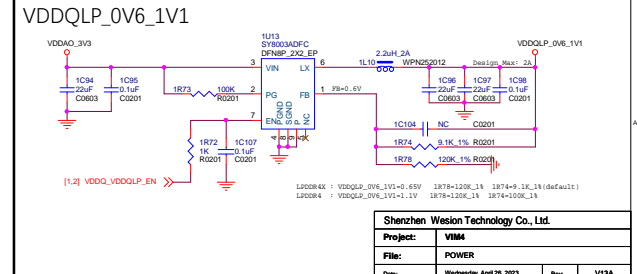
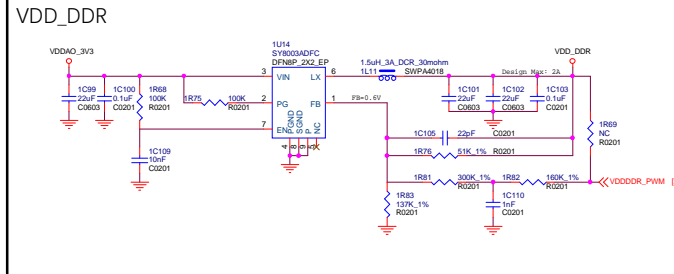
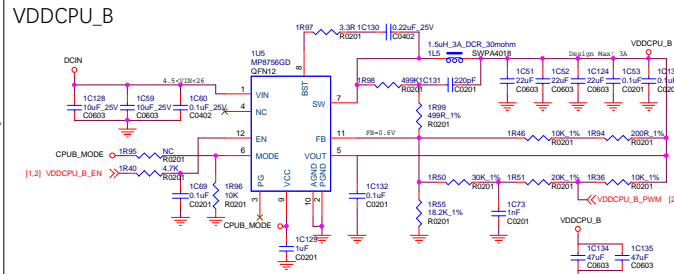
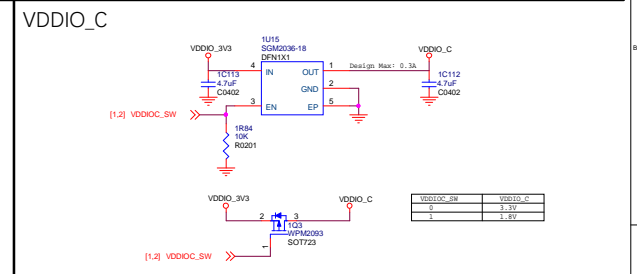
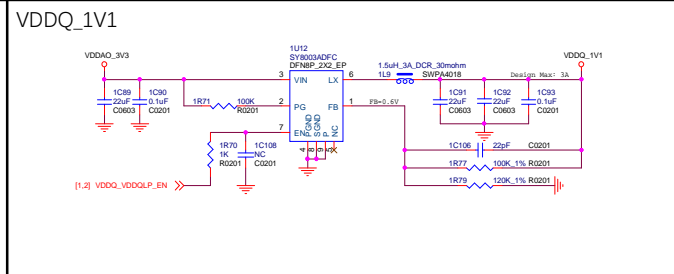
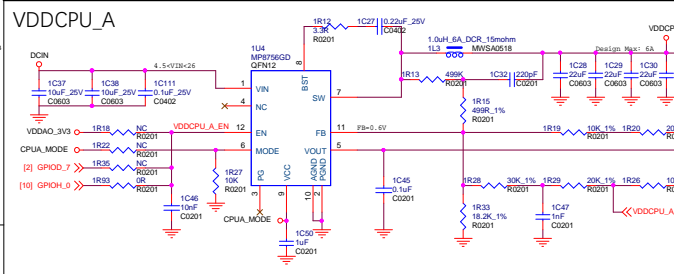
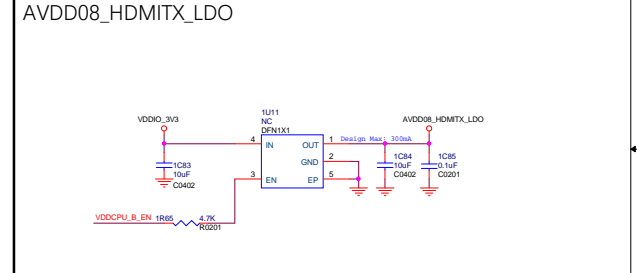
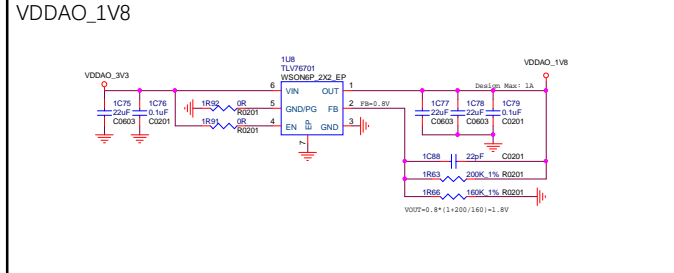
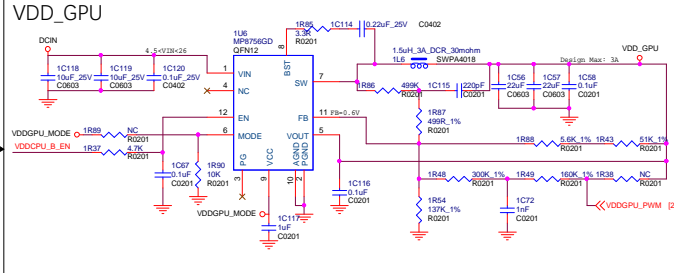
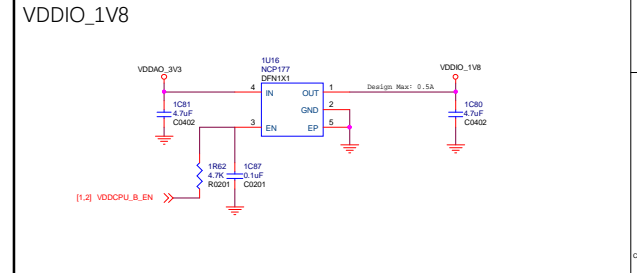
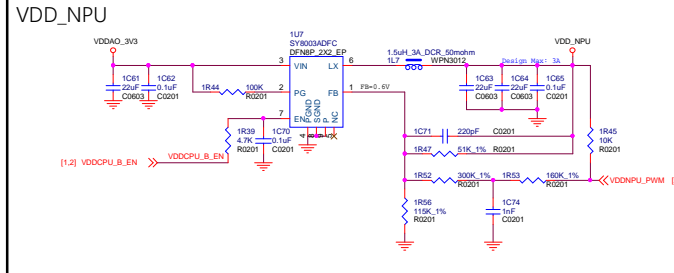
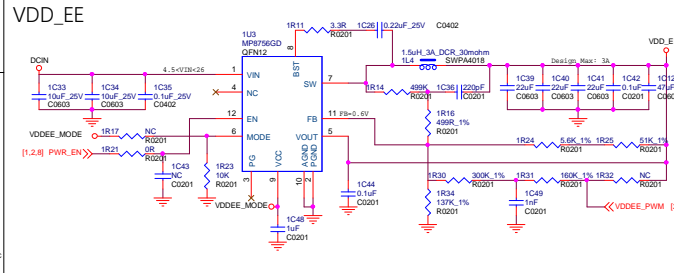
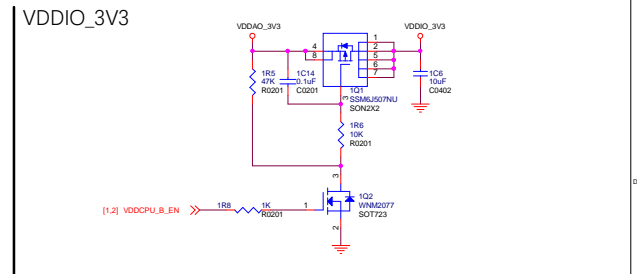
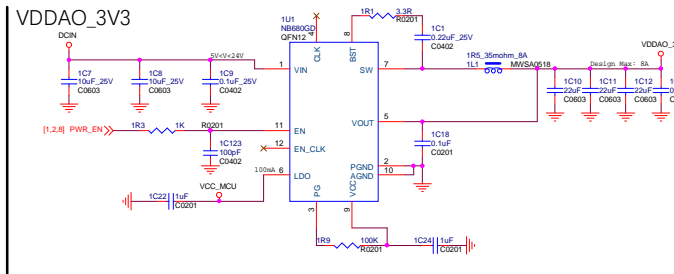
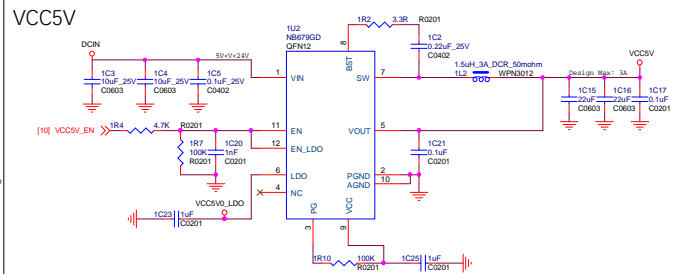


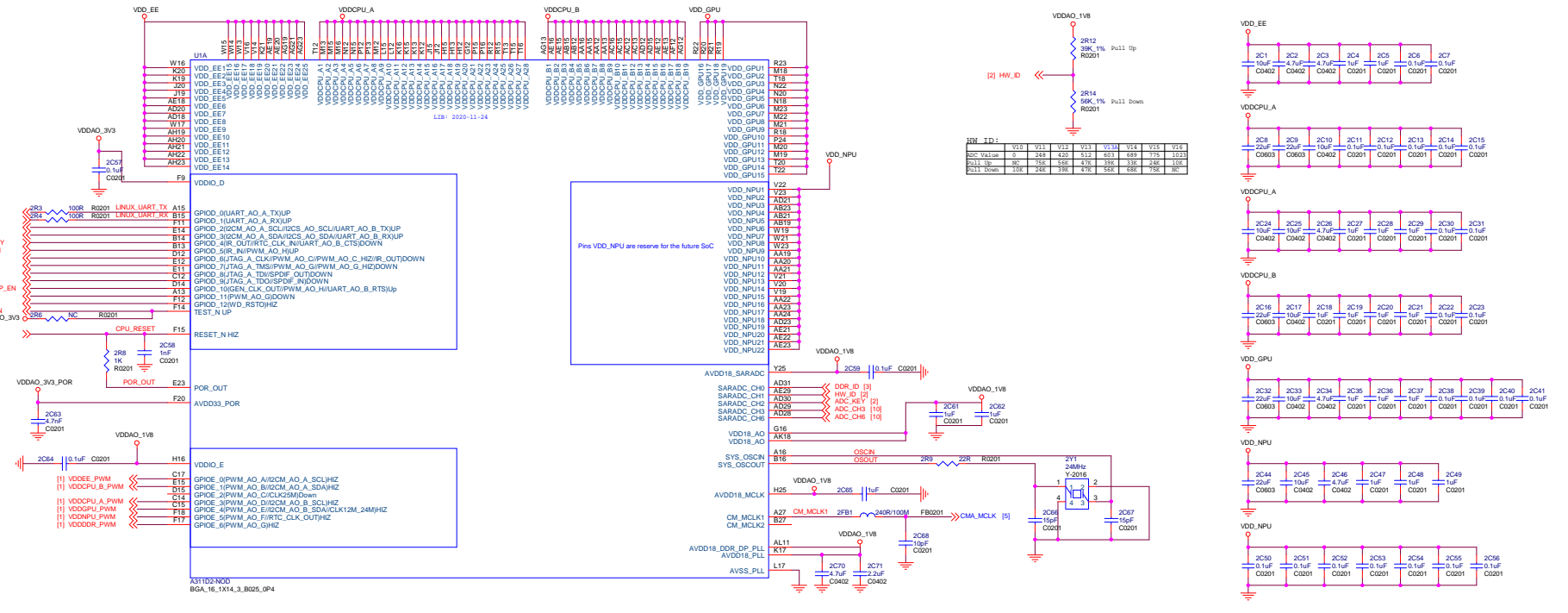


KHADASS

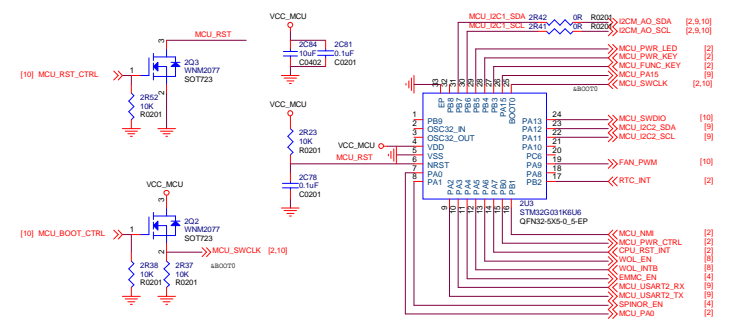
Something a little different.

Shenzhen Wesion Technology Co., Ltd.			
<b>Project:</b>	VIM4		
<b>File:</b>	Khadass		
<b>Date:</b>	Wednesday, April 26, 2023	<b>Rev:</b>	V13A
<b>Designed_by:</b>	Totti	<b>Sheet:</b>	0

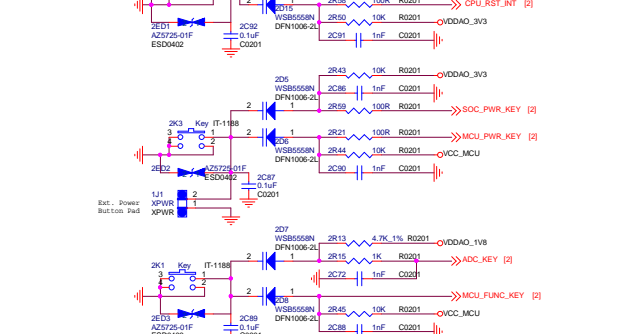




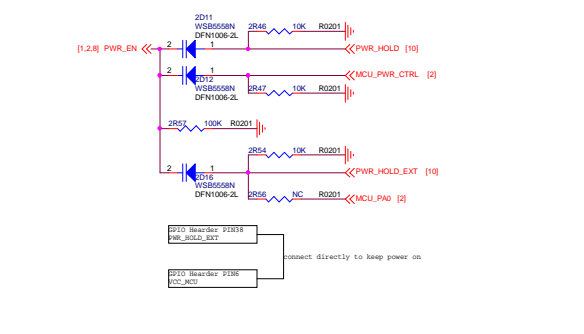
### MCU



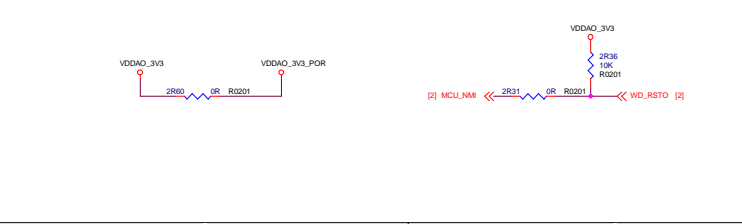
### Buttons



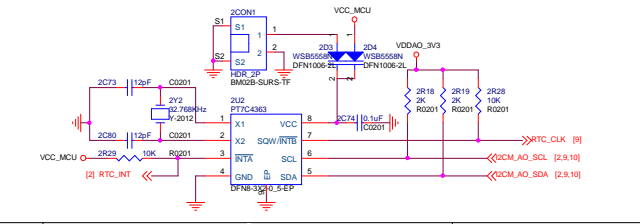
### PWR\_EN



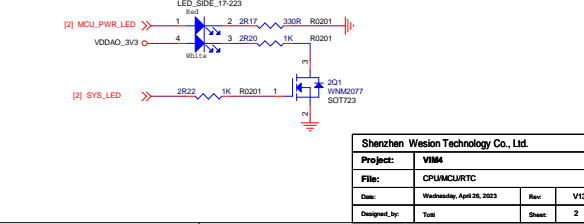
### RESET & Watchdog



### RTC

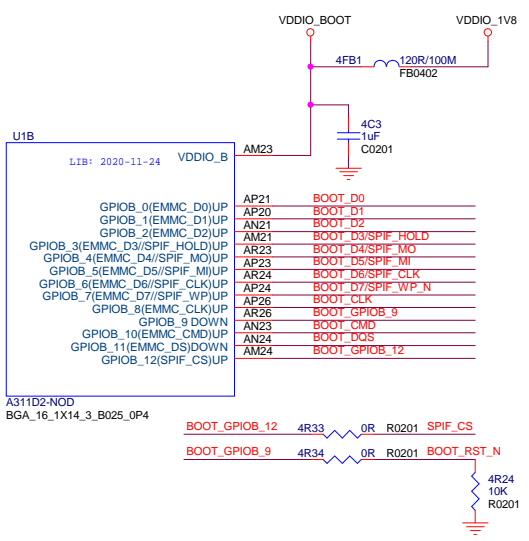


### LED

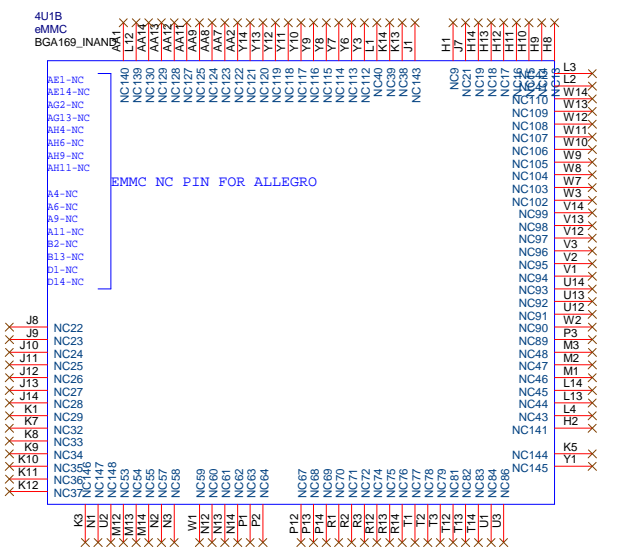
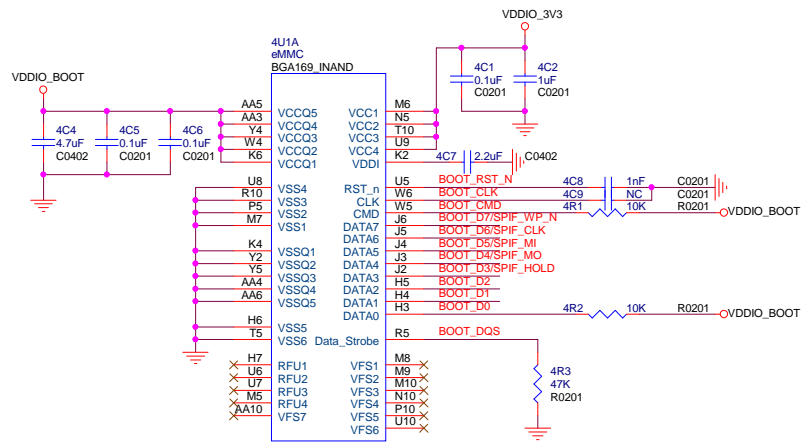


Shenzhen Wision Technology Co., Ltd.			
Project:	VIM4	Rev:	V15A
File:	CPUMCU/RTC	Draw:	2
Date:	Wednesday, April 26, 2023		
Designer: lry	Yan	Draw:	2

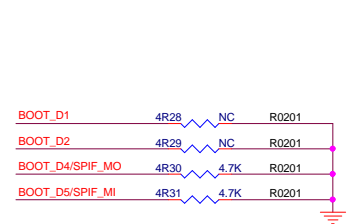




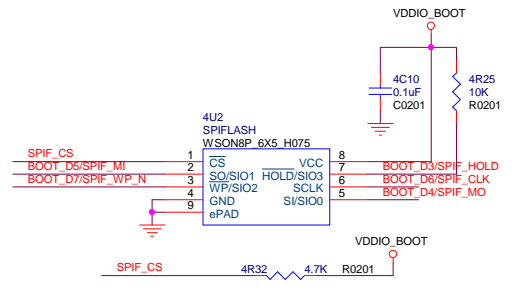
### EMMC



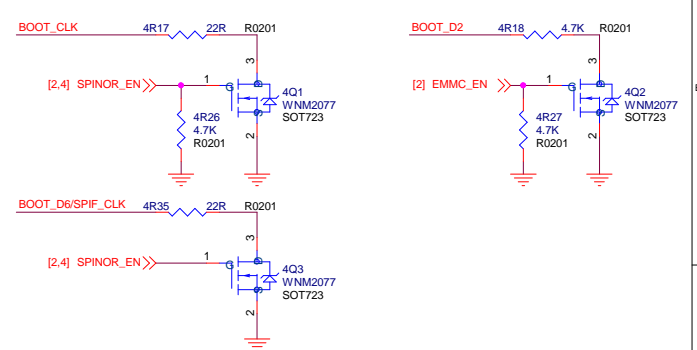
### Power ON Config



### SPI Flash



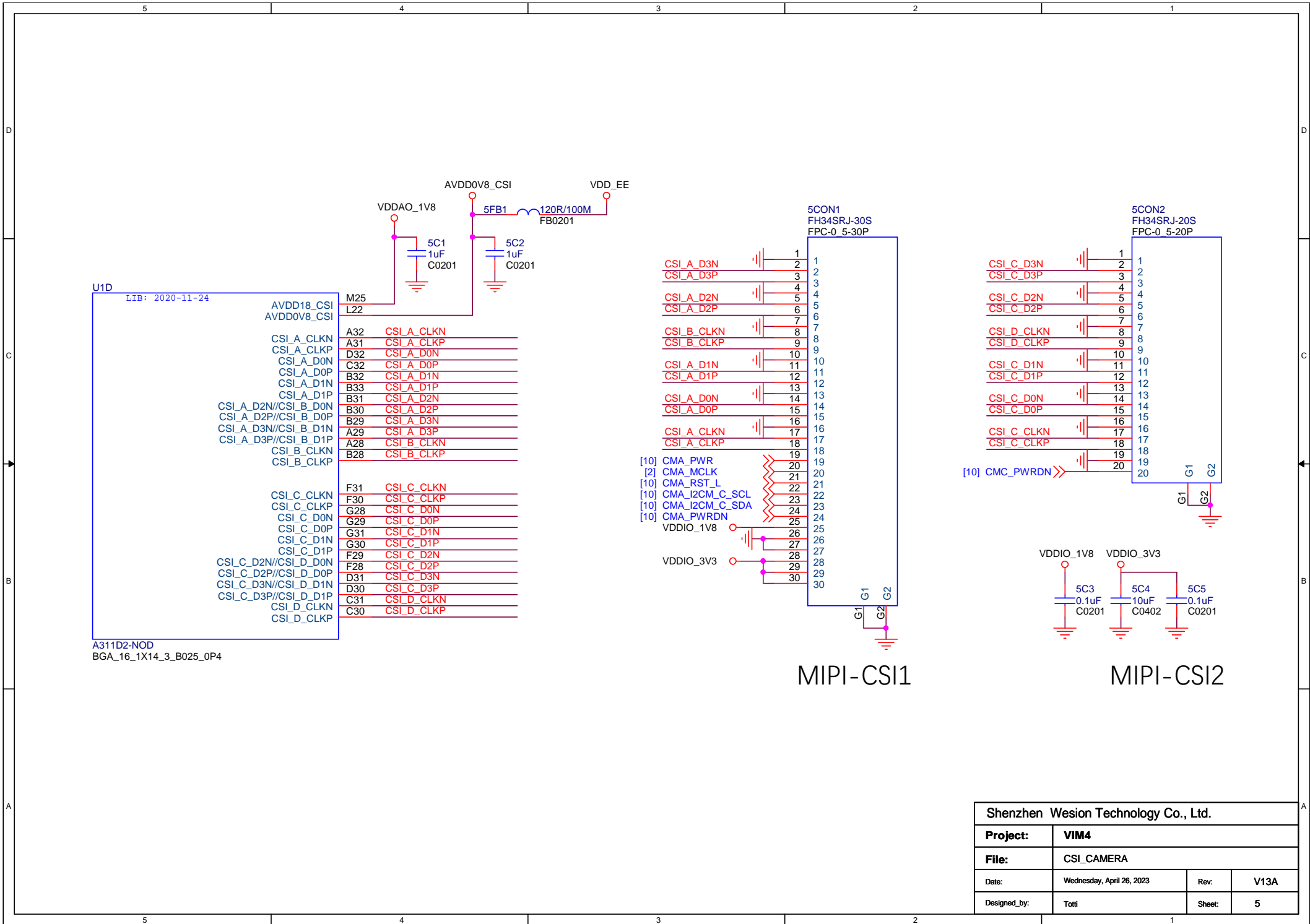
### TST



Booting Sequence Diagram

EMMC_EN	SPINOR_EN	1st Boot	2nd Boot	3rd Boot	4th Boot
0	0	SD Card	eMMC	SPI Flash	USB
1	0	SD Card	SPI Flash	eMMC	USB
x	1	USB			

Shenzhen Wesion Technology Co., Ltd.			
Project:	VIM4		
File:	eMMC		
Date:	Wednesday, April 26, 2023	Rev:	V13A
Designed_by:	Toni	Sheet:	4

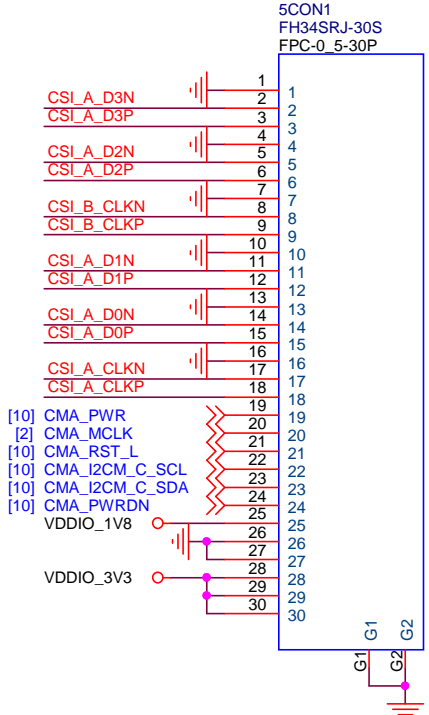


U1D

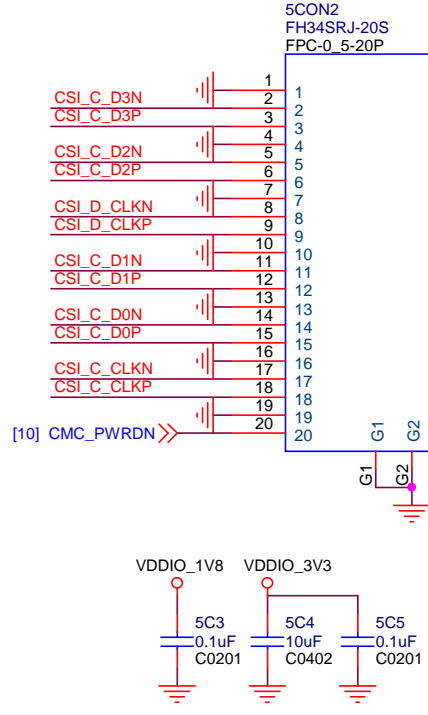
LTB: 2020-11-24

AVDD18_CSI	M25	
AVDD0V8_CSI	L22	
CSI_A_CLKN	A32	CSI_A_CLKN
CSI_A_CLKP	A31	CSI_A_CLKP
CSI_A_D0N	D32	CSI_A_D0N
CSI_A_D0P	C32	CSI_A_D0P
CSI_A_D1N	B32	CSI_A_D1N
CSI_A_D1P	B33	CSI_A_D1P
CSI_A_D2N/CSI_B_D0N	B31	CSI_A_D2N
CSI_A_D2P/CSI_B_D0P	B30	CSI_A_D2P
CSI_A_D3N/CSI_B_D1N	B29	CSI_A_D3N
CSI_A_D3P/CSI_B_D1P	A29	CSI_A_D3P
CSI_B_CLKN	A28	CSI_B_CLKN
CSI_B_CLKP	B28	CSI_B_CLKP
CSI_C_CLKN	F31	CSI_C_CLKN
CSI_C_CLKP	F30	CSI_C_CLKP
CSI_C_D0N	G28	CSI_C_D0N
CSI_C_D0P	G29	CSI_C_D0P
CSI_C_D1N	G31	CSI_C_D1N
CSI_C_D1P	G30	CSI_C_D1P
CSI_C_D2N/CSI_D_D0N	F29	CSI_C_D2N
CSI_C_D2P/CSI_D_D0P	F28	CSI_C_D2P
CSI_C_D3N/CSI_D_D1N	D31	CSI_C_D3N
CSI_C_D3P/CSI_D_D1P	D30	CSI_C_D3P
CSI_D_CLKN	C31	CSI_D_CLKN
CSI_D_CLKP	C30	CSI_D_CLKP

A311D2-NOD  
BGA\_16\_1X14\_3\_B025\_0P4

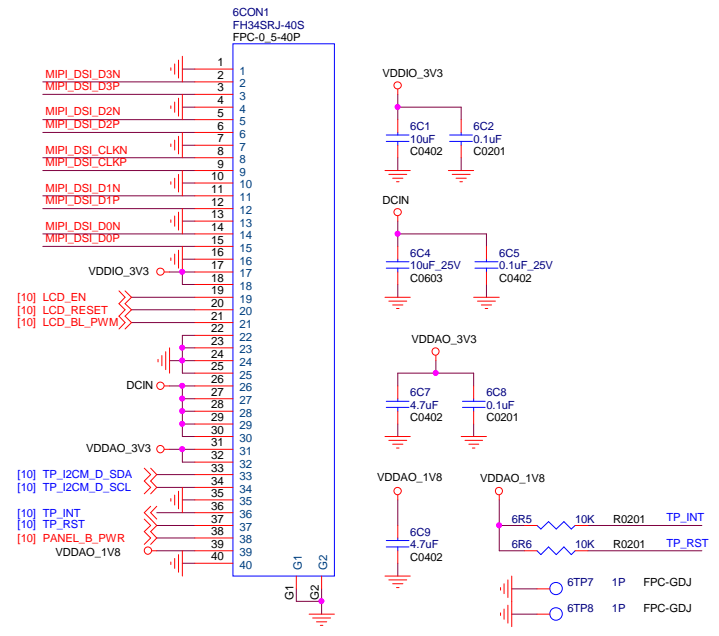
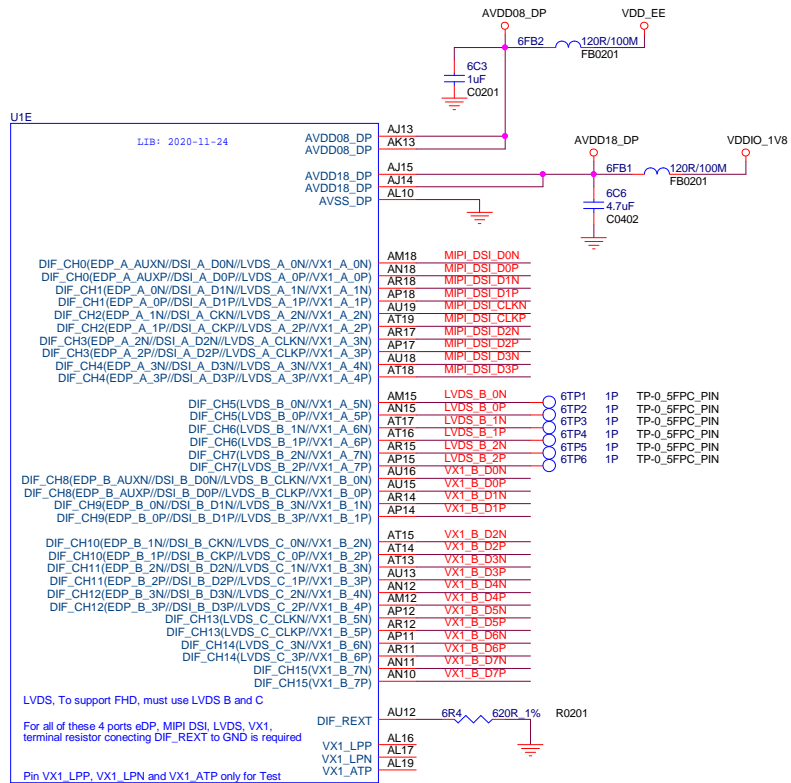


MIPI-CSI1

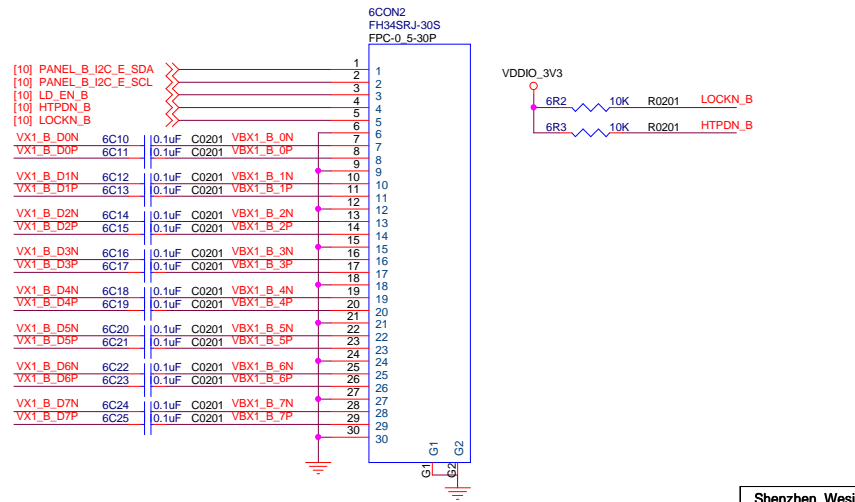


MIPI-CSI2

Shenzhen Wesion Technology Co., Ltd.			
Project:	VIM4		
File:	CSI_CAMERA		
Date:	Wednesday, April 26, 2023	Rev:	V13A
Designed_by:	Totti	Sheet:	5



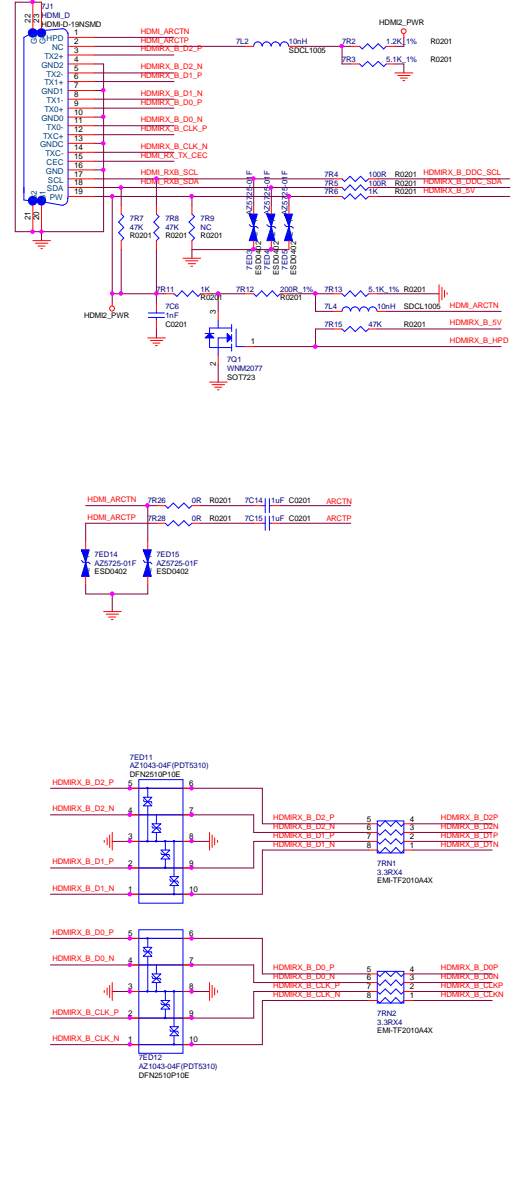
MIPI-DSI



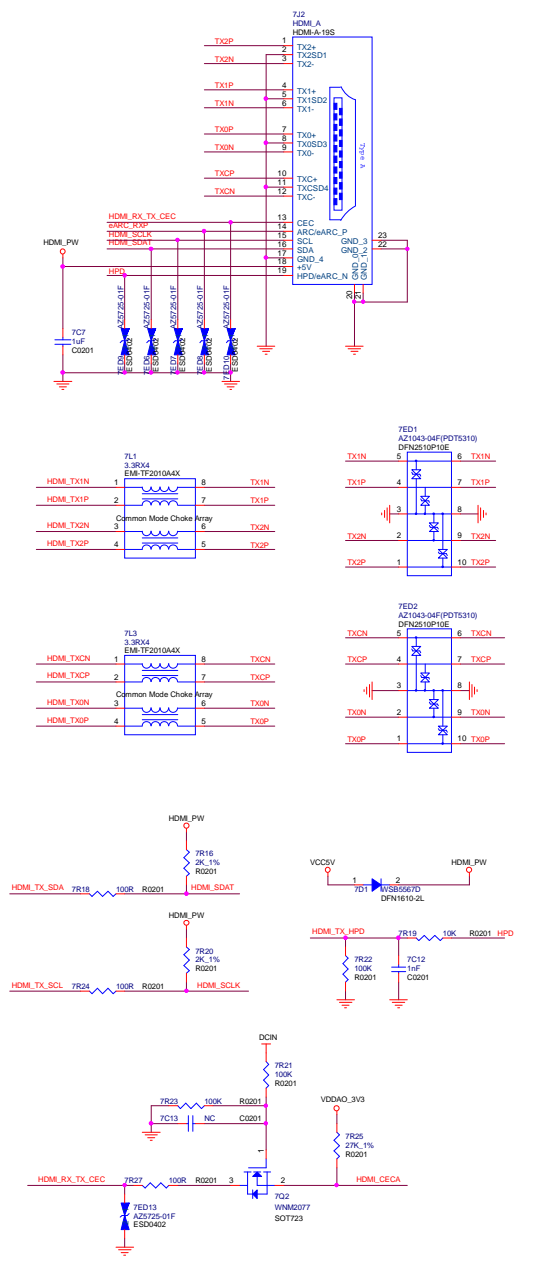
VBO / DSI

Shenzhen Wesion Technology Co., Ltd.			
Project:	VIM4		
File:	DSI/eDP/LVDS/VX1		
Date:	Wednesday, April 26, 2023	Rev:	V13A
Designed_by:	Toll	Sheet:	6

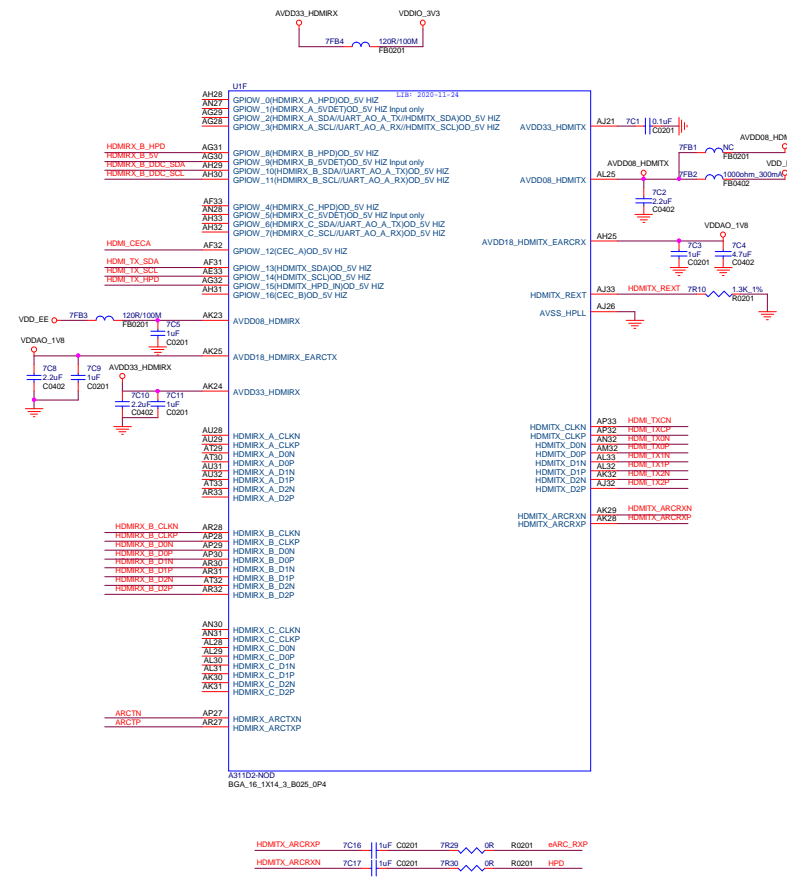
# HDMI IN



# HDMI OUT



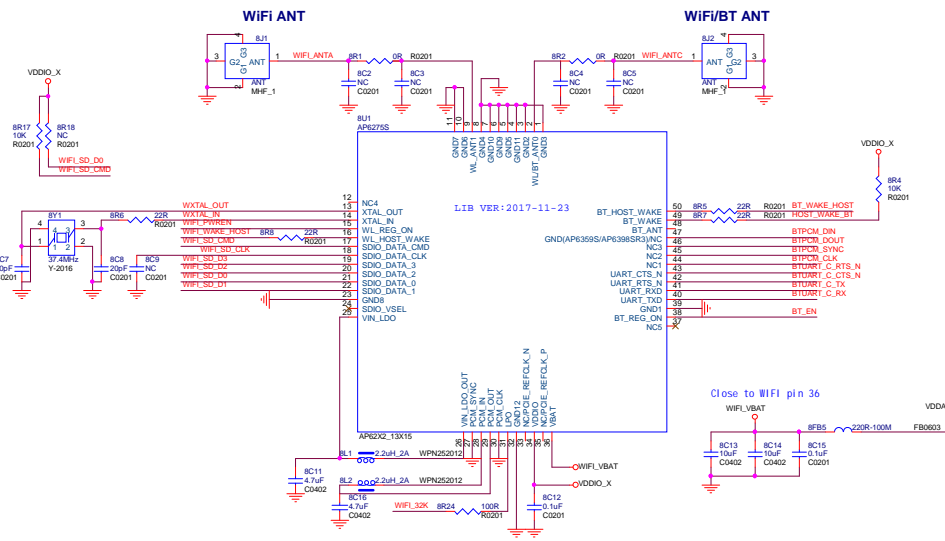
Shenzhen Wision Technology Co., Ltd.			
Project:	VIM4	Rev:	VISA
File:	HDM	Draw:	7
Date:	Wednesday, April 26, 2012	Draw:	VISA
Designed by:	Tan	Draw:	7



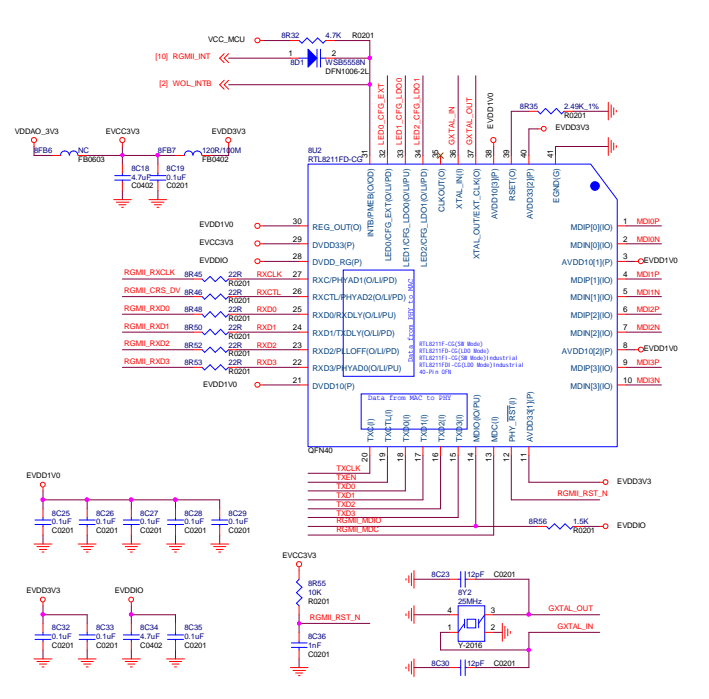




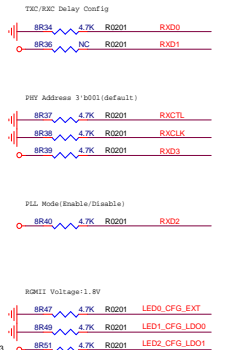
### Wi-Fi & BT



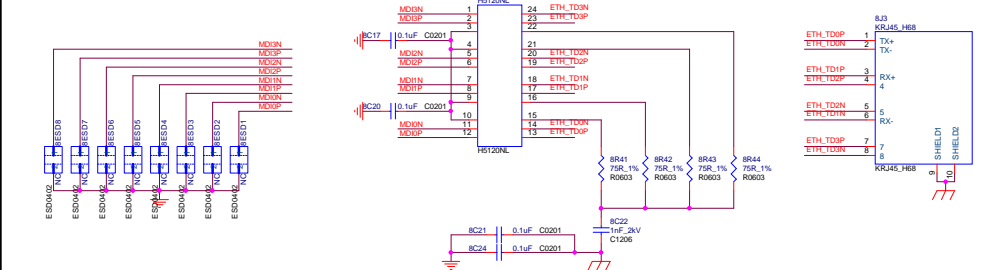
### Ethernet



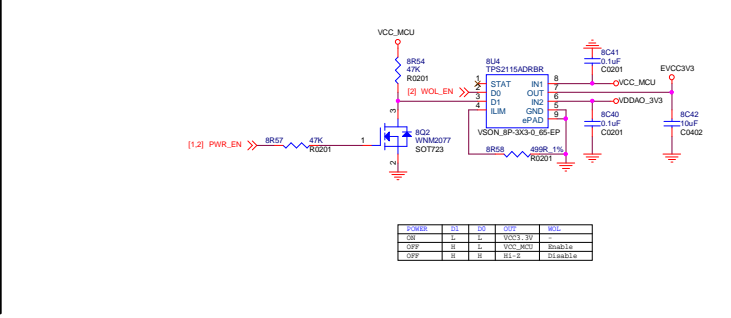
### Configuration

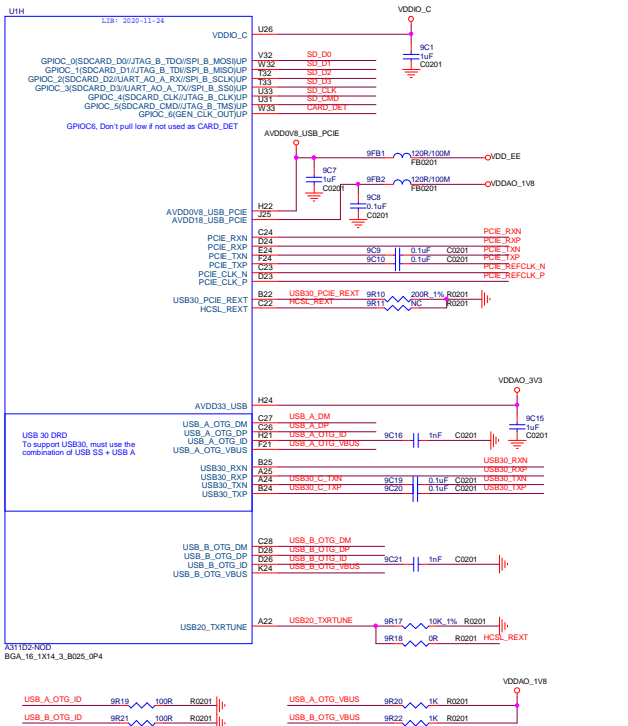


### RJ45

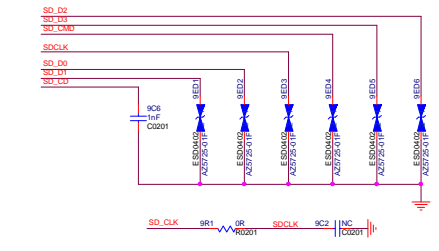
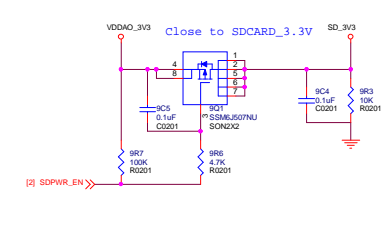


### WOL

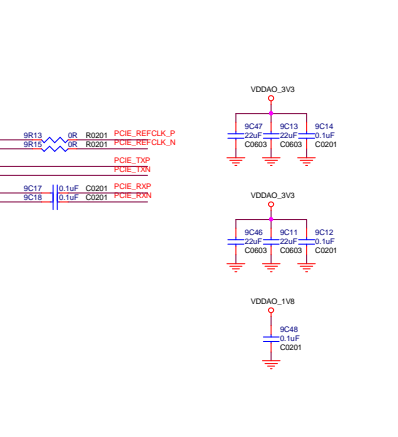
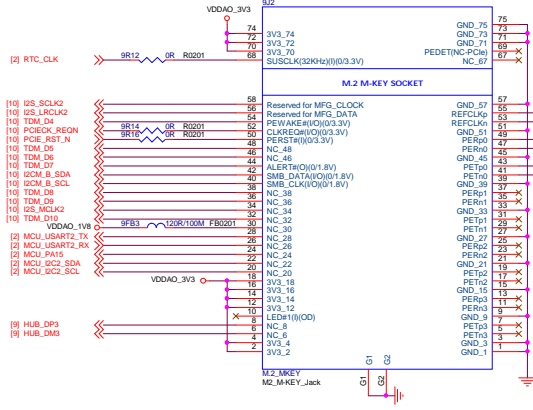




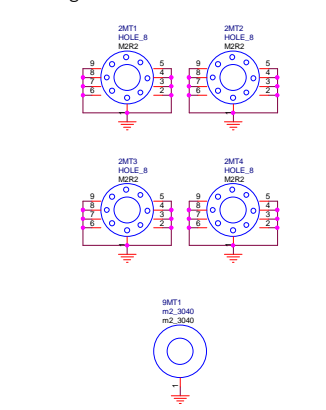
### SD Card



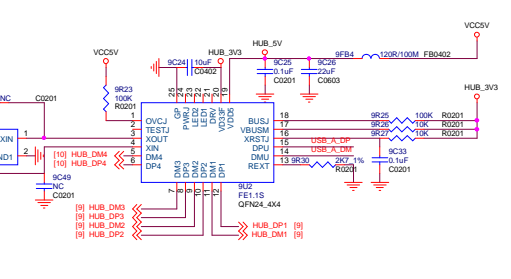
### M.2 Connector



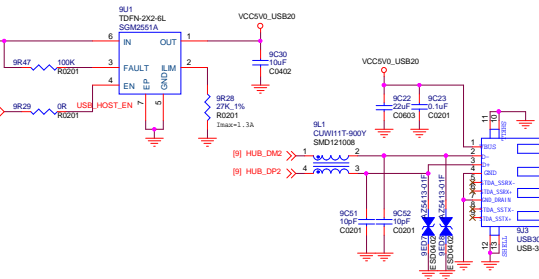
### Mouting Holes



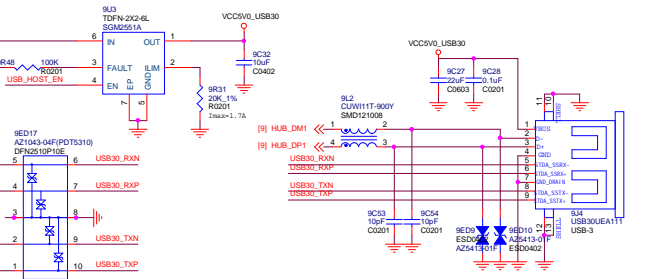
### USB HUB



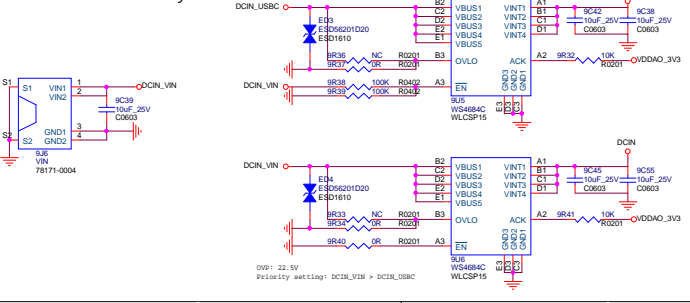
### USB 2.0



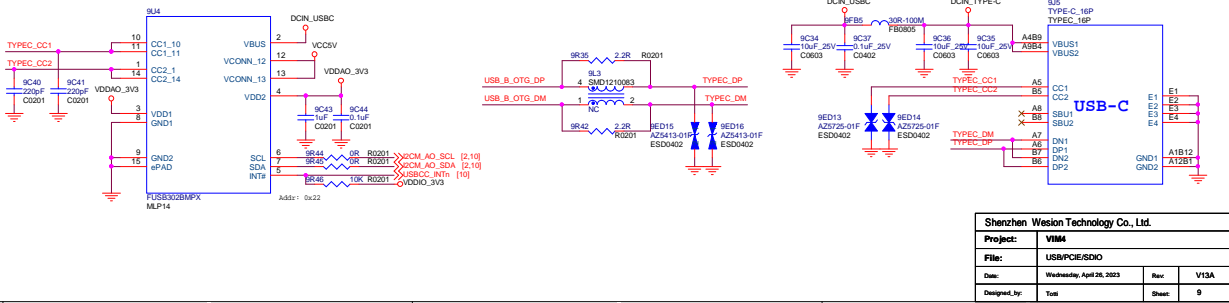
### USB 3.0



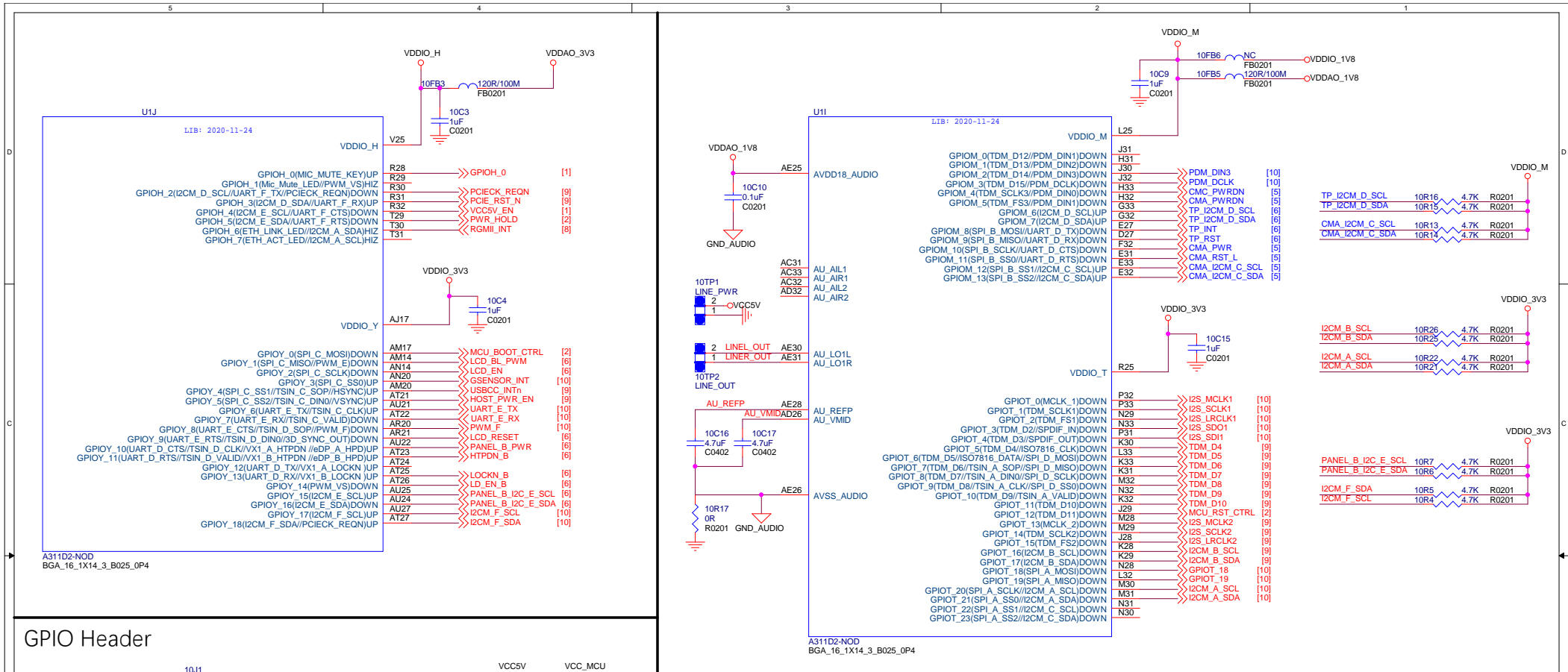
### VIN & Power Priority



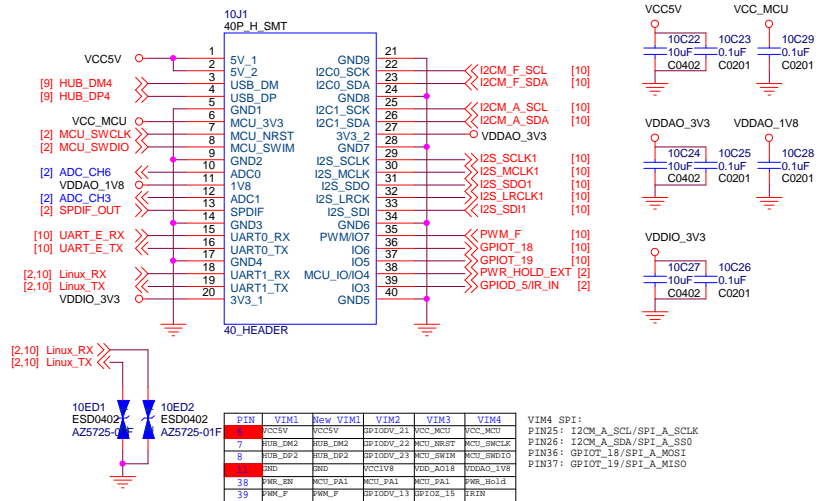
### USB-C



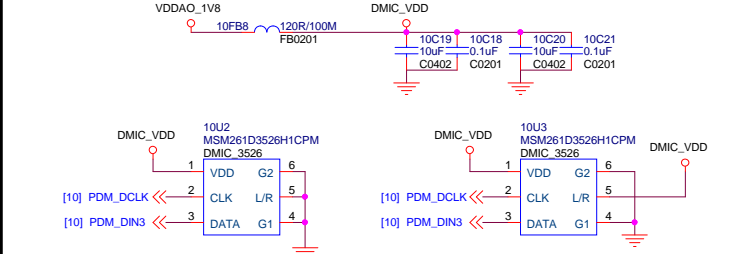
Shenzhen Wision Technology Co., Ltd.			
Project:	VIM4	Rev:	V15A
File:	USB/PCIE/SDIO	Draw:	9
Date:	Wednesday, April 26, 2023		
Designer: ljr	Yan		



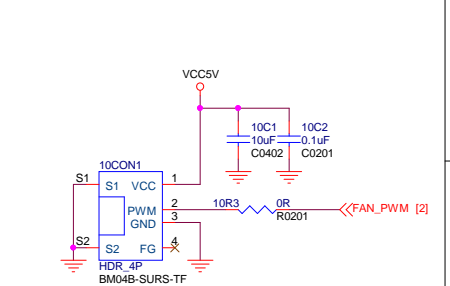
### GPIO Header



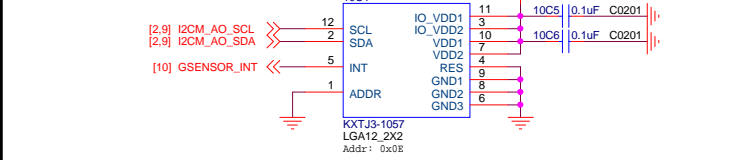
### DMIC



### FAN



### G-sensor



Shenzhen Wesion Technology Co., Ltd.			
Project:	VIM4		
File:	GPIO/FAN/Sensor/DMIC		
Date:	Wednesday, April 26, 2023	Rev:	V13A
Designed_by:	Toni	Sheet:	10

Tips: Float PIN6 & 11 to develop all VIM compatible expand board. Check the Tone Board for reference.

LUK

Lib: 2020-11-24

A1 DVSS166  
 A3 DVSS167  
 B3 DVSS168  
 B6 DVSS169  
 B8 DVSS170  
 B11 DVSS171  
 B17 DVSS172  
 B21 DVSS173  
 B24 DVSS174  
 B26 DVSS175  
 C2 DVSS176  
 C3 DVSS177  
 C11 DVSS178  
 C13 DVSS179  
 C18 DVSS180  
 C26 DVSS181  
 C29 DVSS182  
 D11 DVSS183  
 D13 DVSS184  
 E1 DVSS185  
 E7 DVSS186  
 E9 DVSS187  
 E10 DVSS188  
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 F7 DVSS197  
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 A01 DVSS286

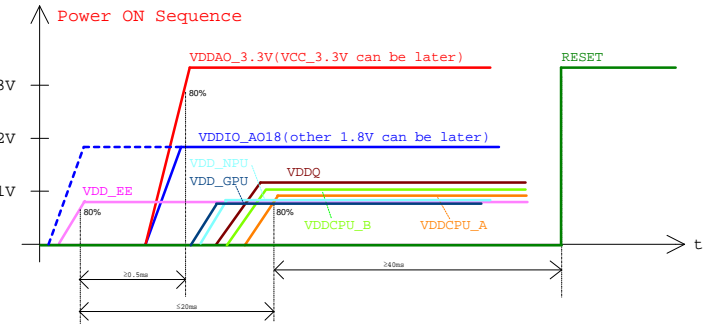
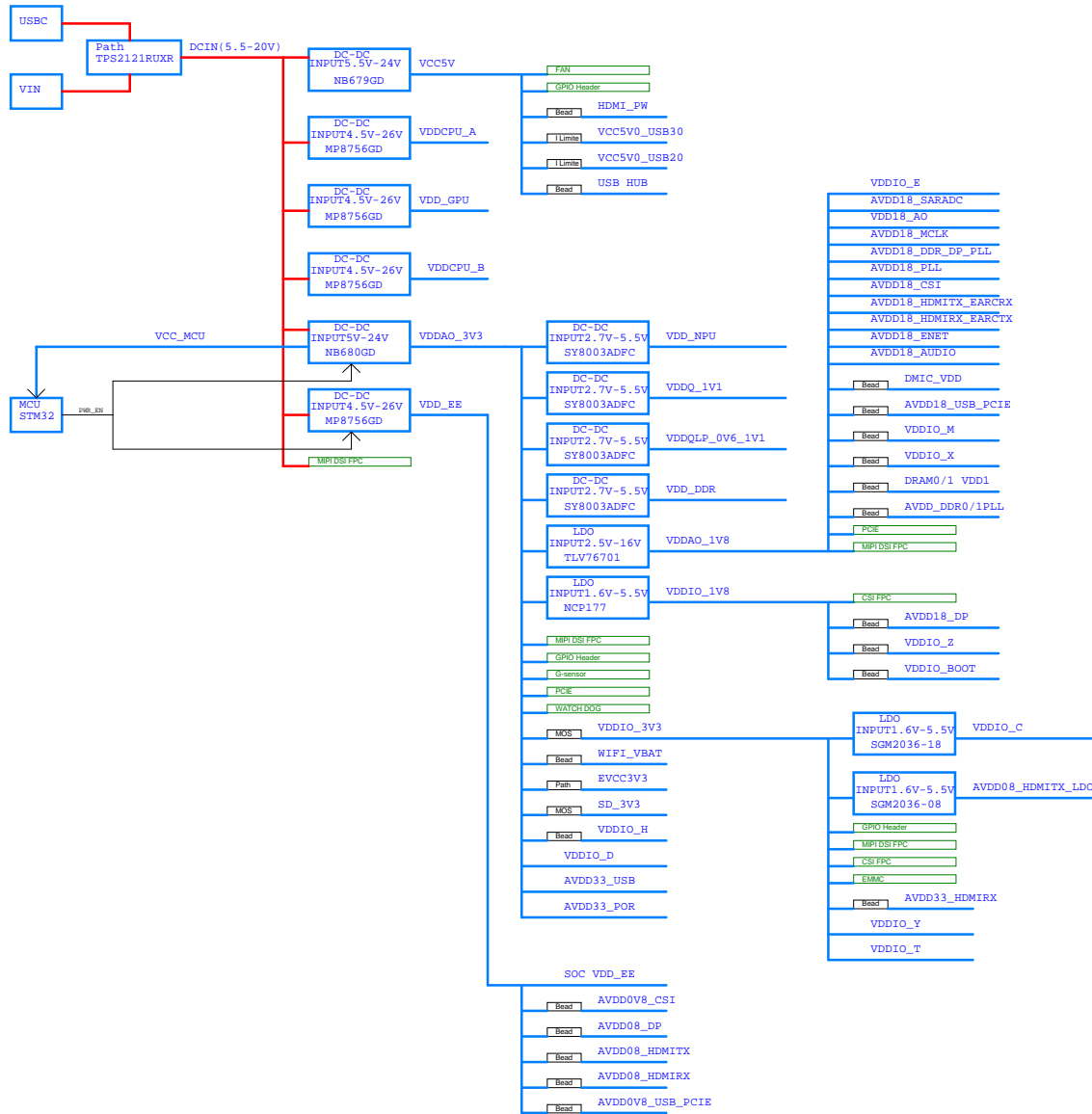
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 DVSS363 AC11  
 DVSS364 AC11  
 DVSS365 AC14  
 DVSS366 AC17  
 DVSS367 AC25  
 DVSS368 AC5  
 DVSS369 AC9  
 DVSS370 AC11  
 DVSS371 AC14  
 DVSS372 AC16  
 DVSS373 AC17  
 DVSS374 AC19  
 DVSS375 AC22  
 DVSS376 AC24  
 DVSS377 AC25  
 DVSS378 AC25  
 DVSS379 AC10  
 DVSS380 AC14  
 DVSS381 AC15  
 DVSS382 AC16  
 DVSS383 AC16  
 DVSS384 AC17  
 DVSS385 AC19  
 DVSS386 AC20  
 DVSS387 AC21  
 DVSS388 AC26  
 DVSS389 AC2  
 DVSS390 AC19  
 DVSS391 AC12  
 DVSS392 AC26  
 DVSS393 AC25  
 DVSS394 AC25  
 DVSS395 AC33  
 DVSS396 AC3  
 DVSS397 AC5  
 DVSS398 AC9  
 DVSS399 AC13  
 DVSS400 AC16  
 DVSS401 AC18  
 DVSS402 AC18  
 DVSS403 AC5

A311D2-NOO  
 BGA\_16\_1X14\_3\_B025\_0P4

GND

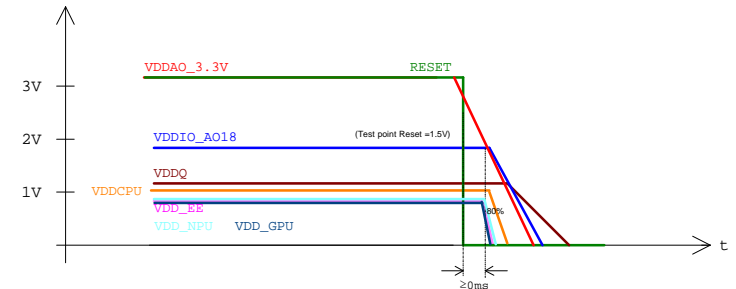
Shenzhen Wision Technology Co., Ltd.			
Project:	VIM4	Rev:	V15A
File:	DVSS	Draw:	11
Date:	Wednesday, April 26, 2023		
Design: by	Tan		

Power Tree:



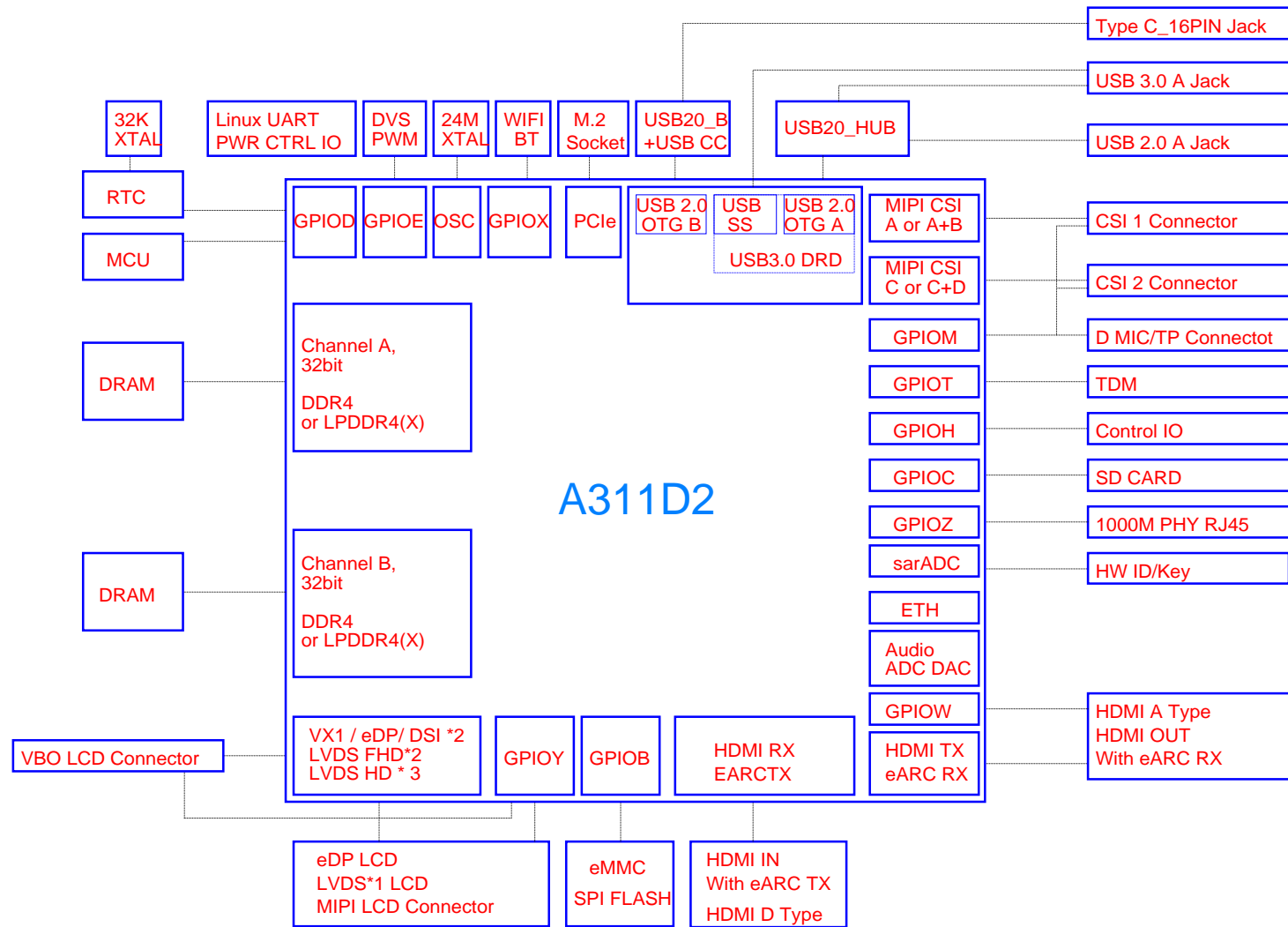
- 1) All test values refer to 80% of typical power voltage.
- 2) VDDAO\_3.3V & VCC3.3V should ramp up > 0.5ms later than VDD\_EE.
- 3) All power sources should get stable within 20ms (except VDDQ, VDD\_QLP).
- 4) No sequence requirement between VDD18\_AO and VDD\_EE.  
No sequence requirement between VDDCPU\_A & VDDCPU\_B & VDD\_NPU & VDD\_GPU & VDDQ & VDD\_QLP & VDD\_DDR and other power source.
- 5) VDDIO\_AO18 should ramp up earlier or at the same time with VDDAO\_3.3V & VCC3.3V.  
VDDAO\_3.3V & VCC3.3V should never be 2.5V higher than VDD18\_AO.
- 6) RESET\_n should keep low for at least 40ms after power up (except VDDQ, VDD\_QLP).

Power OFF Sequence



A reset IC should monitor VDDIO3.3V, output lower (lower than 1.5V) before other power rails turning off.  
There is no power off sequence requirement between other power rails.

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Project:	VIM4	Rev:	V15A
File:	POWER TREE	Drawn:	
Date:	Wednesday, April 26, 2023	Sheet:	12
Design: By:	Tian	Check:	



Shenzhen Wesion Technology Co., Ltd.			
Project:	VIM4		
File:	BLOCK		
Date:	Wednesday, April 26, 2023	Rev:	V1.0A
Design: JY	Total	Sheet:	13