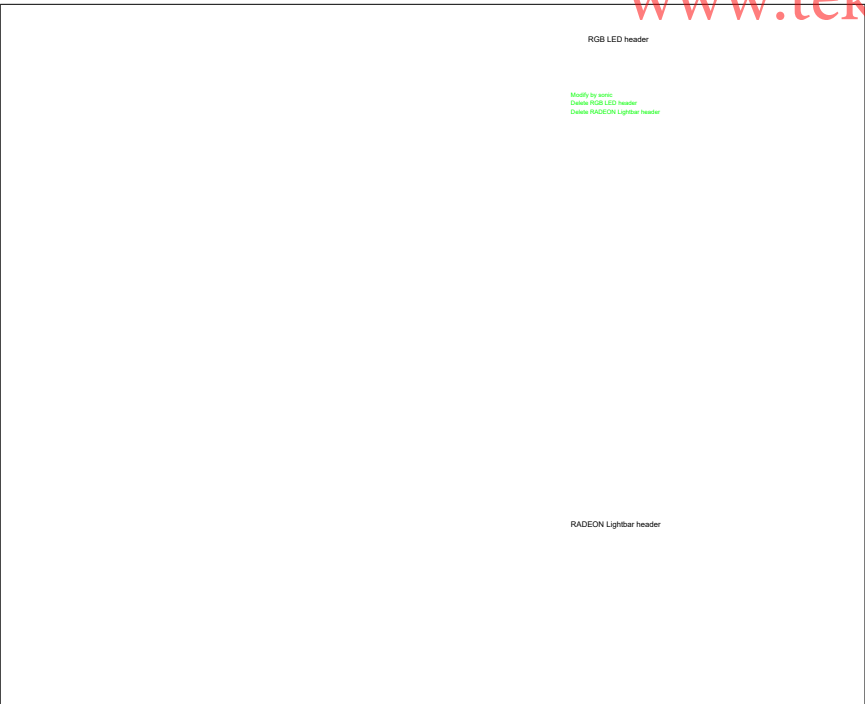
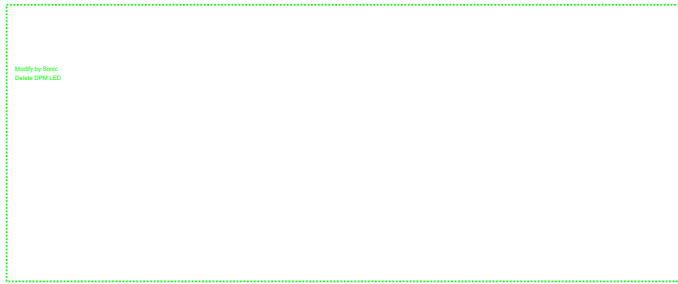
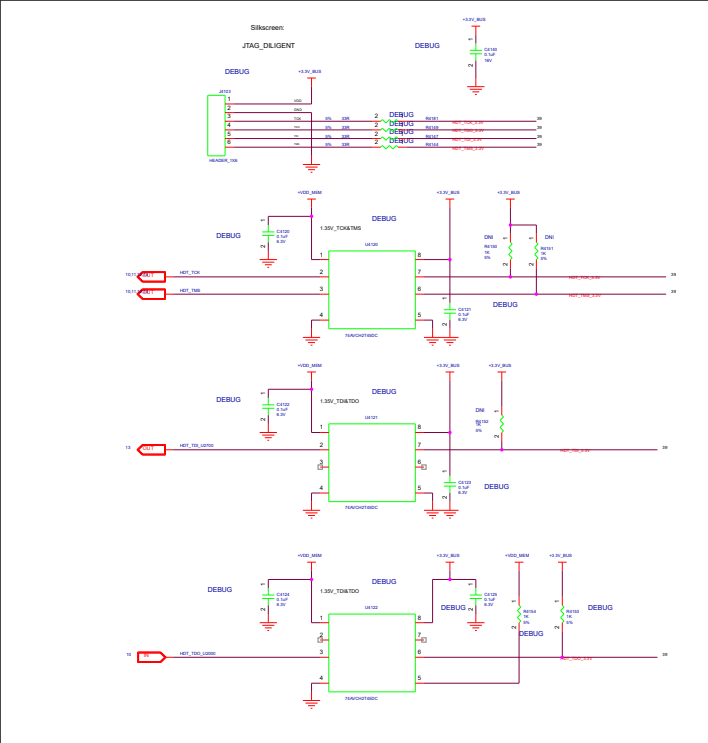
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DNI these six caps to match SLT board and keep the design consistent across SKUs

C1218  
C1208  
C1200  
C1438  
C1413  
C1384



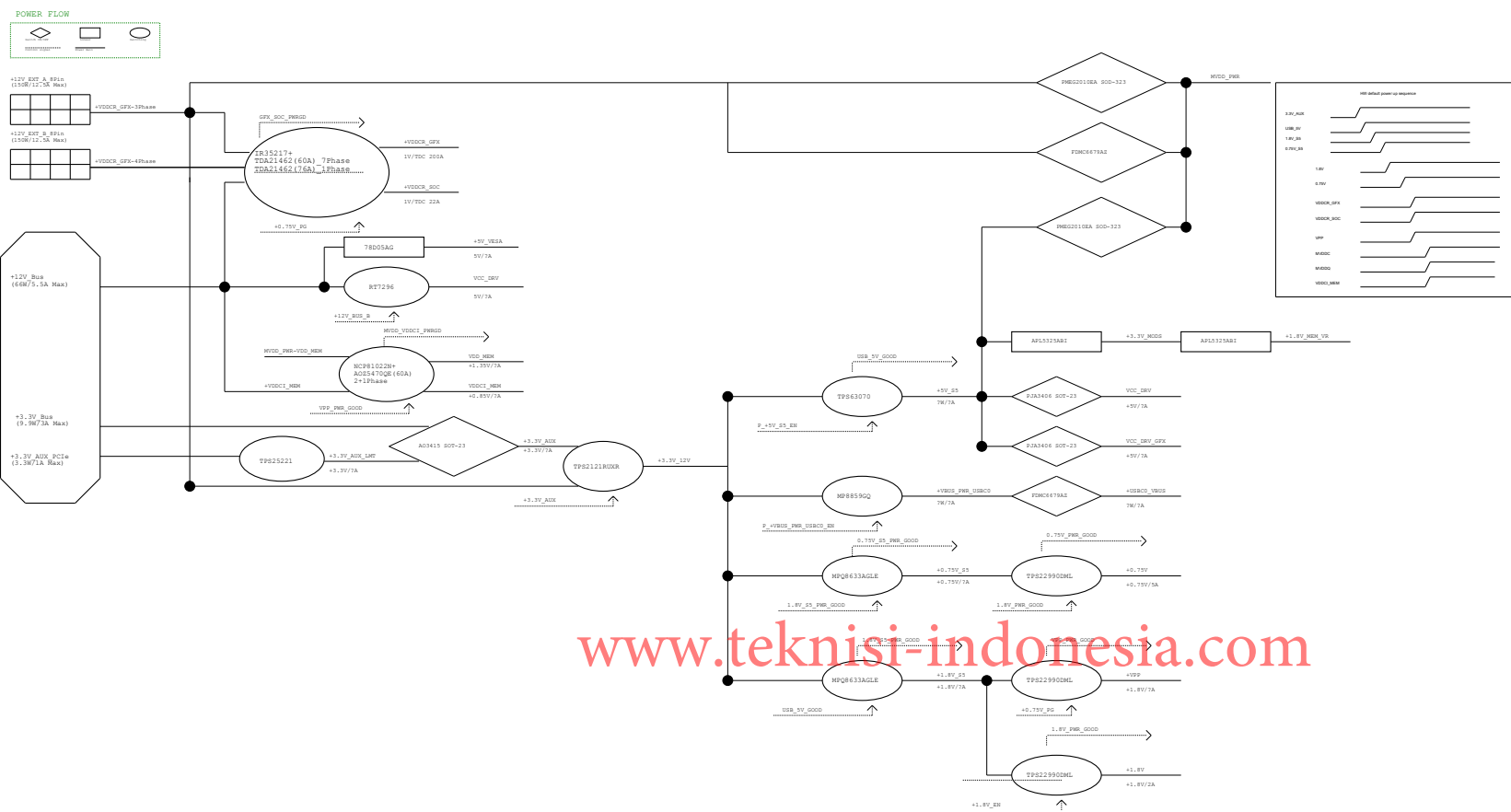


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3. 隔離電感儘量靠近Connector, 接到PLC可拉一般正常線寬, 間隔20mils space.

