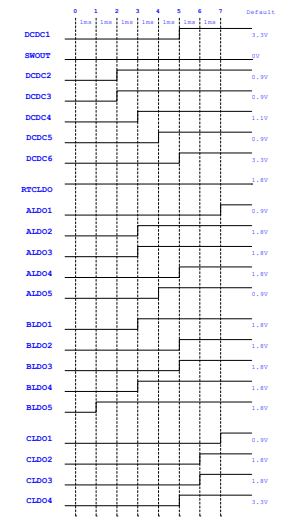


U1
JH7110


VF2/EVB NetName	Ball Name	Recommended Margin Mac	Seq
+1V8_VDD18_AON	VDD18_AON	VDD18_AON	1
+1V8_VDD18_CFU	VDD09_CFU	VDD09_CFU	2
+1V8_VDD18_AON	VDD09_AON	VDD09_AON	3
+1V8_VDD18_AON	VDD18	VDD18	4
+1V8_VDD18_AON	VDDQ11_DDR	VDDQ11_DDR	5
+1V8_VDD18_AON	VDD09	VDD09	6
+1V8_VDD18_AON	VDD18/VDDQ33	VDD18/VDDQ33	7
+1V8_VDD18_AON	FAD_RSTN	FAD_RSTN	8

Note:
 1. VDD18_AON and VDD18_CFU Can Power up at Seq#4
 2. VDD18_AON and VDD18_CFU Can Power up at Seq#4
 3. VDD18_AON and VDD18_CFU Can Power up after Resets
 VDD18_AON and VDD18_CFU Can Power up after Resets
 VDD18_AON and VDD18_CFU Can Power up after Resets



Vision Five 2 JH7110 GPIO List

Power Group	GPIO Name	Default FUN	Devices	Notes
VDD1833_GPIO3	GPIO00	HDMI I2C SCL GPIO0	HDMI: J8	
	GPIO01	HDMI I2C SDA GPIO1	HDMI: J8	
	GPIO02	DSI I2C SDA GPIO2	LCD TP:U32 & MIPI TK J1	
	GPIO03	DSI I2C SCL GPIO3	LCD TP:U32 & MIPI TK J1	
	GPIO04	I2SMCLK	OSC: U13	
	GPIO05	UART0 TX GPIO5	40PIN: J15	
VDD1833_GPIO4	GPIO06	UART0 RX GPIO6	40PIN: J15	
	GPIO07	SD SDIO1 D2 GPIO7	Micro SD:J10	
	GPIO08	SD SDIO1 D3 GPIO8	Micro SD:J10	
	GPIO09	SD SDIO1 CMD GPIO9	Micro SD:J10	
	GPIO10	SD SDIO1 CLK GPIO10	Micro SD:J10	
	GPIO11	SD SDIO1 D0 GPIO11	Micro SD:J10	
	GPIO12	SD SDIO1 D1 GPIO12	Micro SD:J10	
	GPIO13	GMAC PHYRSTN GPIO13	GMAC0:U6 & GMAC1 0	
	GPIO14	HDMI CEC GPIO14	HDMI: J8	
	GPIO15	HDMI HPD GPIO15	HDMI: J8	
	GPIO16	CSI I2C SCL GPIO16	MIPI RX:J2	
	GPIO17	CSI I2C SDA GPIO17	MIPI RX:J2	
	GPIO18	CSI PWDN0 GPIO18	MIPI RX:J2	
	GPIO19	PMIC I2C SCL GPIO19	PMIC:U22 & EEPROM : U0	
GPIO20	PMIC I2C SDA GPIO20	PMIC:U22 & EEPROM : U0		
VDD1833_GPIO1	GPIO21	PCIE1 PWREN H GPIO21	Mkey: U23-U24	
	GPIO22	MIPI PWR EN	LCD TP:U32	
	GPIO23	LCD RESET	LCD TP:U32	
	GPIO24	MIPI LCD BL	LCD TP:U32	
	GPIO25	TP DET GPIO25	LCD TP:U32	
	GPIO26	PCIE0 PERSTN GPIO26	VL805: U16	
	GPIO27	PCIE0 PRSN GPIO27	VL805: U16	
	GPIO28	PCIE1 PERSTN GPIO28	Mkey: U23	
	GPIO29	PCIE1 PRSN GPIO29	Mkey: U23	
	GPIO30	TP INT L	LCD TP:U32	
	GPIO31	TP RST L	LCD TP:U32	
	GPIO32	PCIE0 PWREN H GPIO32	VL805: U16	
	GPIO33	DAC PWML GPIO33	AUDIO JK:J4	
	GPIO34	DAC PWMR GPIO34	AUDIO JK:J4	
GPIO35	WDO GPIO35	RSET IC:U35		
VDD1833_GPIO2	GPIO36	GPIO36	40PIN: J15	
	GPIO37	GPIO37	40PIN: J15	
	GPIO38	GPIO38	40PIN: J15	
	GPIO39	GPIO39	40PIN: J15	
	GPIO40	GPIO40	40PIN: J15	
	GPIO41	SD SDIO0 CD GPIO41	Micro SD:J10	
	GPIO42	GPIO42	40PIN: J15	
	GPIO43	GPIO43	40PIN: J15	
	GPIO44	GPIO44	40PIN: J15	
	GPIO45	GPIO45	40PIN: J15	
	GPIO46	GPIO46	40PIN: J15	
	GPIO47	GPIO47	40PIN: J15	
	GPIO48	GPIO48	40PIN: J15	
	GPIO49	GPIO49	40PIN: J15	
	GPIO50	GPIO50	40PIN: J15	
	GPIO51	GPIO51	40PIN: J15	
	GPIO52	GPIO52	40PIN: J15	
	GPIO53	GPIO53	40PIN: J15	
	GPIO54	GPIO54	40PIN: J15	
	GPIO55	GPIO55	40PIN: J15	
	GPIO56	GPIO56	40PIN: J15	
GPIO57	GPIO57	40PIN: J15		
GPIO58	GPIO58	40PIN: J15		
GPIO59	GPIO59	40PIN: J15		
GPIO60	GPIO60	40PIN: J15		
GPIO61	GPIO61	40PIN: J15		
GPIO62	SDIO0 RSTN GPIO62	eMMC: J9		
GPIO63	GPIO63	40PIN: J15		
VDD18_AON	RGPIO0	Boot Mode		
	RGPIO1	Boot Mode	SW: S1B04	
	RGPIO2	Boot Mode	SW: S1B04	
	RGPIO3	STS PWR	LED3	



Title VisionFive 2

Size B	Document Number GPIO List	Rev V1.3B
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Sheet 03		of 23

U1A

VDD00	G9
VDD01	G10
VDD02	G11
VDD03	H8
VDD04	H9
VDD05	H11
VDD06	H16
VDD07	H17
VDD08	H18
VDD09	H19
VDD10	H20
VDD11	J6
VDD12	J7
VDD13	J16
VDD14	J18
VDD15	J20
VDD16	J21
VDD17	K7
VDD18	K16
VDD19	K18
VDD20	K20
VDD21	K21
VDD22	L7
VDD23	L8
VDD24	L16
VDD25	L17
VDD26	L18
VDD27	L20
VDD28	M8
VDD29	M18
VDD30	N8
VDD31	N9
VDD32	N14
VDD33	N15
VDD34	N16
VDD35	N17
VDD36	N18
VDD37	P9
VDD38	P10
VDD39	P11
VDD40	P12
VDD41	P14
VDD42	P15
VDD43	P17
VDD44	R9

VDD_CPU

VDD_CPU00	J11
VDD_CPU01	J12
VDD_CPU02	J13
VDD_CPU03	K10
VDD_CPU04	K12
VDD_CPU05	K13
VDD_CPU06	L10
VDD_CPU07	L12
VDD_CPU08	L13
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VDD_CPU10	M11
VDD_CPU11	M12
VDD_CPU12	M13

JH7110

U1B

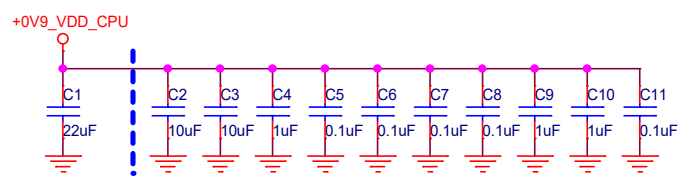
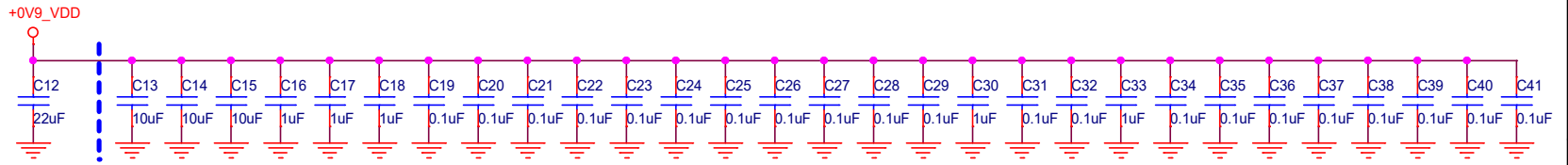
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B17	VSS001	VSS048	J9
C2	VSS002	VSS049	J10
C18	VSS003	VSS050	J14
C20	VSS004	VSS051	J15
D4	VSS005	VSS052	J17
D19	VSS006	VSS053	J19
E3	VSS007	VSS054	J22
E7	VSS008	VSS055	J23
E9	VSS009	VSS056	K6
E10	VSS010	VSS057	K8
E12	VSS011	VSS058	K9
E17	VSS012	VSS059	K11
E20	VSS013	VSS060	K14
F8	VSS014	VSS061	K15
F10	VSS015	VSS062	K17
F11	VSS016	VSS063	K19
F12	VSS017	VSS064	K22
F13	VSS018	VSS065	L2
F23	VSS019	VSS066	L4
F24	VSS020	VSS067	L5
G2	VSS021	VSS068	L6
G7	VSS022	VSS069	L9
G8	VSS023	VSS070	L11
G12	VSS024	VSS071	L14
G13	VSS025	VSS072	L15
G14	VSS026	VSS073	L19
G15	VSS027	VSS074	L21
G16	VSS028	VSS075	L23
G17	VSS029	VSS076	M6
G18	VSS030	VSS077	M7
G19	VSS031	VSS078	M9
G20	VSS032	VSS079	M14
G22	VSS033	VSS080	M15
G23	VSS034	VSS081	M16
H4	VSS035	VSS082	M17
H7	VSS036	VSS083	M19
H10	VSS037	VSS084	M20
H12	VSS038	VSS085	M21
H13	VSS039	VSS086	M22
H14	VSS040	VSS087	N5
H15	VSS041	VSS088	N6
H21	VSS042	VSS089	N7
H22	VSS043	VSS090	N10
H23	VSS044	VSS091	N11
J2	VSS045	VSS092	N12
J5	VSS046	VSS093	N13

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U1C

N19	VSS094	VSS141	Y4
N20	VSS095	VSS142	Y6
N21	VSS096	VSS143	Y9
P2	VSS097	VSS144	Y10
P4	VSS098	VSS145	Y11
P8	VSS099	VSS146	Y14
P13	VSS100	VSS147	Y18
P16	VSS101	VSS148	Y19
P18	VSS102	VSS149	Y22
P20	VSS103	VSS150	Y24
P21	VSS104	VSS151	AA4
R3	VSS105	VSS152	AA5
R8	VSS106	VSS153	AA6
R10	VSS107	VSS154	AA8
R11	VSS108	VSS155	AA9
R12	VSS109	VSS156	AA16
R13	VSS110	VSS157	AA19
R14	VSS111	VSS158	AA20
R15	VSS112	VSS159	AB3
R16	VSS113	VSS160	AB6
R17	VSS114	VSS161	AB7
R18	VSS115	VSS162	AB10
T4	VSS116	VSS163	AB13
T8	VSS117	VSS164	AB19
T11	VSS118	VSS165	AB22
T18	VSS119	VSS166	AB24
U1	VSS120	VSS167	AC1
U8	VSS121	VSS168	AC2
U11	VSS122	VSS169	AC4
U18	VSS123	VSS170	AC6
U19	VSS124	VSS171	AC8
V8	VSS125	VSS172	AC17
V11	VSS126	VSS173	AC21
V17	VSS127	VSS174	AC23
V18	VSS128	VSS175	AD5
V20	VSS129	VSS176	AD10
V22	VSS130	VSS177	AD14
W3	VSS131	VSS178	AD25
W7	VSS132	VSS179	AE1
W10	VSS133	VSS180	AE2
W11	VSS134	VSS181	AE8
W12	VSS135	VSS182	AE13
W13	VSS136	VSS183	AE16
W15	VSS137	VSS184	AE18
W16	VSS138	VSS185	AE21
W17	VSS139	VSS186	AE23
W18	VSS140	VSS187	AE25

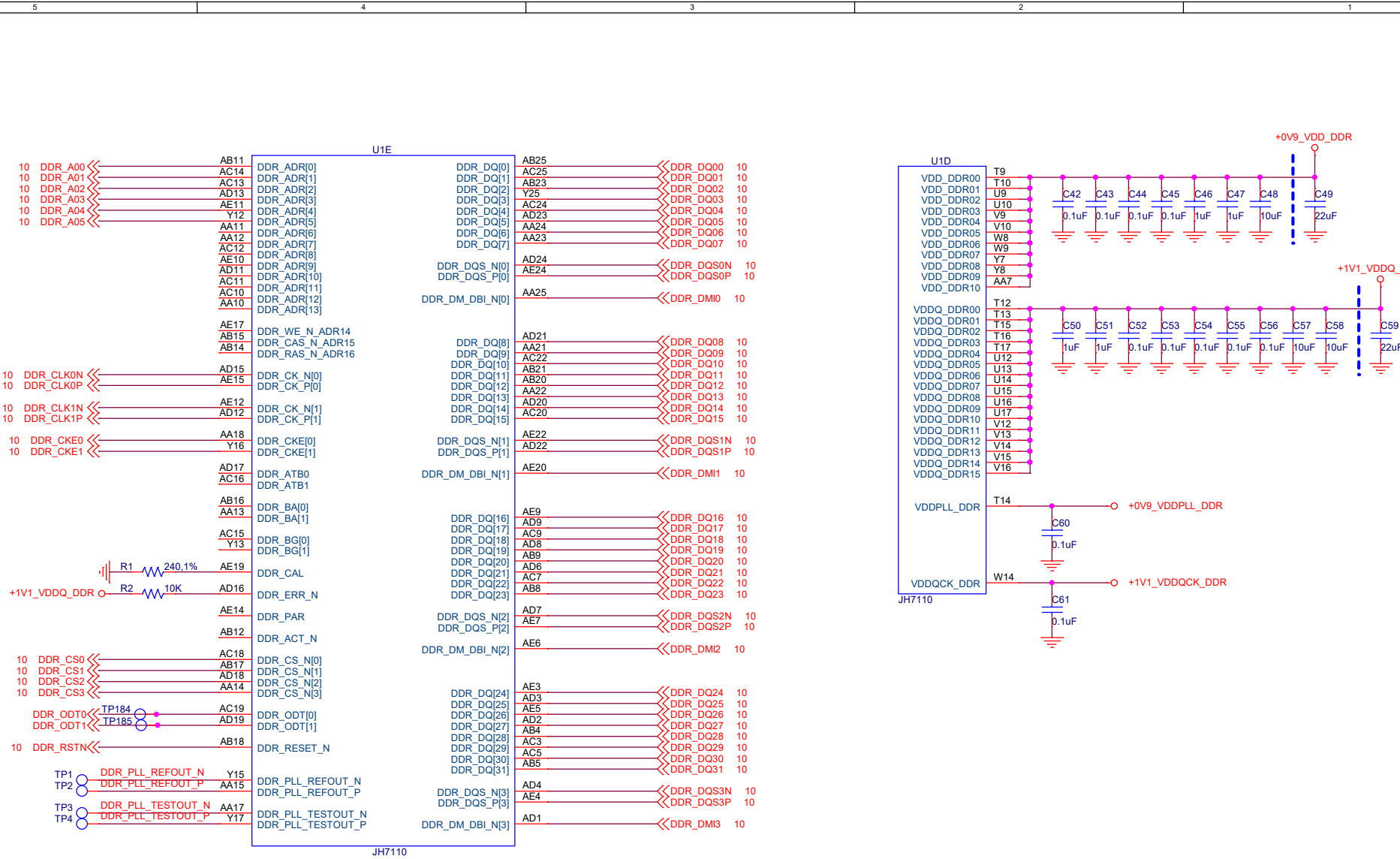
JH7110



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Title: **VisionFive 2**

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Date: Wednesday, February 08, 2023	Sheet: 04	of 23



D

D

C

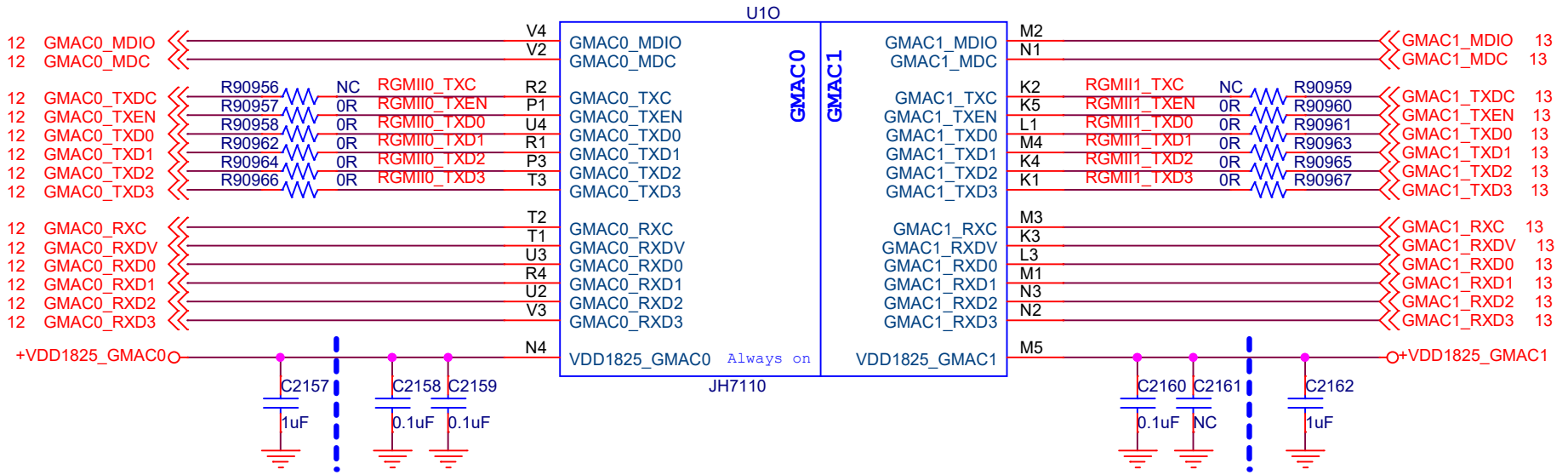
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B

B

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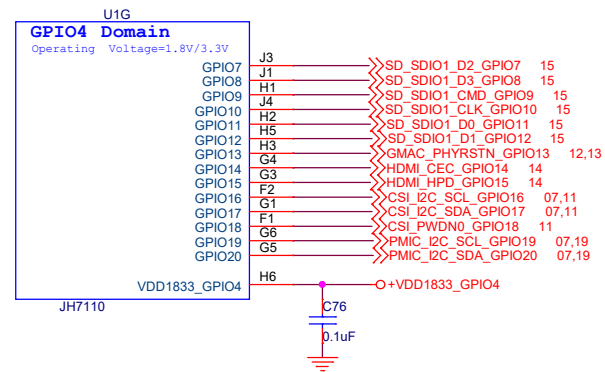
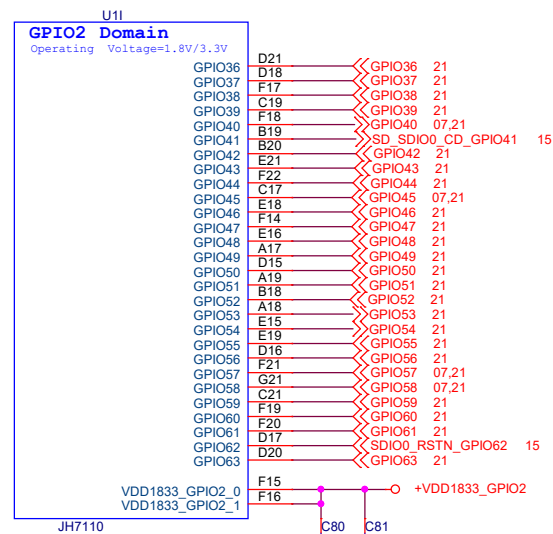
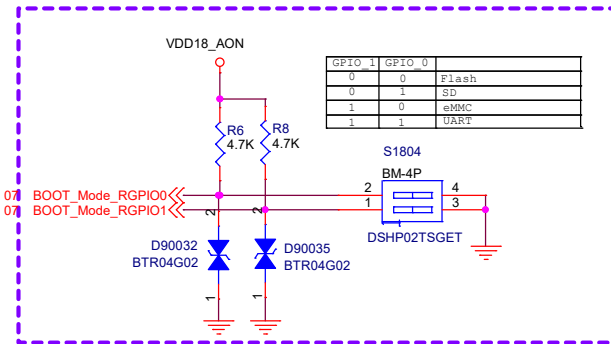
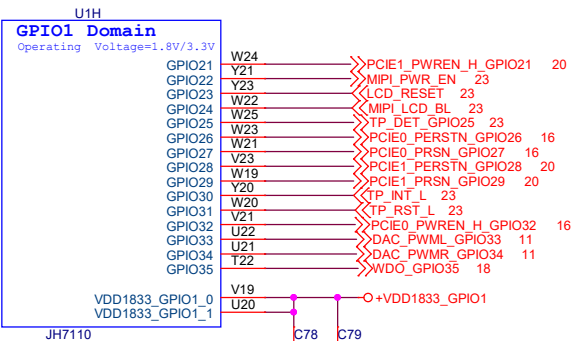
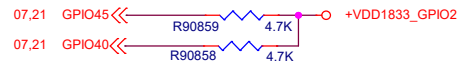
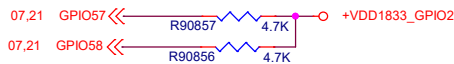
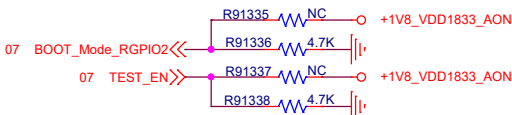
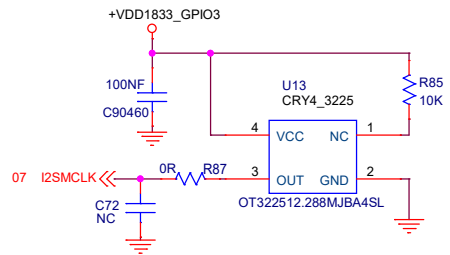
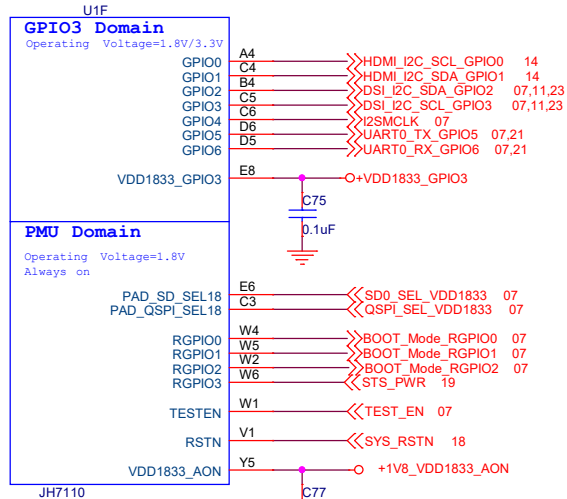
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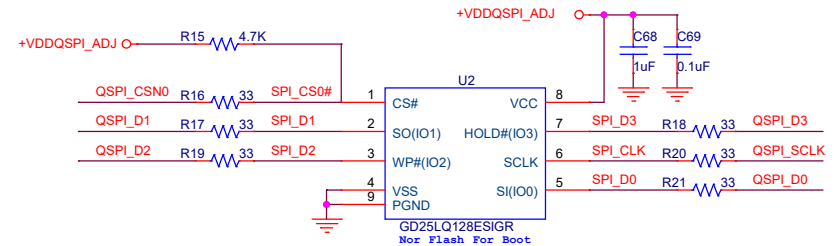
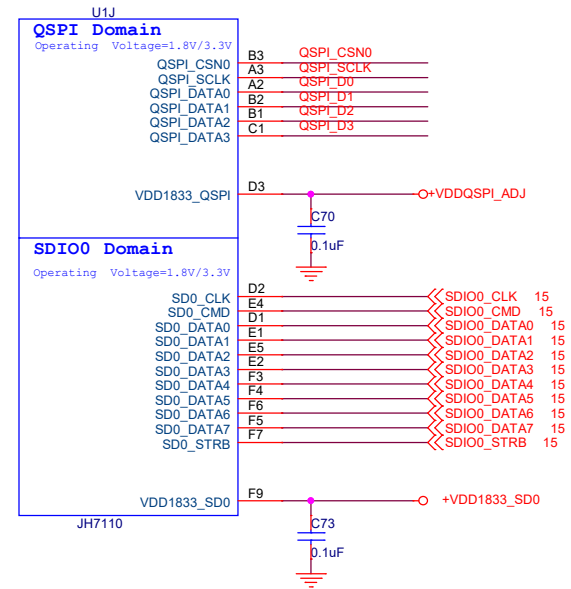
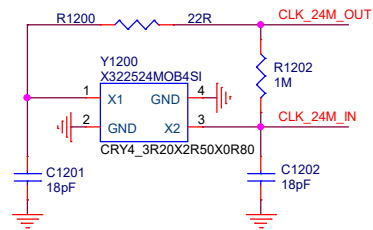
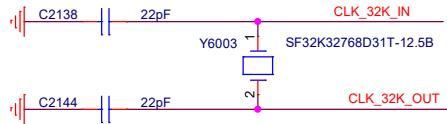
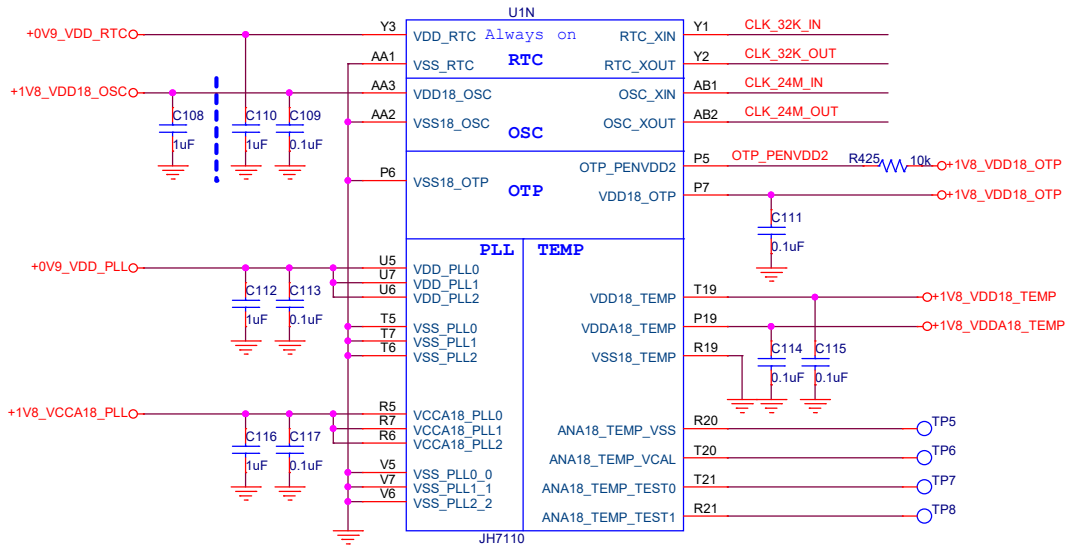


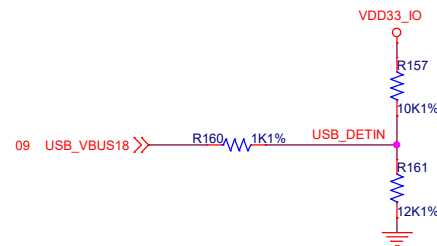
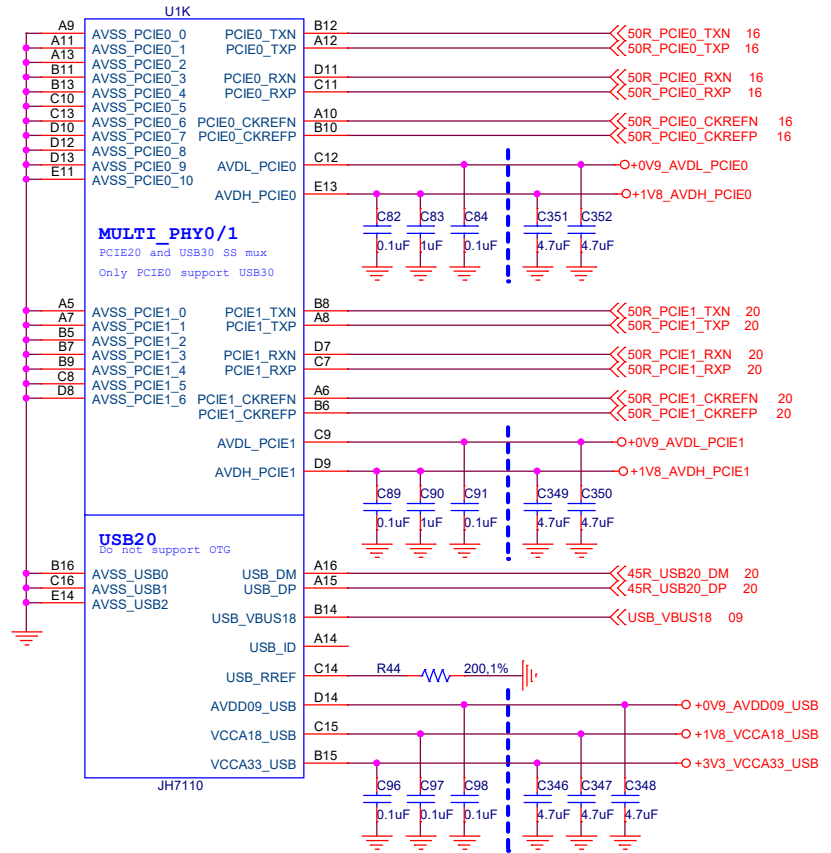
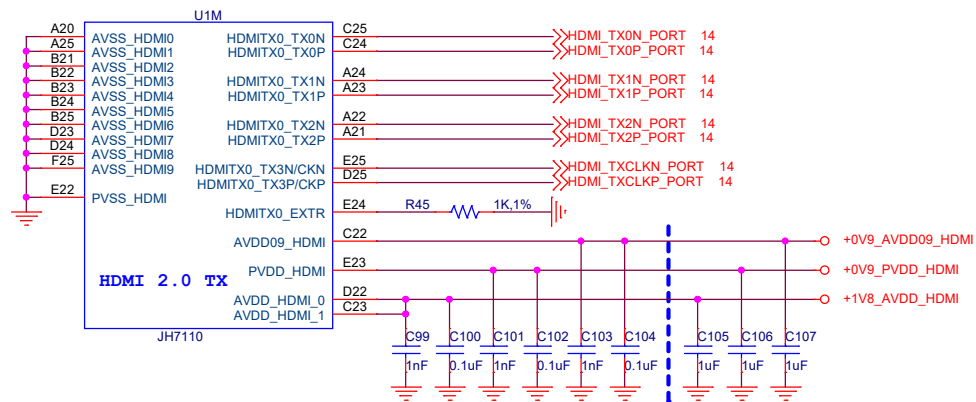
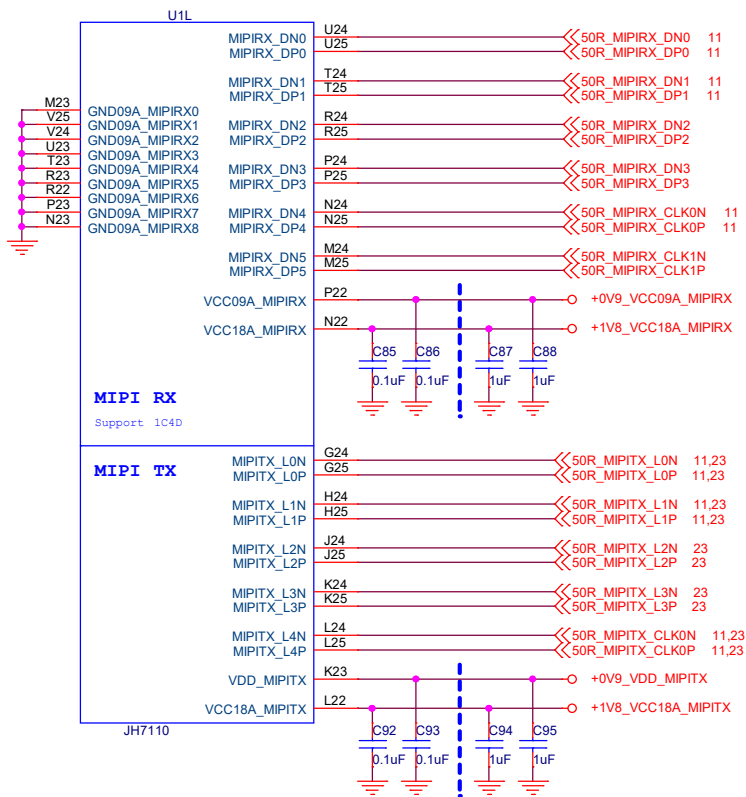
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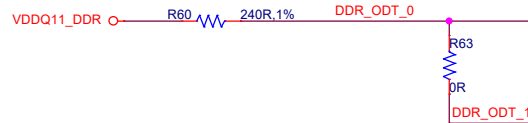
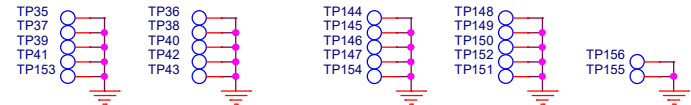
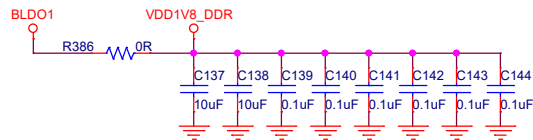
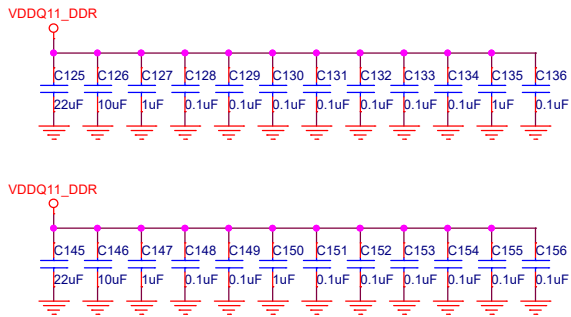
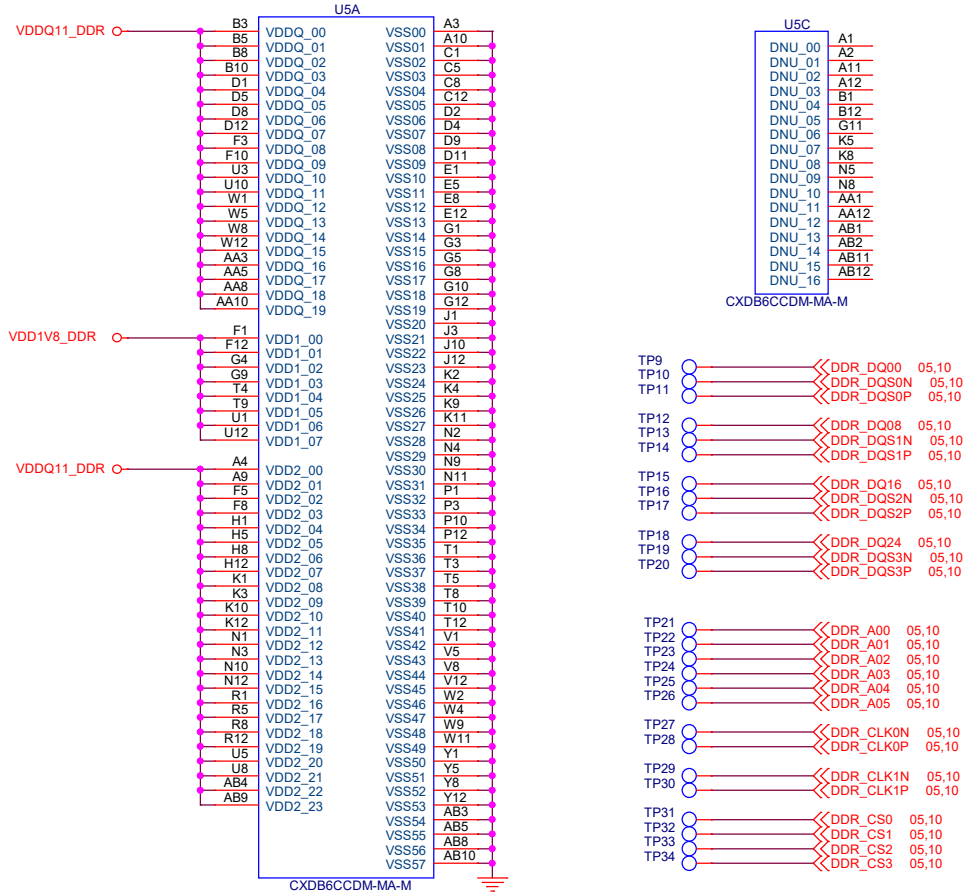
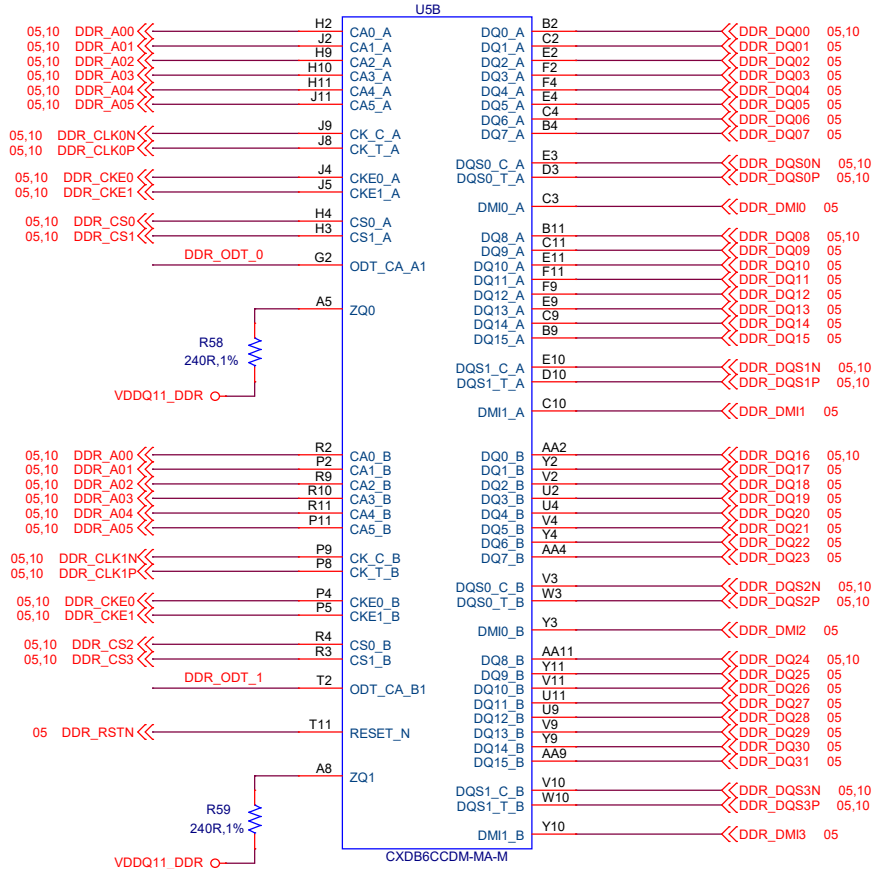
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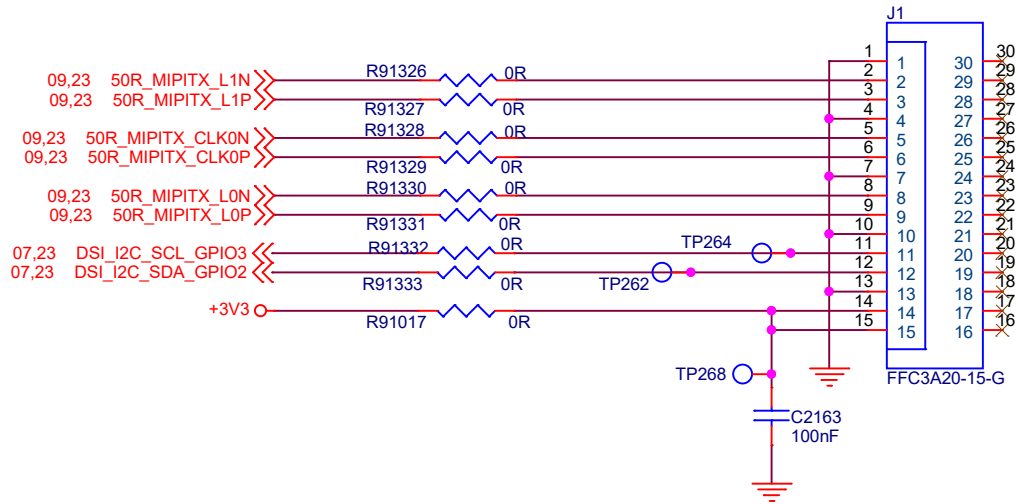




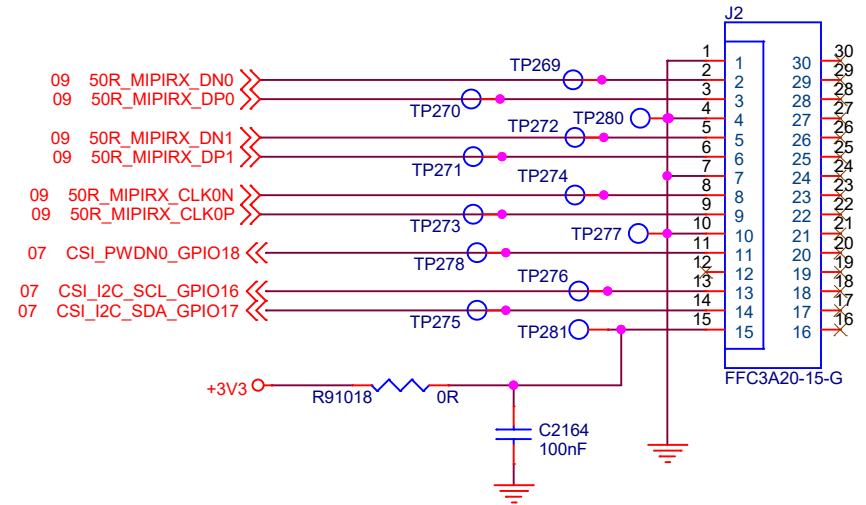
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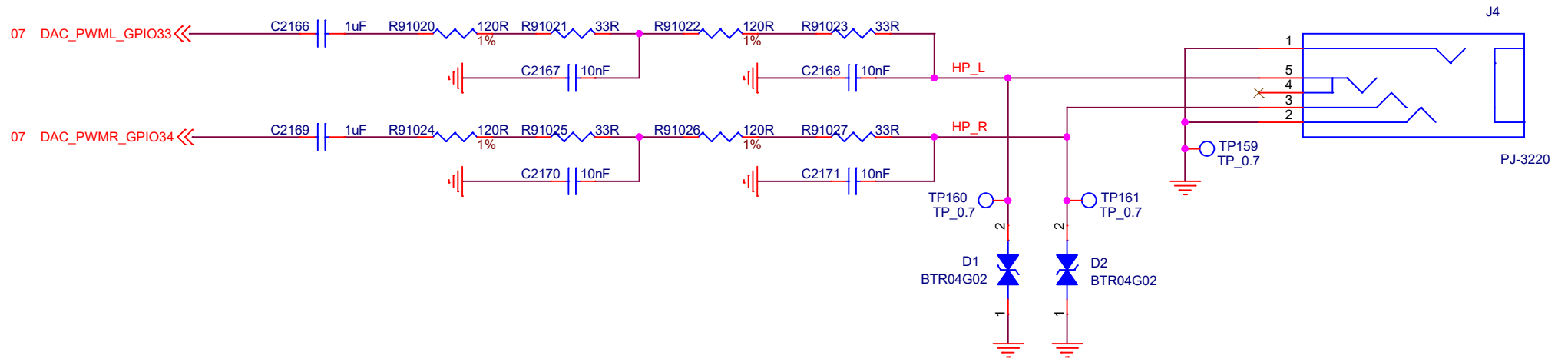
MIPI_TX



MIPI_RX0



AUDIO



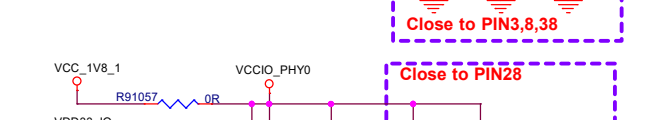
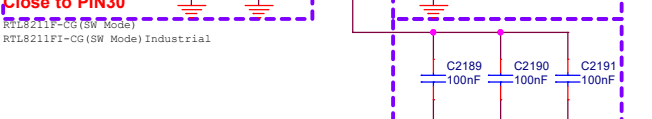
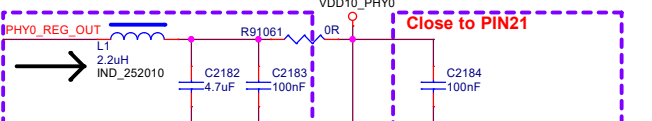
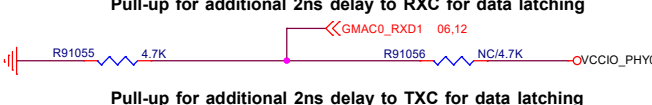
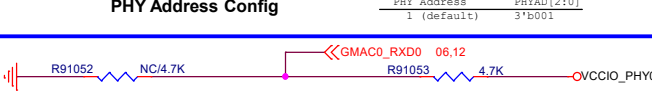
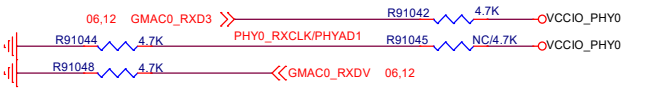
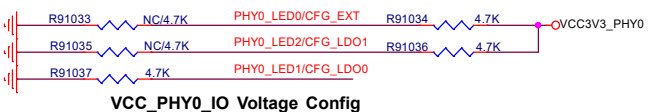
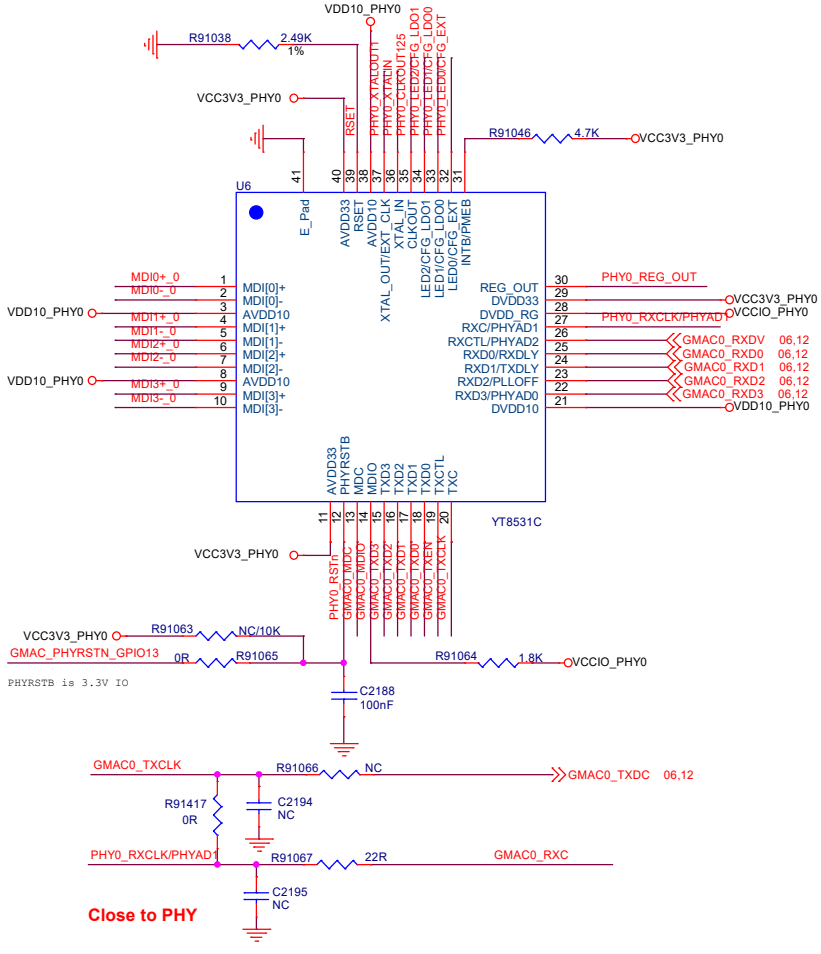
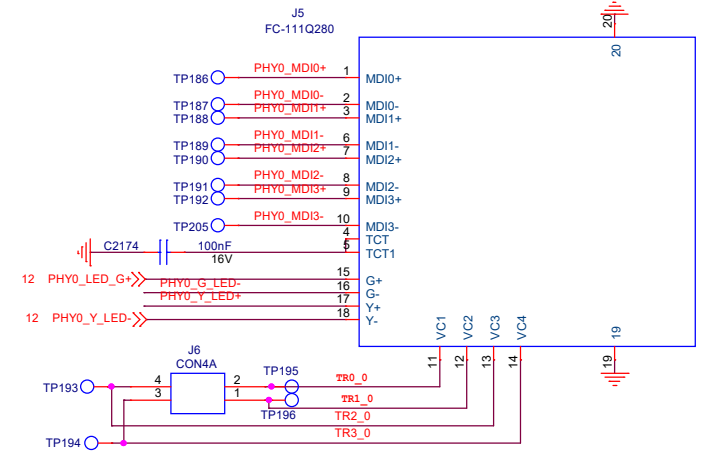
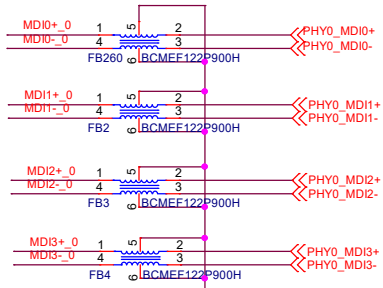
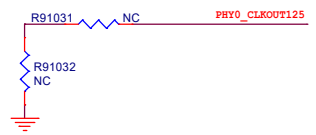
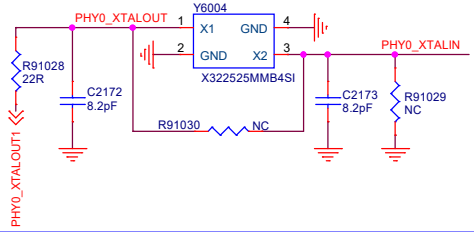
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Giga PHY0

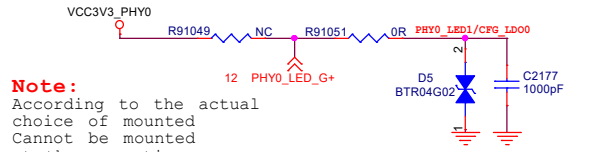
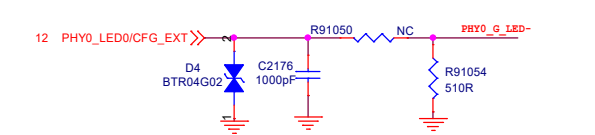
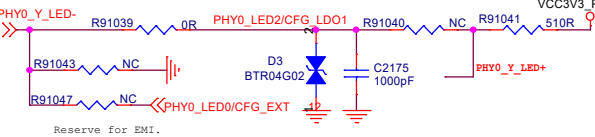
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 >>GMACO_RXD3 06,12
 >>GMACO_RXDV 06,12
 >>GMACO_RXC 06

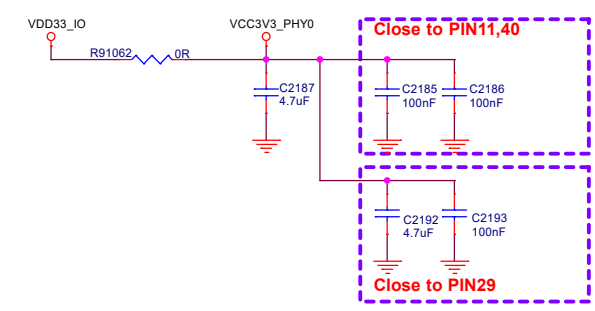
>>GMACO_MDC 06
 >>GMACO_MDIO 06
 >>GMAC_PHYRSTN_GPIO13 07,13



RGMI1 Power Source	CFG_EXT	CFG_LDO[1:0]
External 3.3V	1'b1	2'b00
External 1.8V	1'b1	2'b10
Internal 1.8V(default)	1'b0	2'b10



Note:
According to the actual choice of mounted Cannot be mounted at the same time



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Title
 VisionFive 2

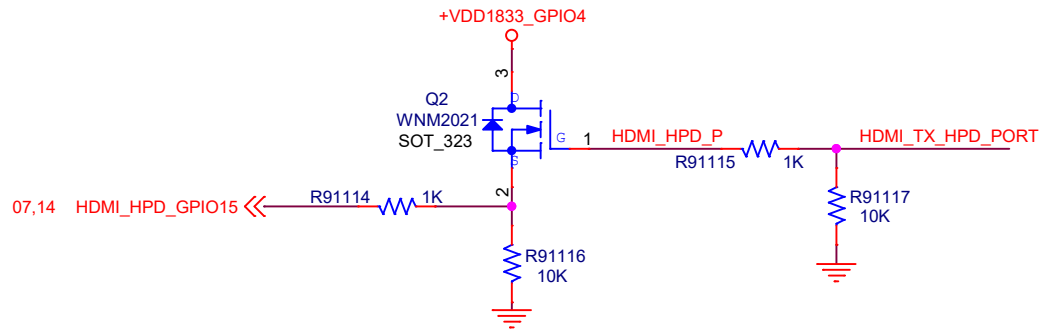
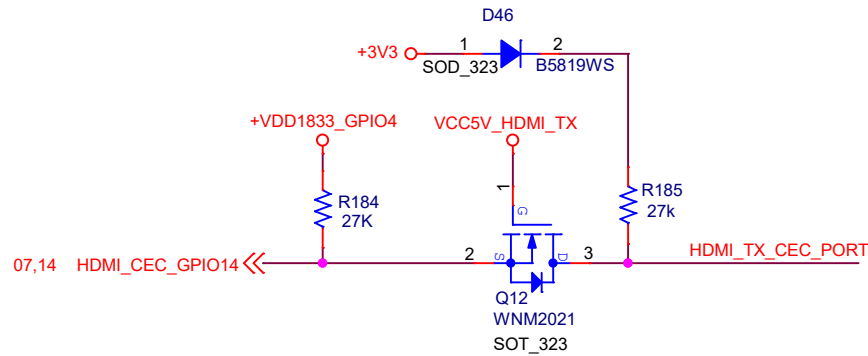
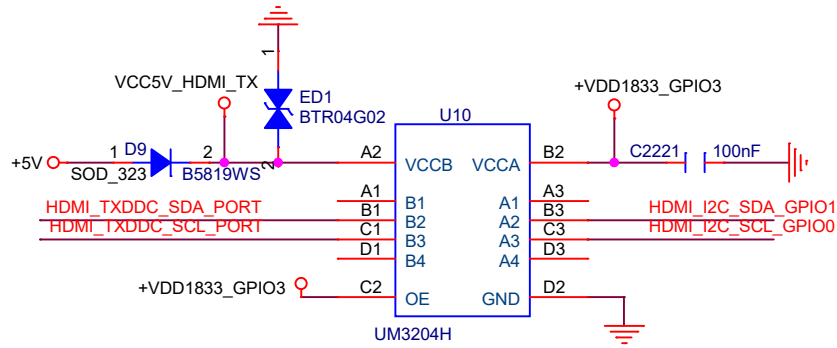
Size A3	Document Number Ethernet_0	Rev V1.3B
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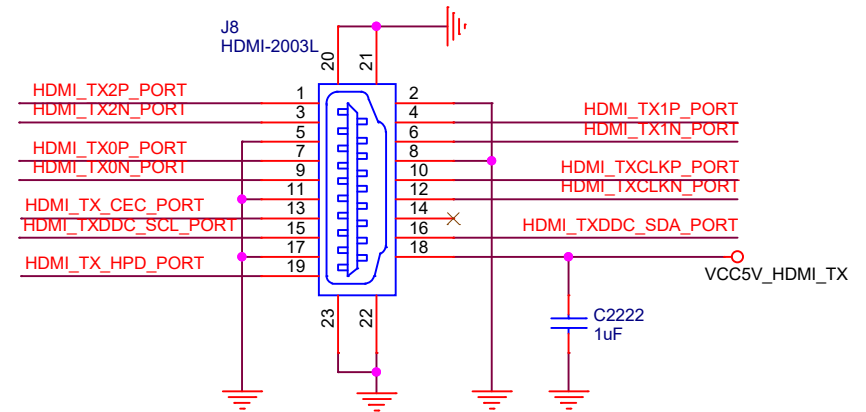
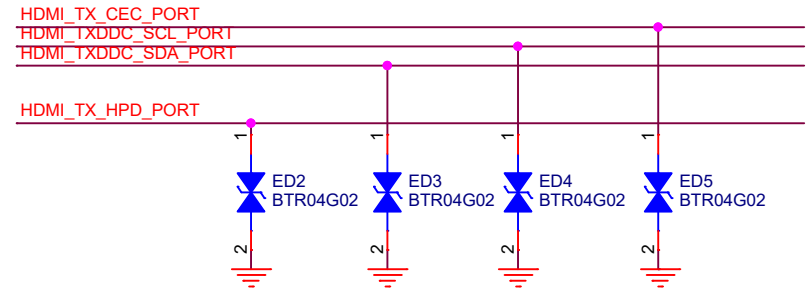
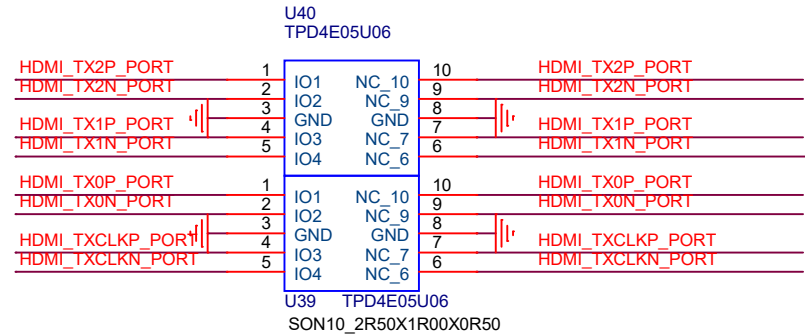
HDMI2.0 TX

- 09 HDMI_TX2P_PORT <<<
- 09 HDMI_TX2N_PORT <<<
- 09 HDMI_TX1P_PORT <<<
- 09 HDMI_TX1N_PORT <<<
- 09 HDMI_TX0P_PORT <<<
- 09 HDMI_TX0N_PORT <<<
- 09 HDMI_TXCLKP_PORT <<<
- 09 HDMI_TXCLKN_PORT <<<

- >>>HDMI_I2C_SCL_GPIO0 07
- >>>HDMI_I2C_SDA_GPIO1 07
- >>>HDMI_CEC_GPIO14 07,14
- >>>HDMI_HPD_GPIO15 07,14

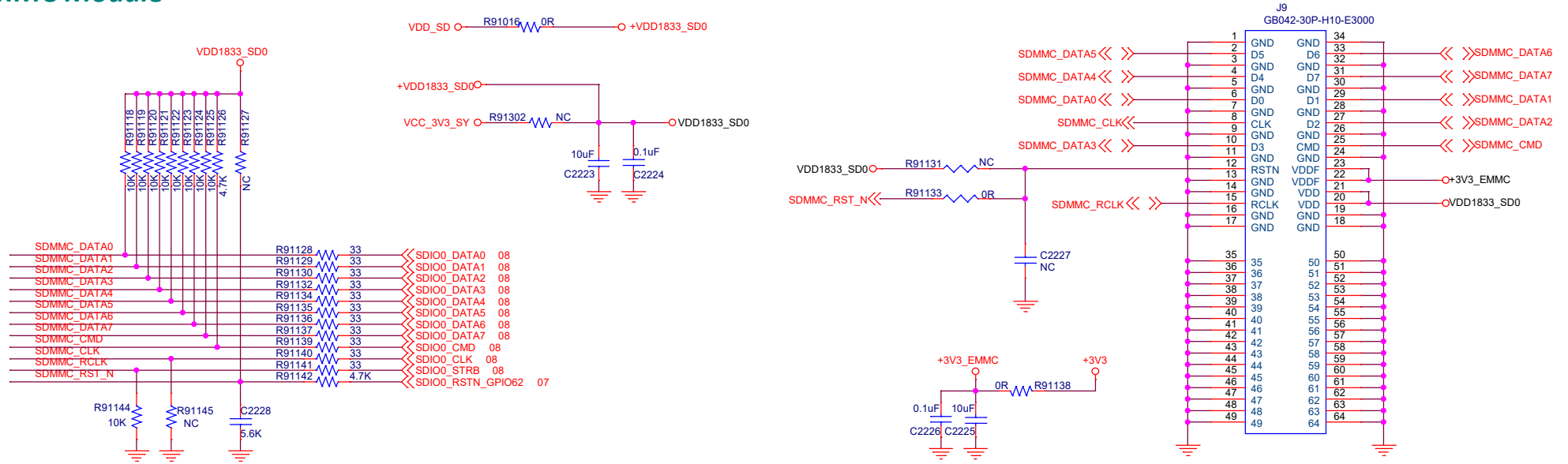


$$C_j \leq 0.4 \text{ pF}$$

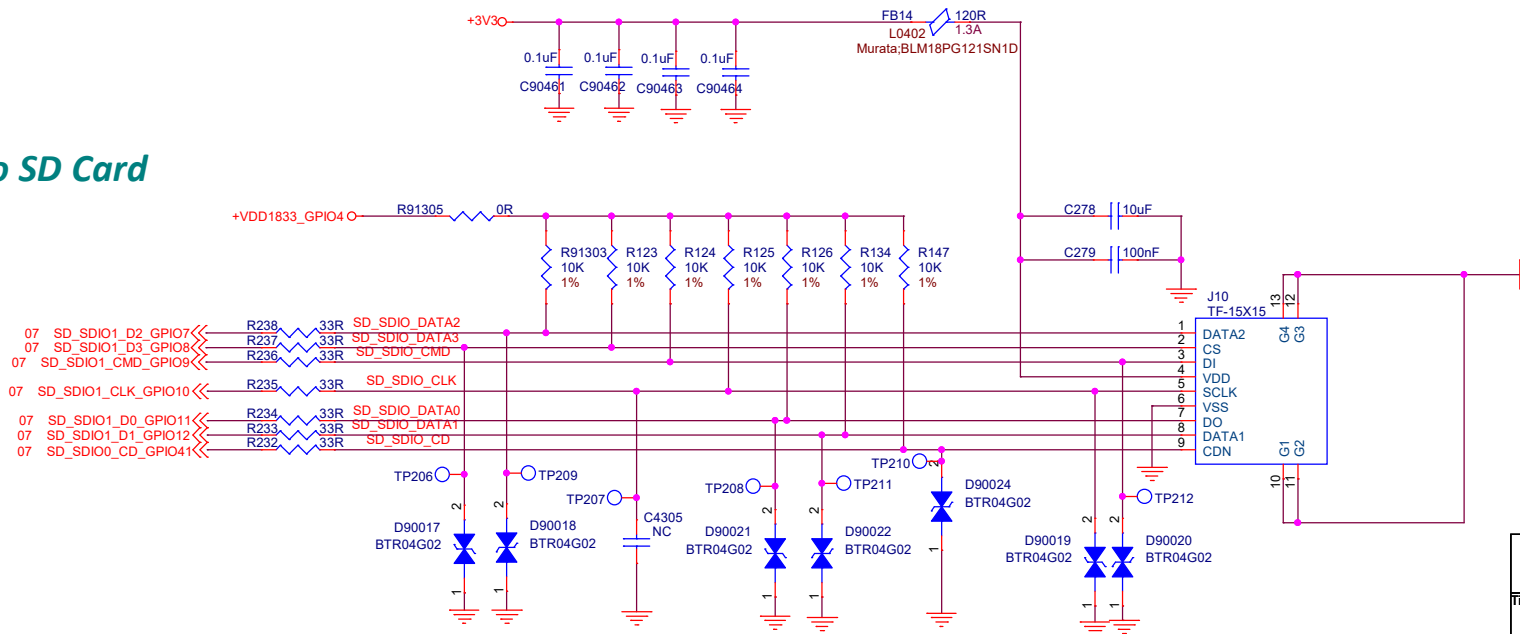



Title VisionFive 2	
Size A4	Document Number HDMI
Date: Wednesday, February 08, 2023	Rev V1.3B
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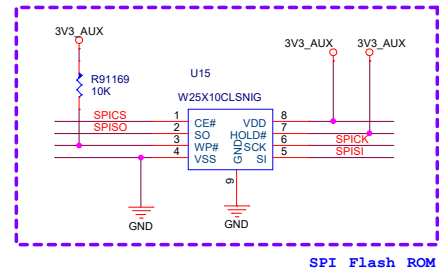
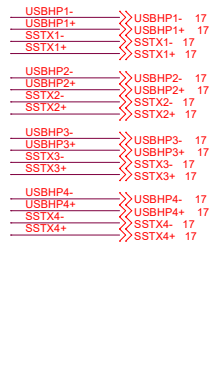
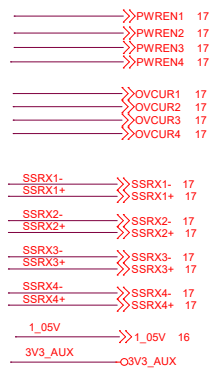
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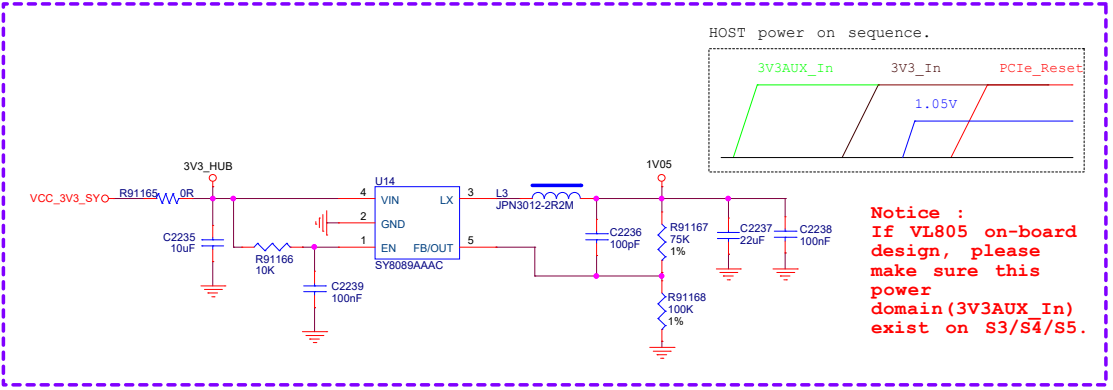
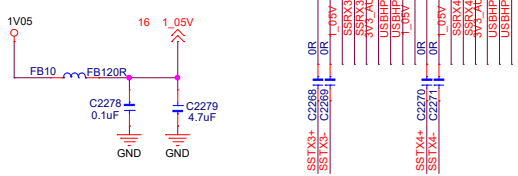
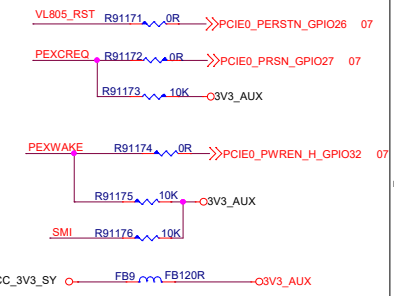
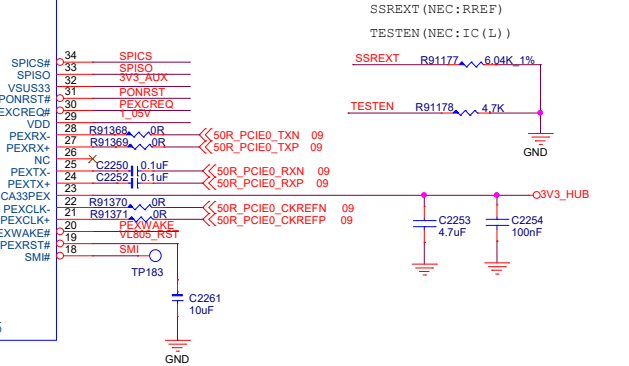
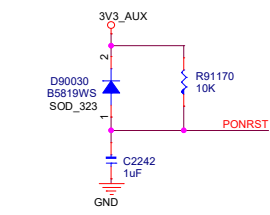
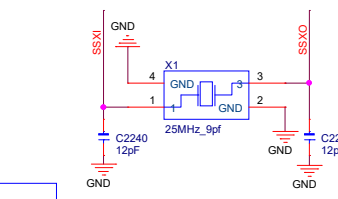
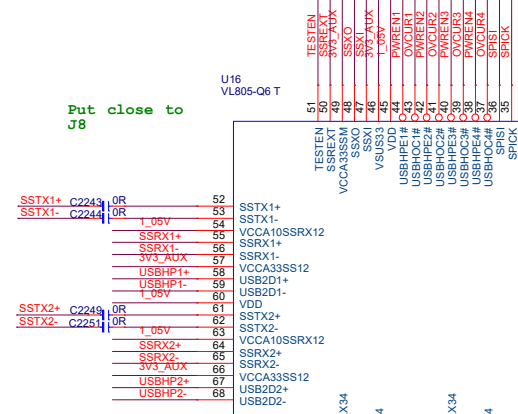
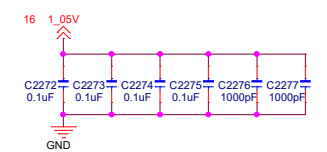
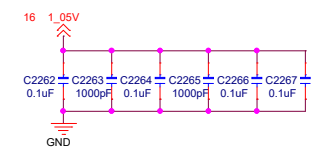
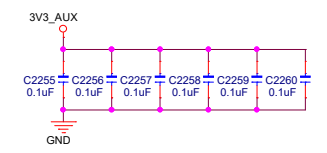
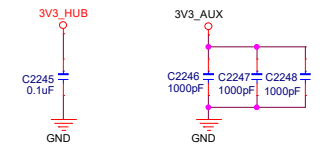
Micro SD Card



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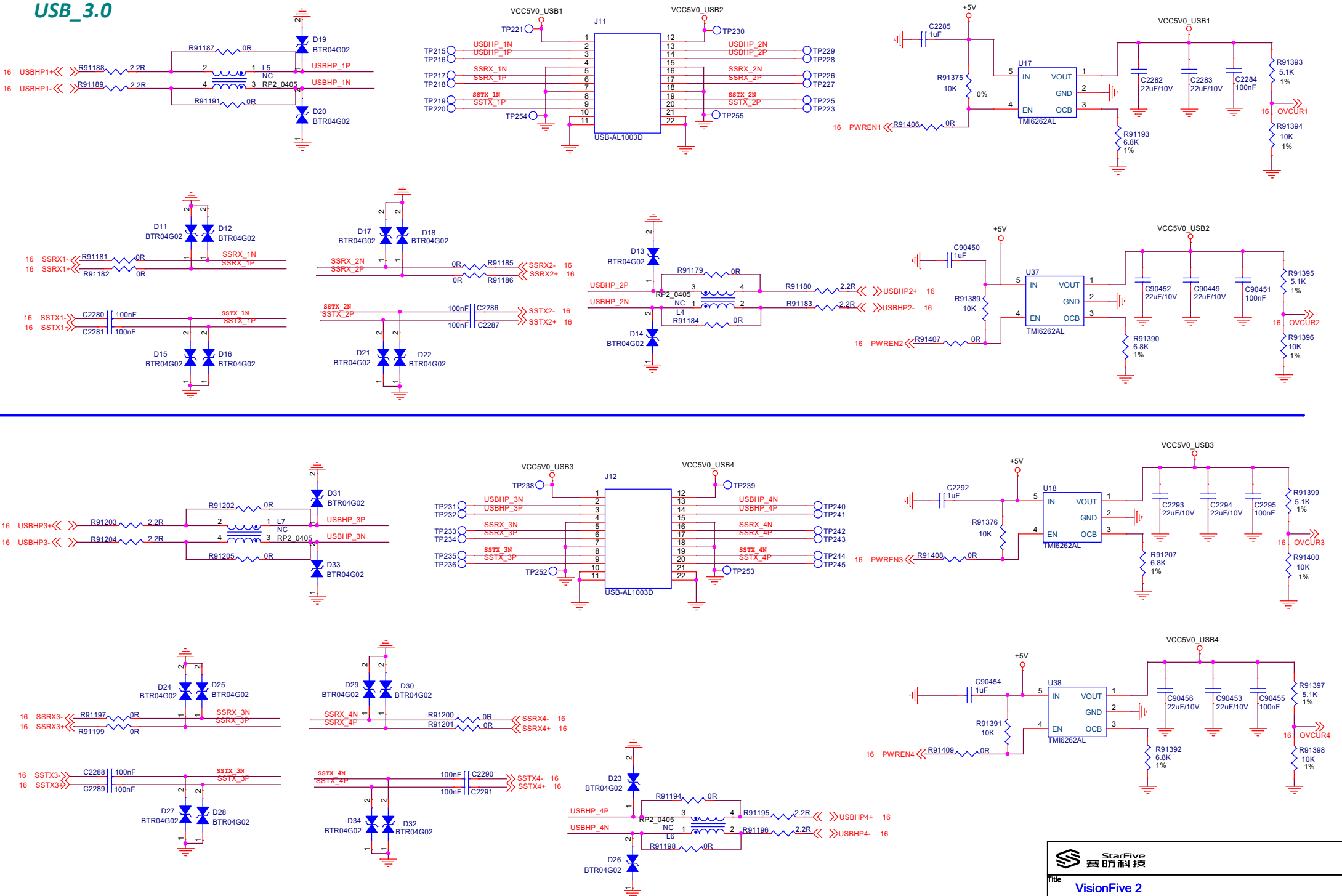



PCIE TO USB

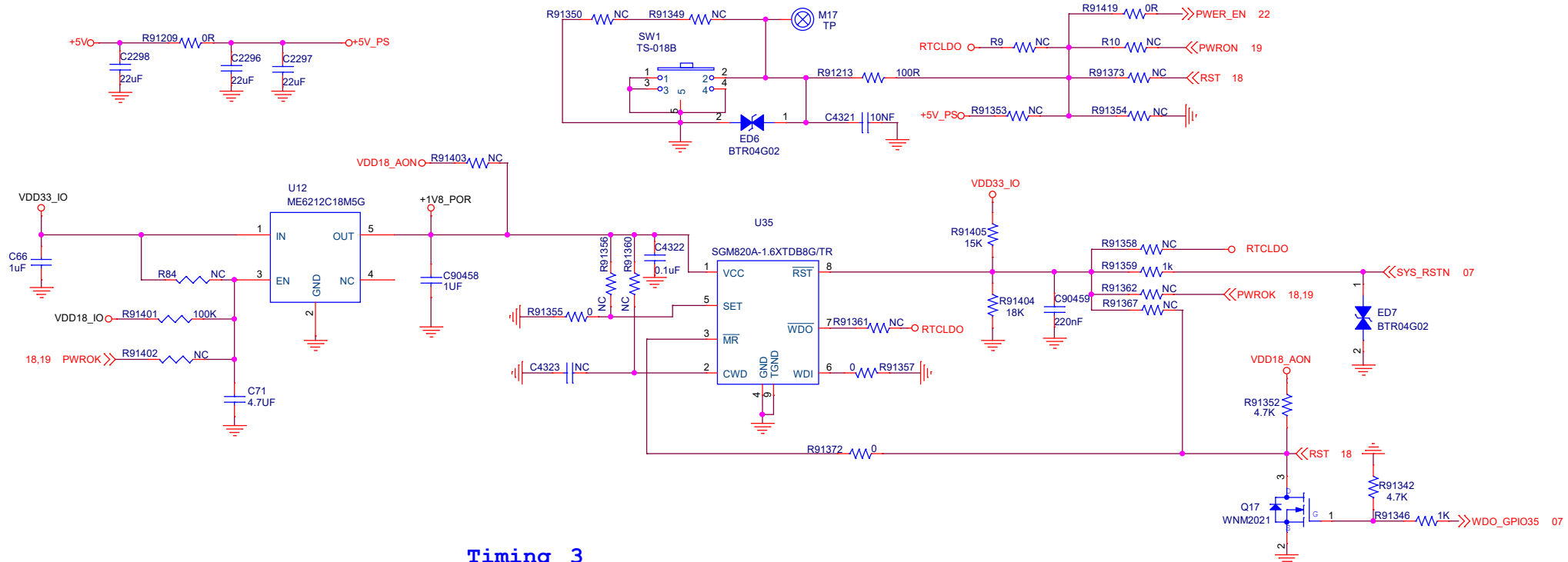


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Size Custom	Document Number VL805 QFN68	Rev V1.3B
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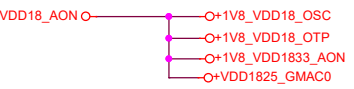
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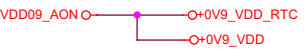
 StarFive 赛昉科技		
VisionFive 2		
Size	Document Number	Rev
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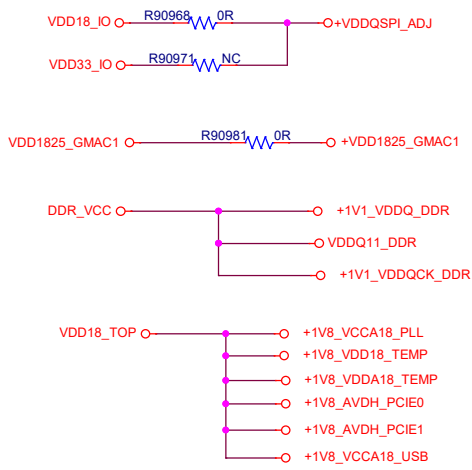
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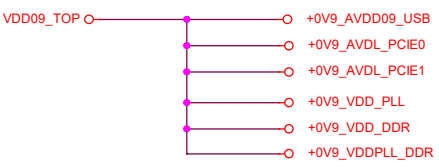
Timing 2



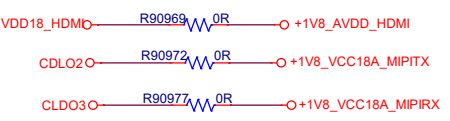
Timing 3



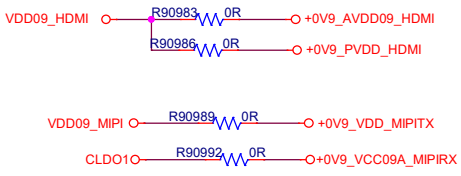
Timing 4



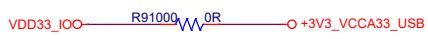
Timing 5



Timing 6

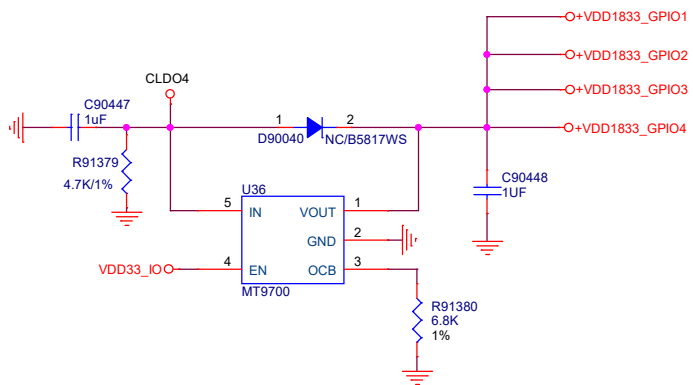
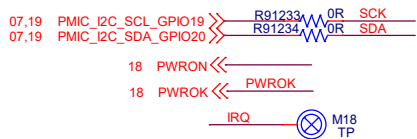


Timing 7

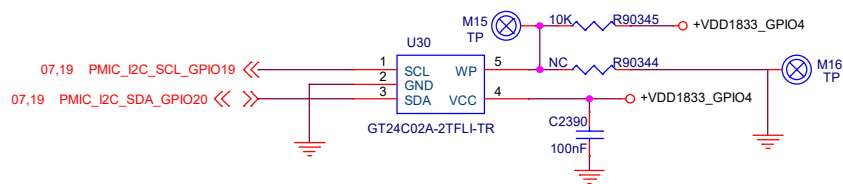
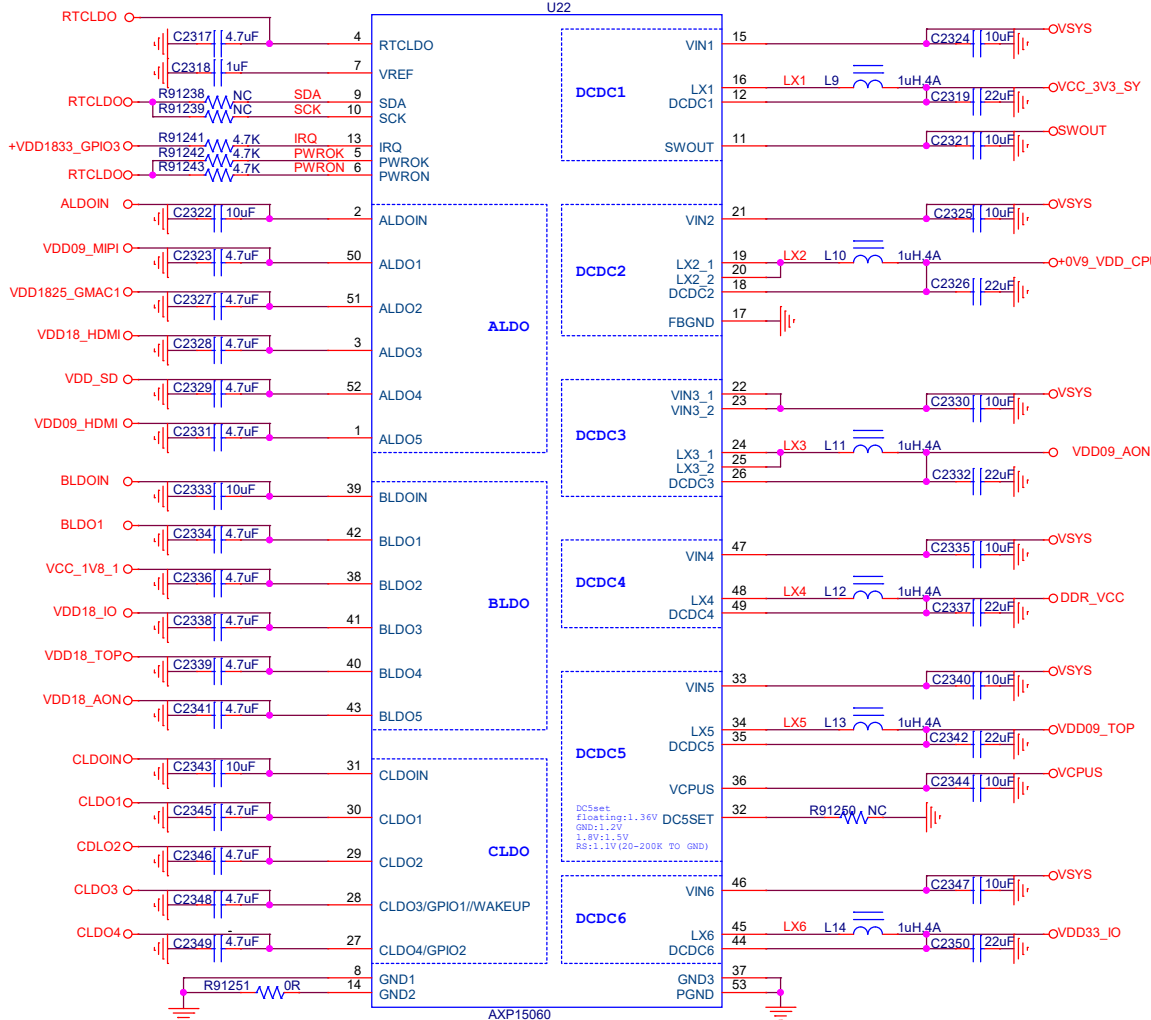
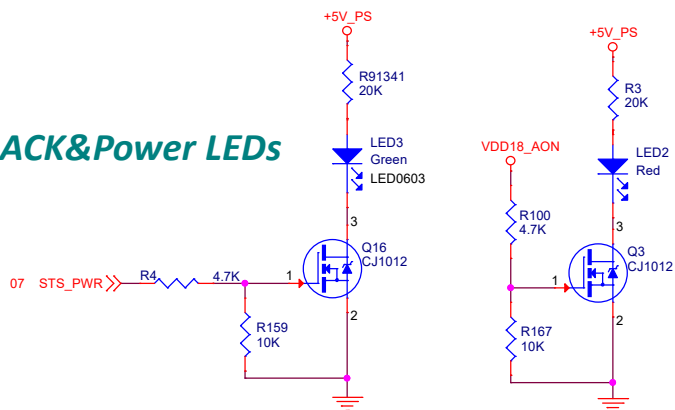


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POWER_PMIC

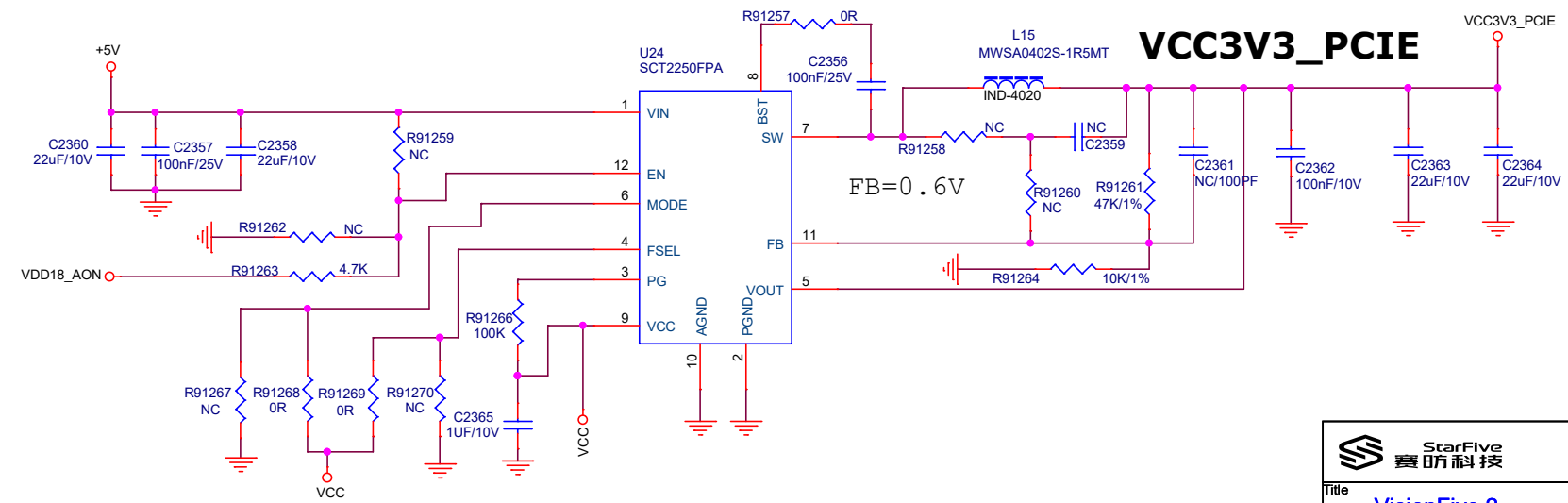
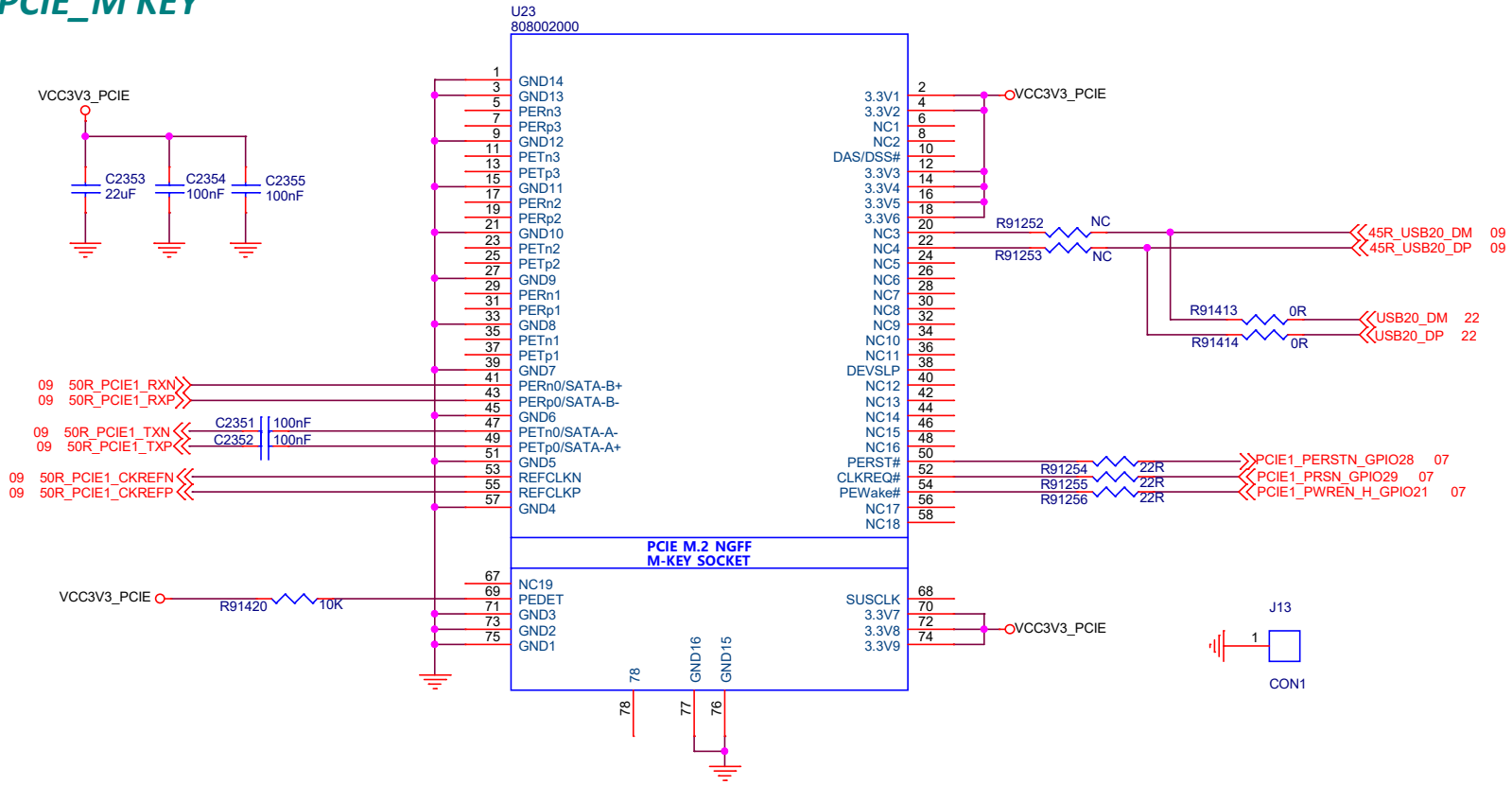


ACK&Power LEDs

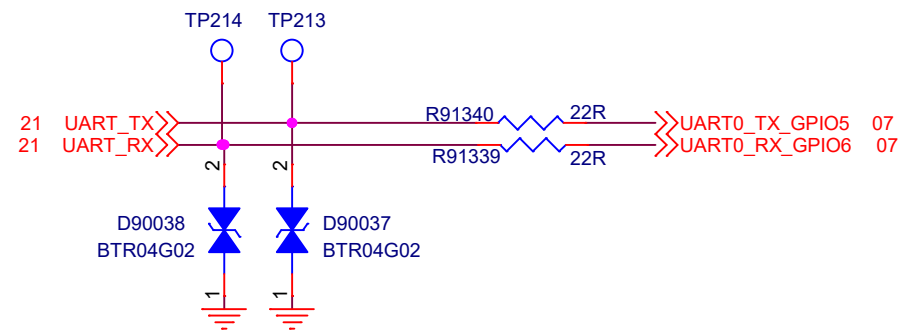
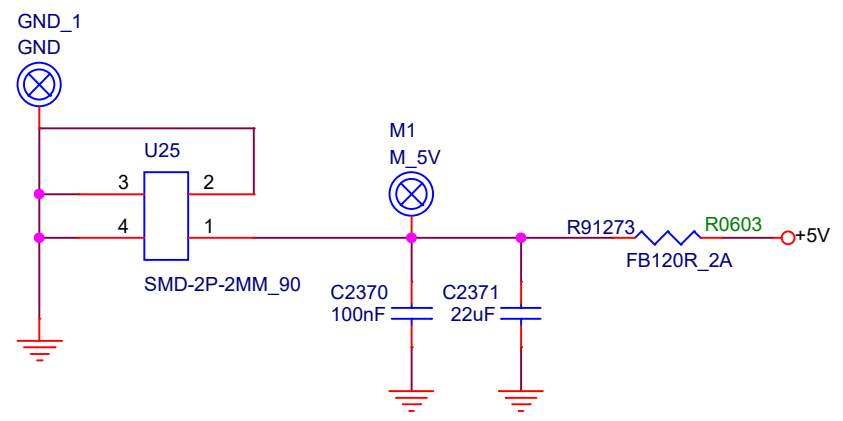
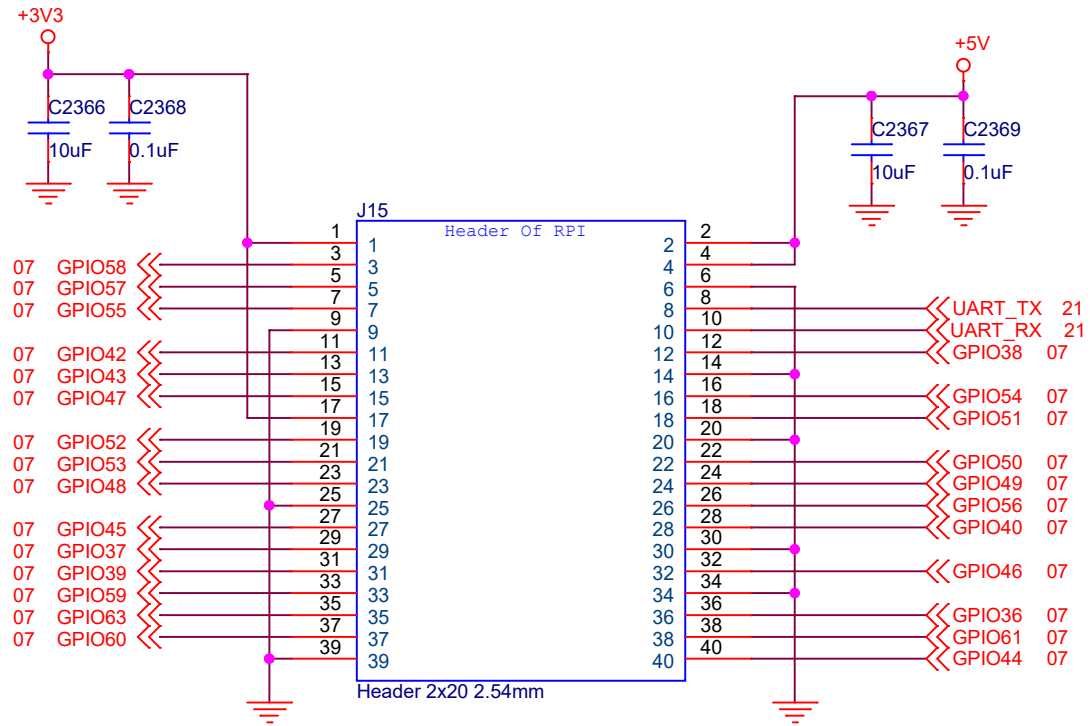


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PCIE_M KEY

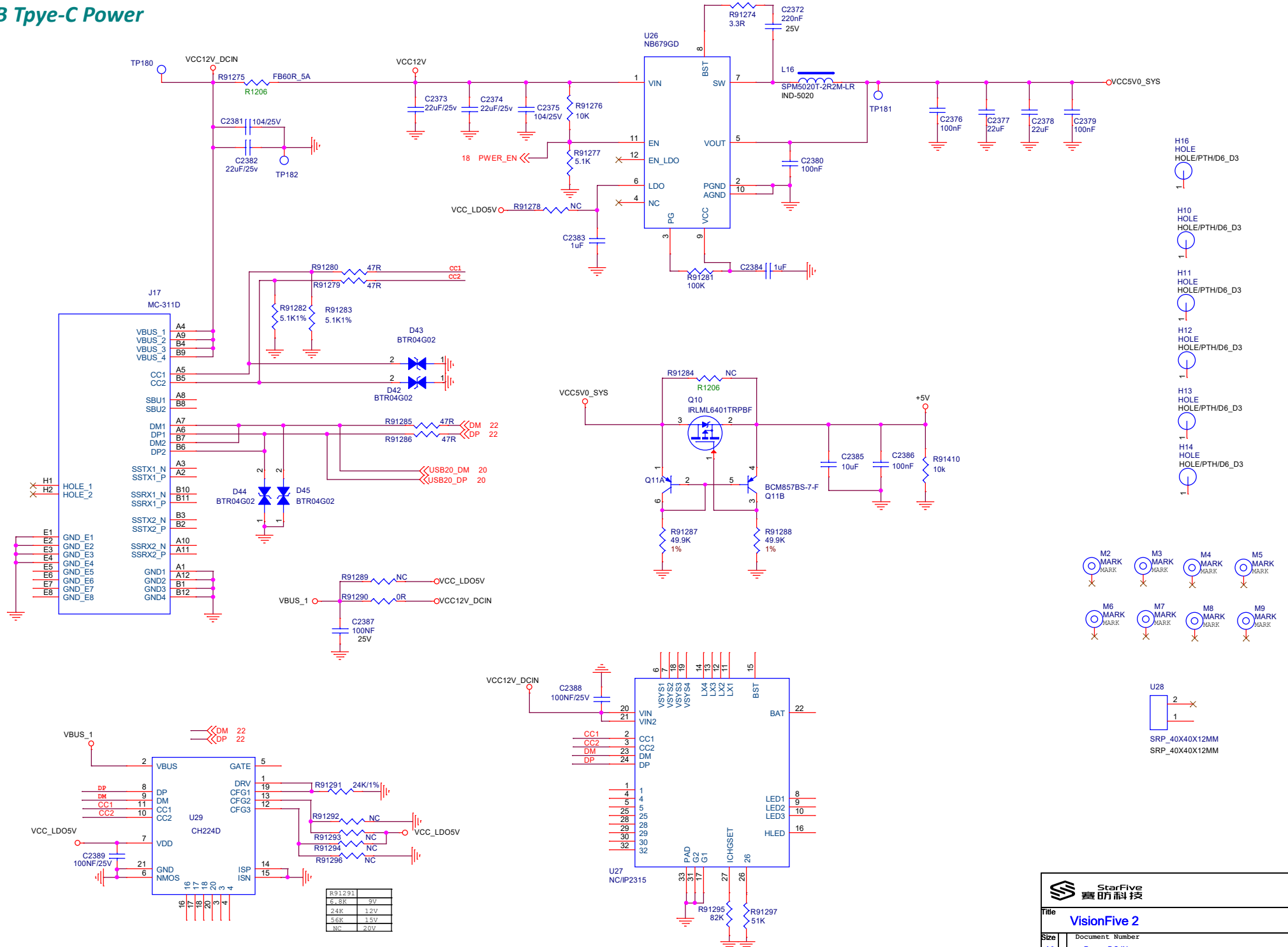


40PIN OUT



Title		
VisionFive 2		
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USB Type-C Power



R91291	9V
5.8K	1.2V
24K	1.2V
5.6K	1.5V
NC	2.0V

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Title: **VisionFive 2**

Size: Document Number

A3: **Power-DC IN** Rev: **V1.3B**

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MIPI_LCD_TX

