

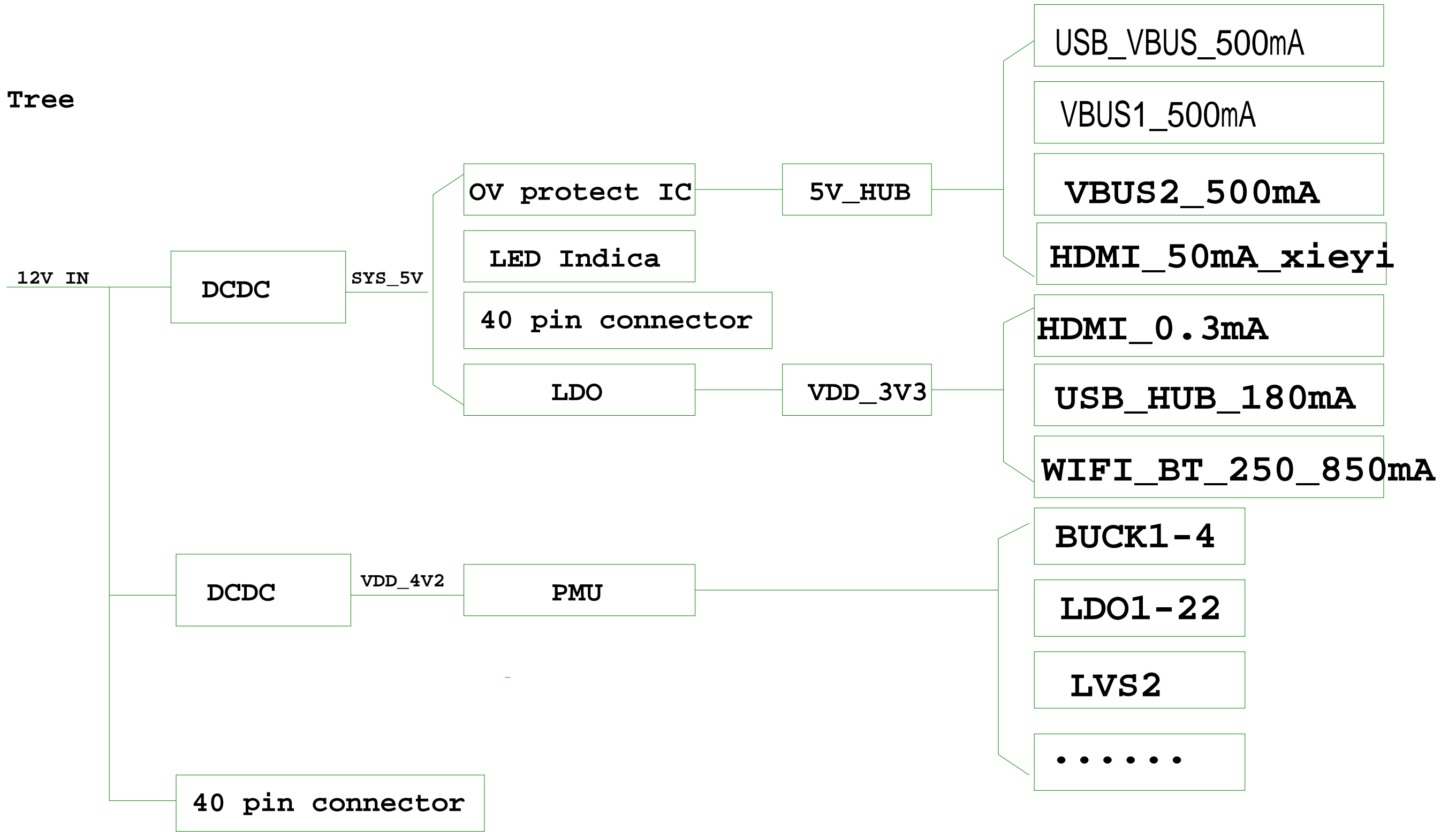
HiKEY SCH

1. Catalog
2. Power Tree
3. 12V IN
4. USB/Hub
5. PMU-1
6. PMU-2
7. PMU Codec
8. SOC-1 System
9. SOC-2-GPIO
10. SOC-3-Media
11. SOC-4-MEM
12. SOC-5-RF
13. SOC-6-POWER
14. SOC-7-GND
15. LRDDR3
16. EMMC
17. HDMI
18. IO_CONN
19. WIFI

The type and specification of the components refer to the BOM

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		A		HUAWEI TECH CO.,LTD.	

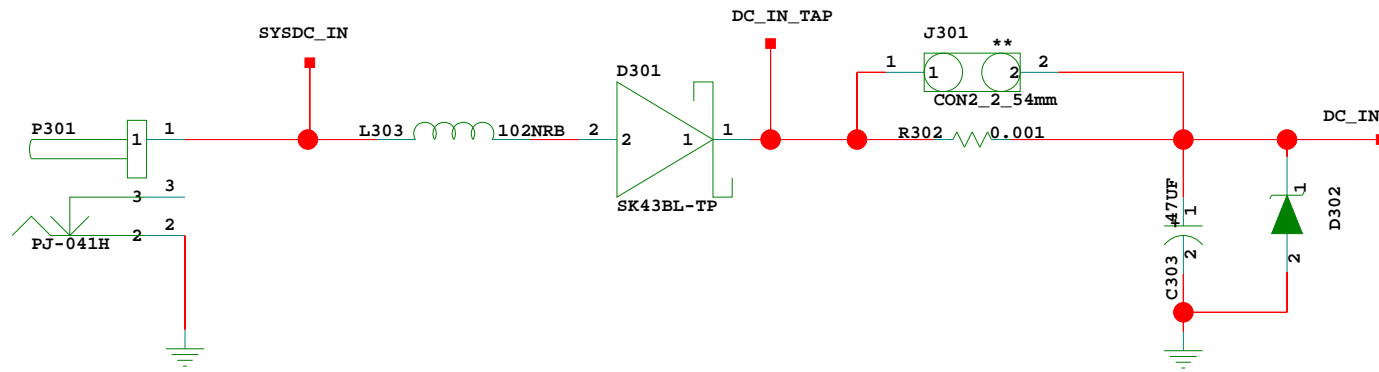
Power Tree



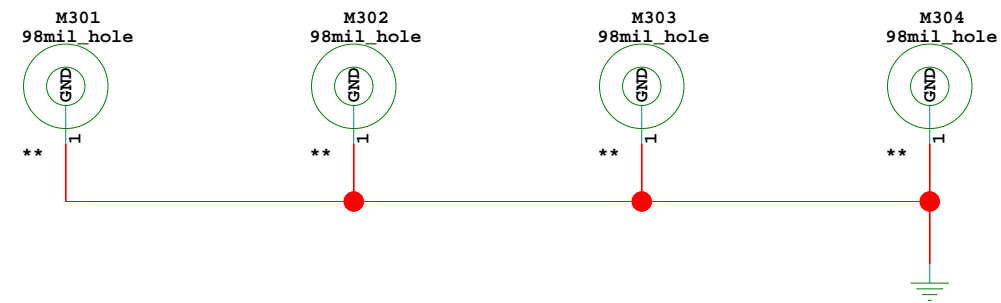
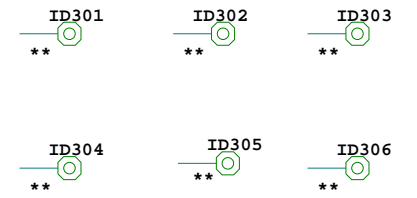
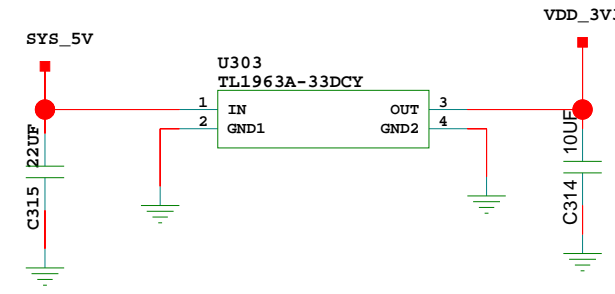
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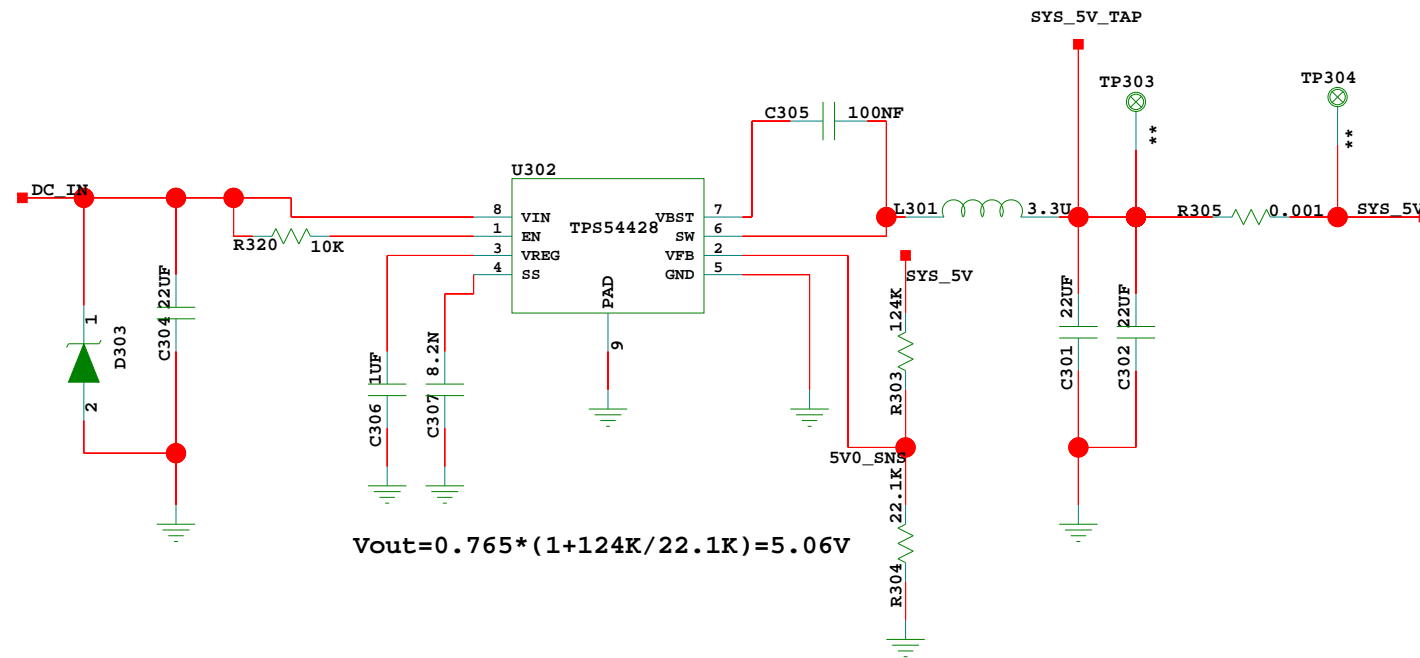
DC 8-18V Input



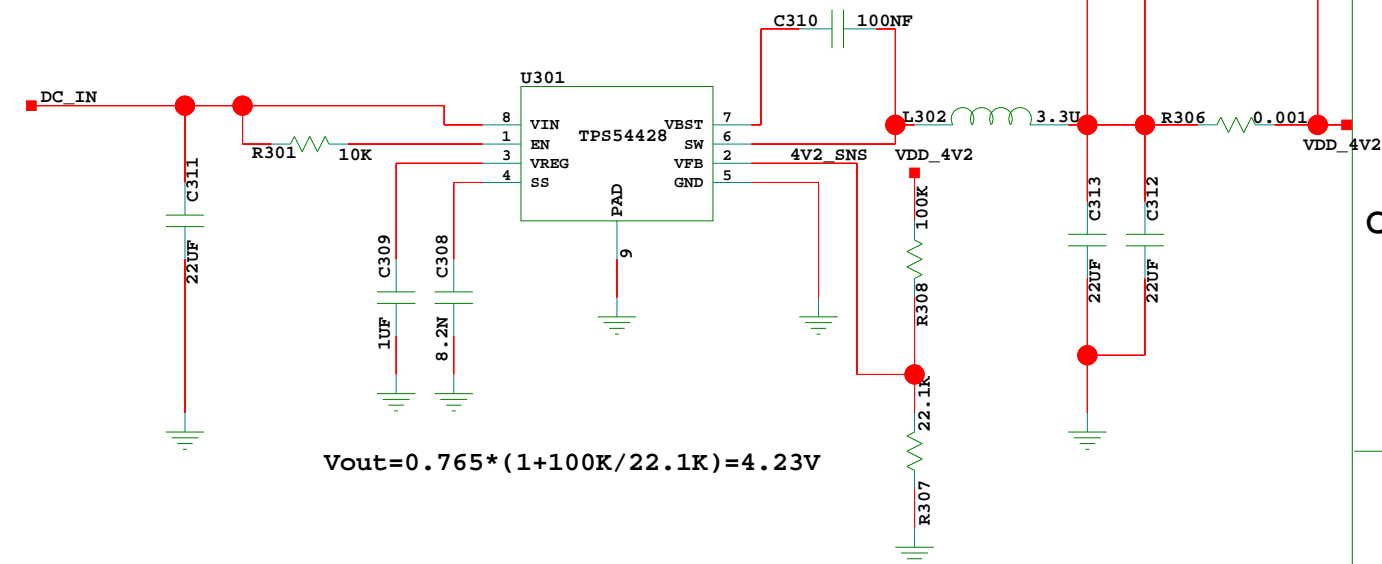
5VDC to 3V3DC



DC_IN 12V0 To 5V 2.6A

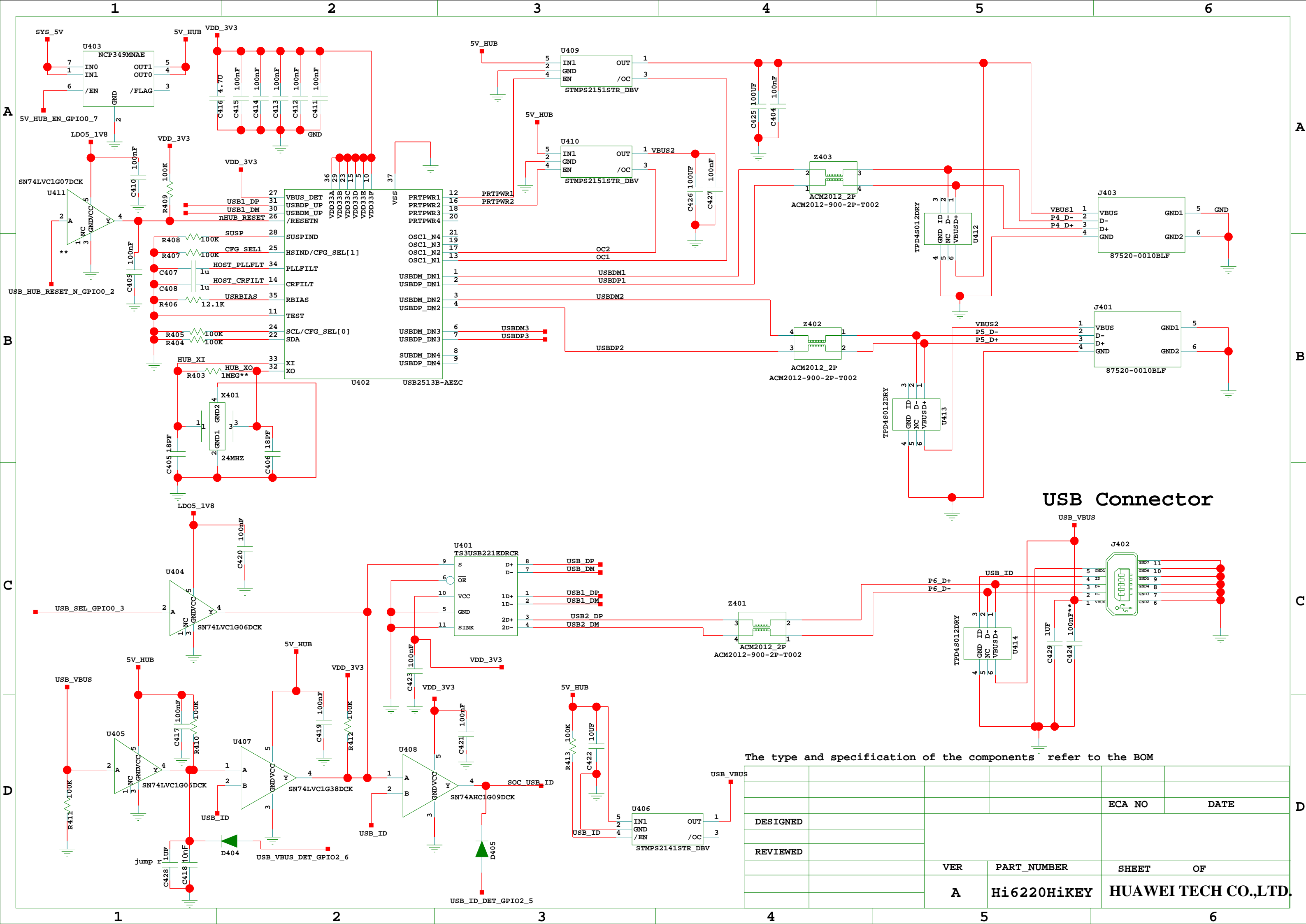


DC_IN 12V0 To 4.2V 2.6A



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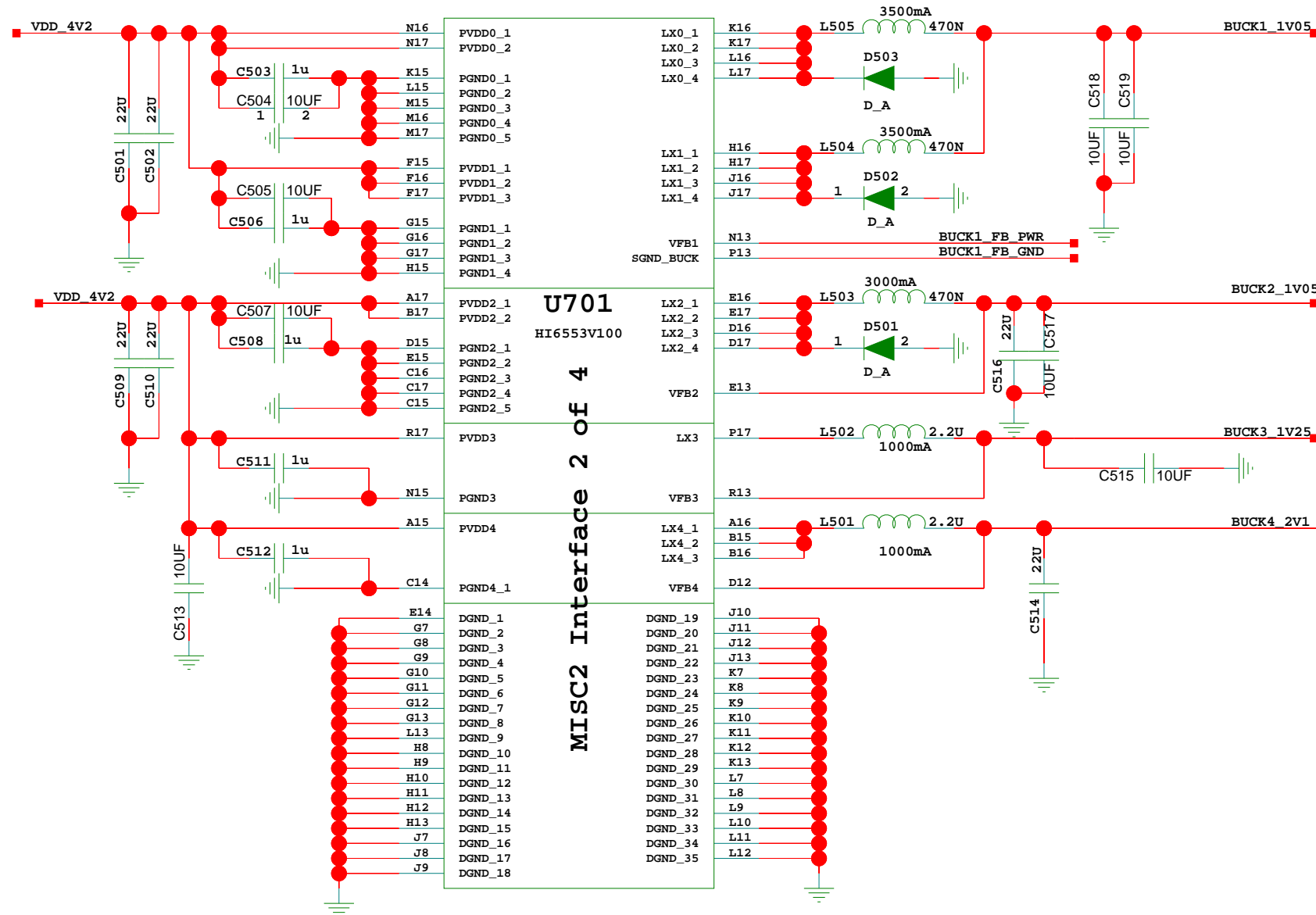


USB Connector

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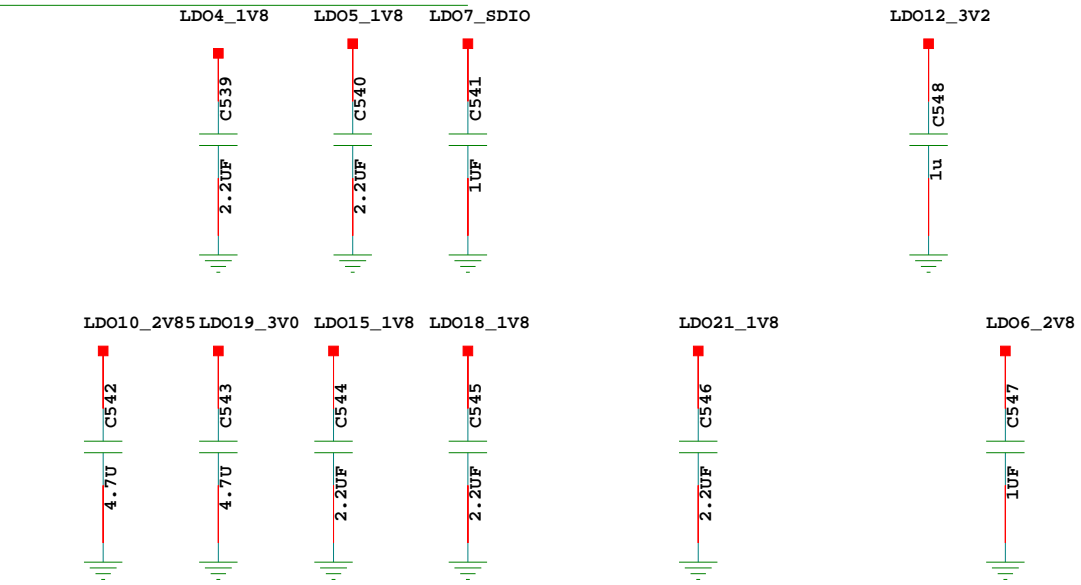
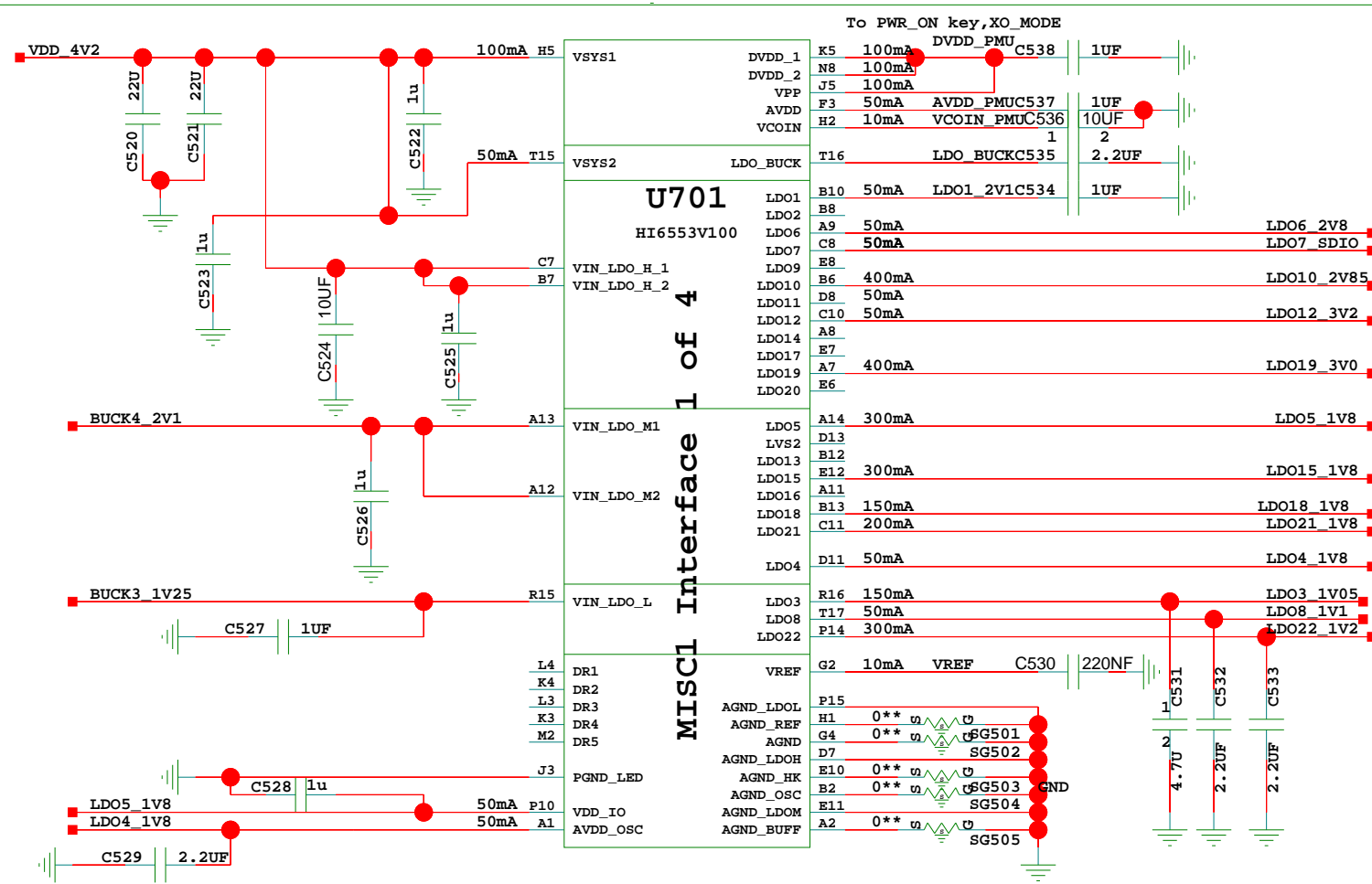
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PMU-1 BUCK



Name	Voltage	Utility
BUCK1	1.05V	ARM Core/L2
BUCK2	1.05V	GPU /Peri IP Core /PHY Core /PLL LV
BUCK3	1.25V	DDR VDD /SOC DDR PHY IO post VDD /LDO L IN
BUCK4	2.1V	LDO M IN
LDO1	2.1V	HKADC
LDO2	2.8V	TP/LCD/Sensor Analog Power
LDO3	1.05V	SOC Always On
LDO4	1.8V	DCXO(XO)
LDO5	1.8V	1.8V IO
LDO6	2.8V	CLK Buffer
LDO7	1.8V/2.85V	SOC SD card IO
LDO8	1.1V	ABB AVDD11
LDO9	1.8V/3.0V	SIM0
LDO10	2.85V	SD card
LDO11	1.8V/3.0V	SIM1
LDO12	3.2V	USB PHY 3.3V
LDO13	1.8V	Camera 1.8V
LDO14	2.8V	Camera 2.8V
LDO15	1.8V	Codec Analog 1.8V
LDO16	1.8V	RFIC 1.8V
LDO17	2.8V	Vibrator
LDO18	1.8V	1.8V Analog Power
LDO19	3.0V	eMMC VDDM
LDO20	1.8V	TPIO/TPAVDD/CAMERA IO/RF
LDO21	1.8V	RFIC2 1.8V
LDO22	1.05V/1.2V	Camera 1.05/1.2V Core
LVS2	1.8V	PA Star Enable

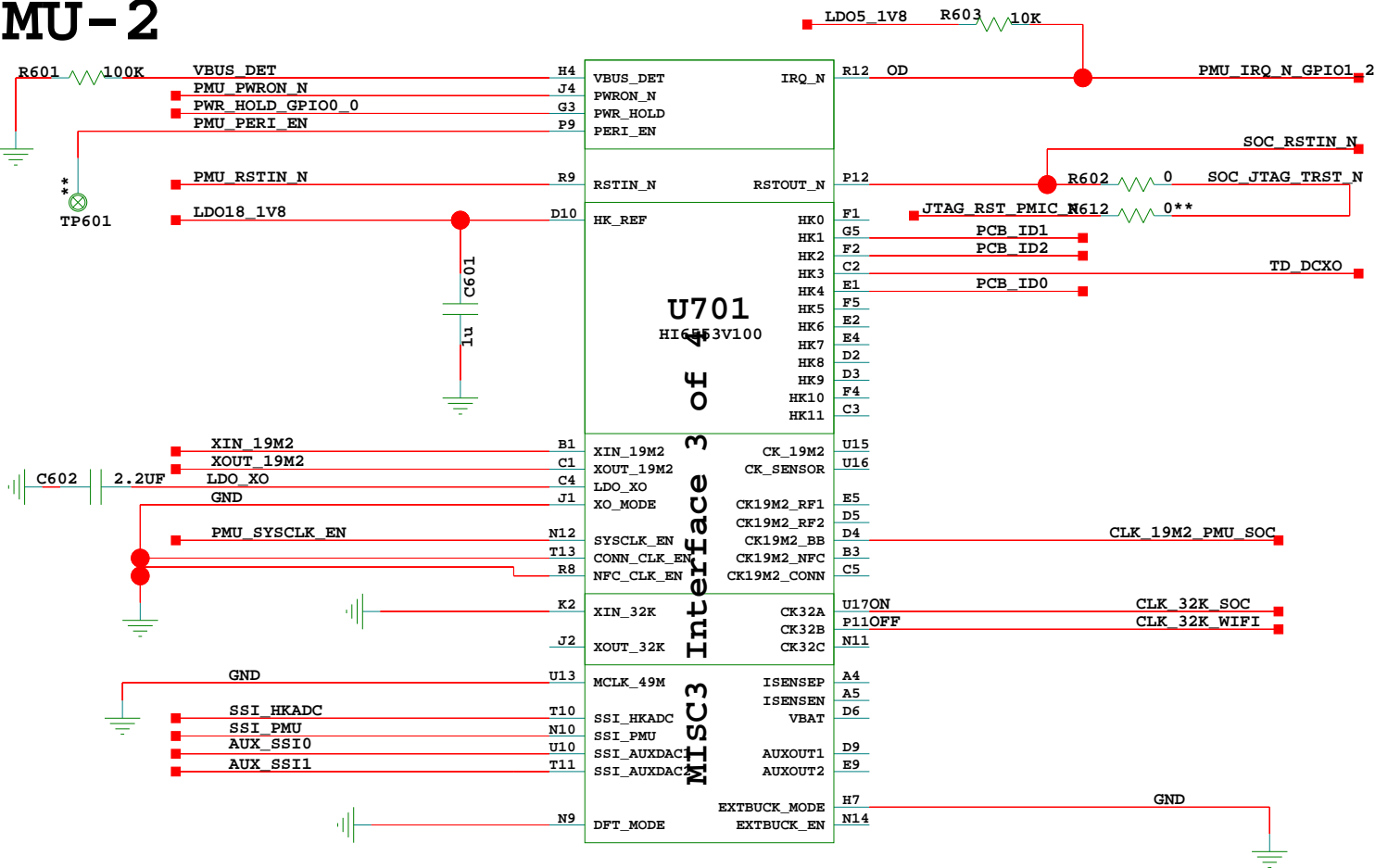
LDO



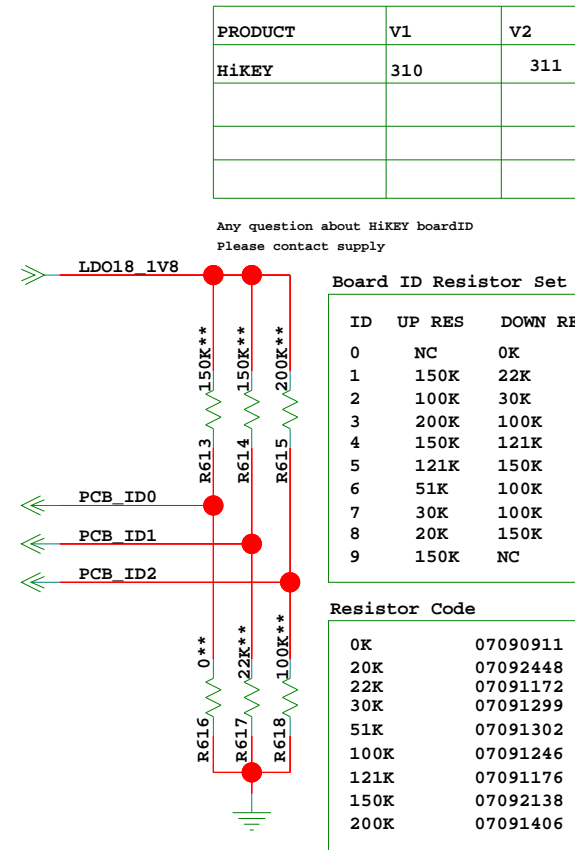
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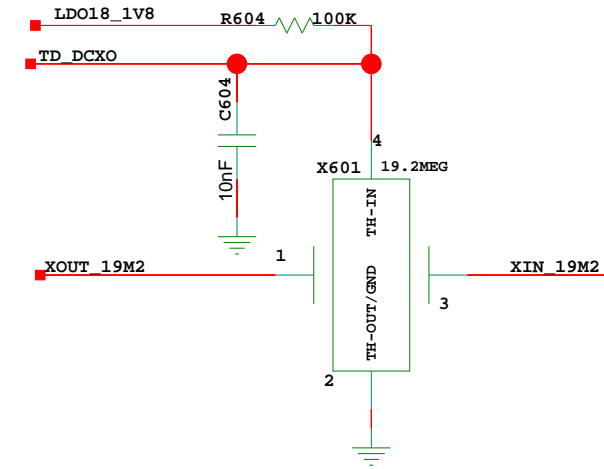
PMU-2



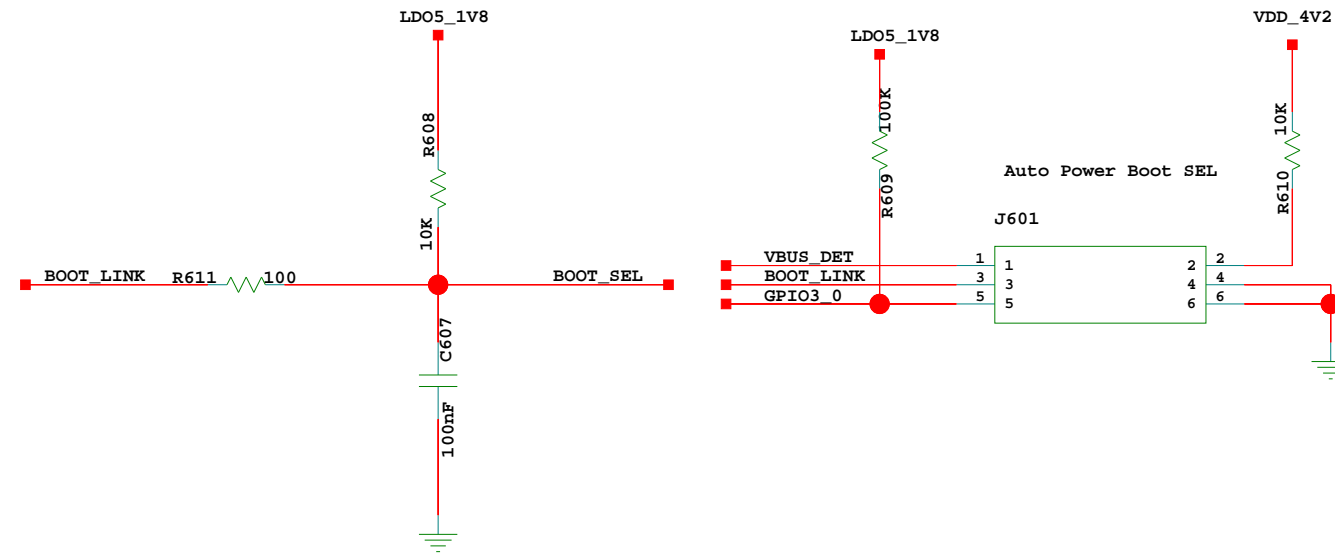
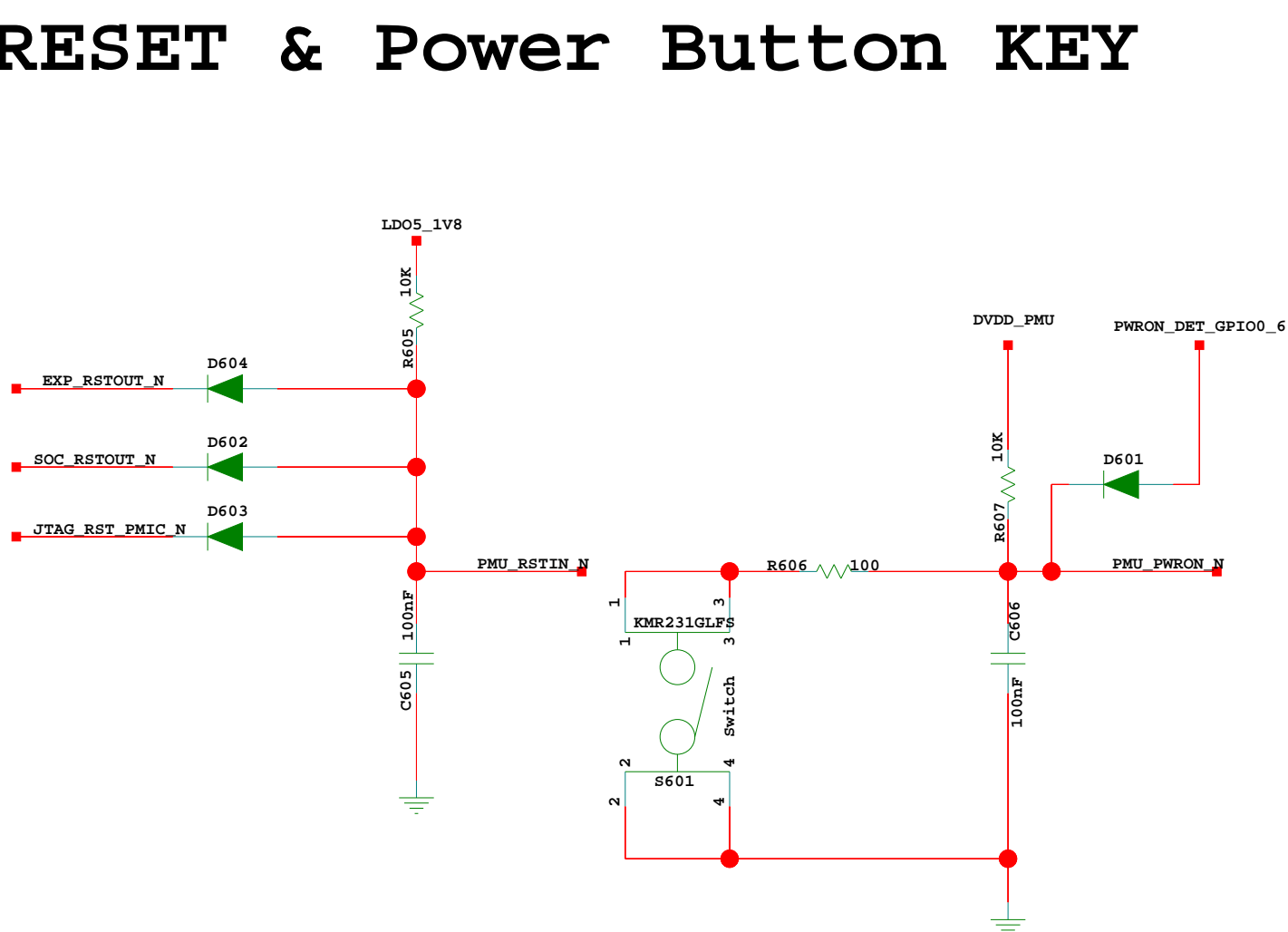
Board ID



19.2M CLK_{DCXO}



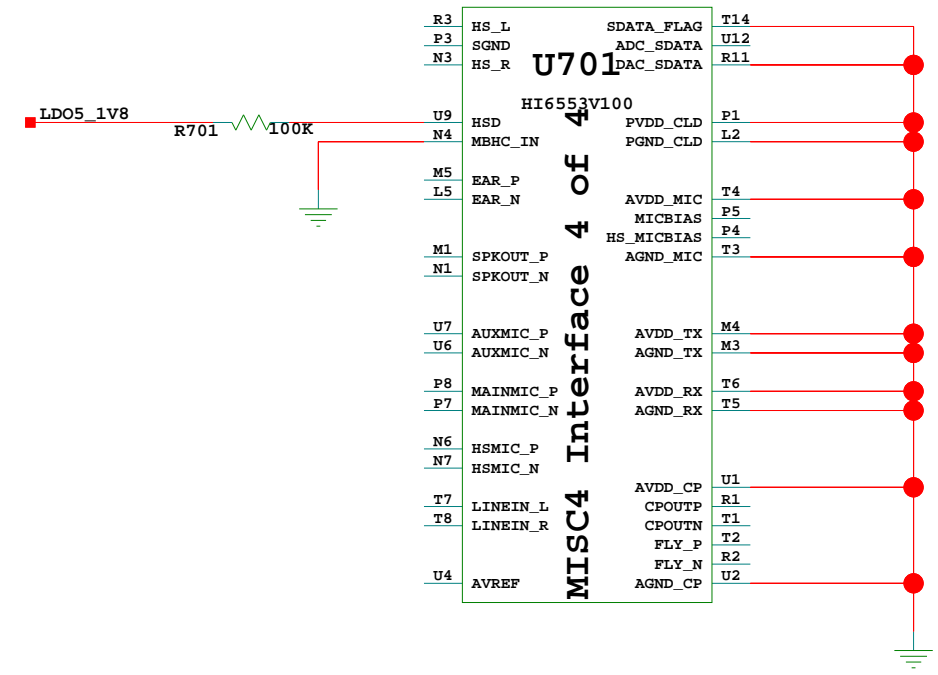
RESET & Power Button KEY



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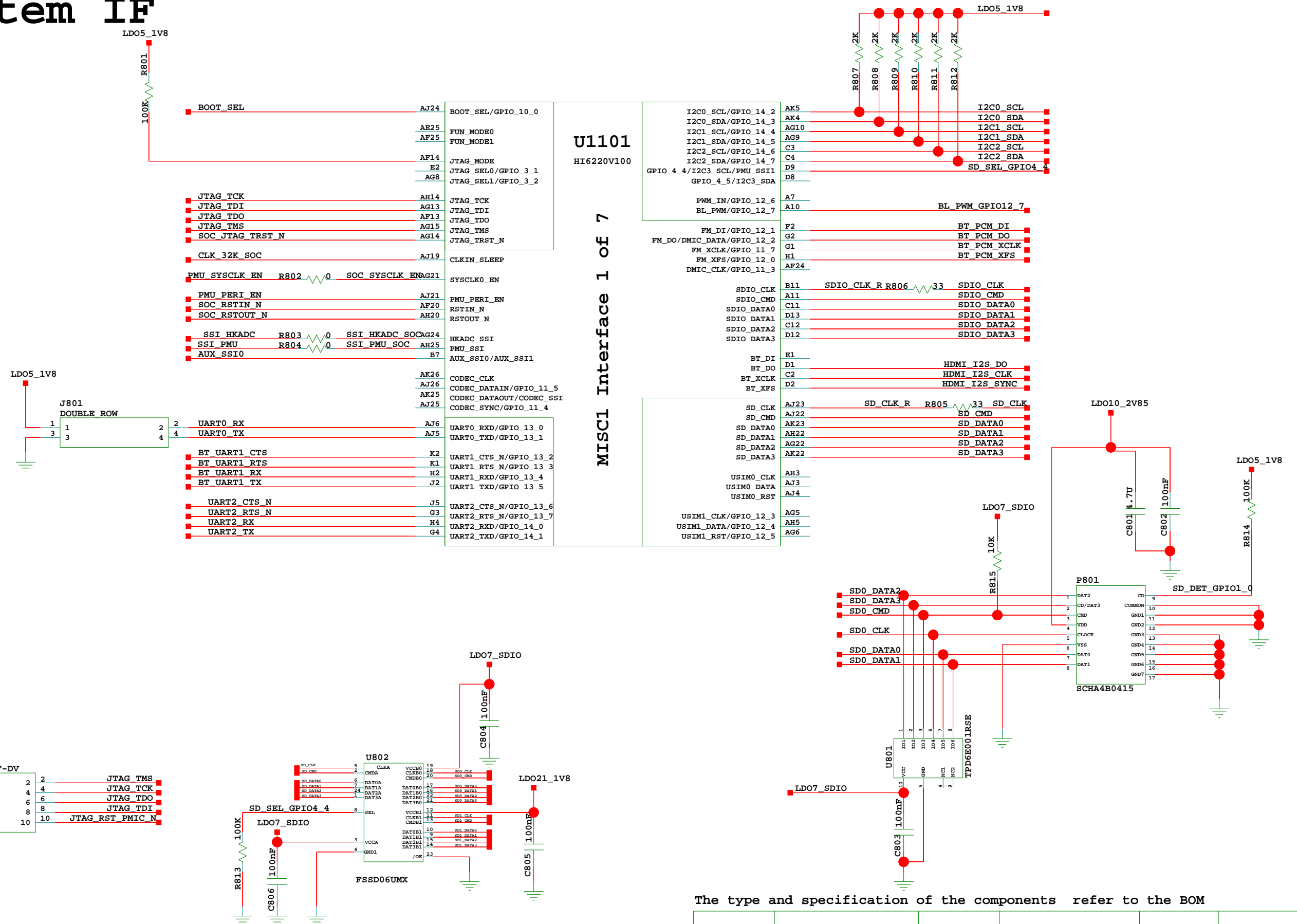
PMU-Codec



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SOC System IF



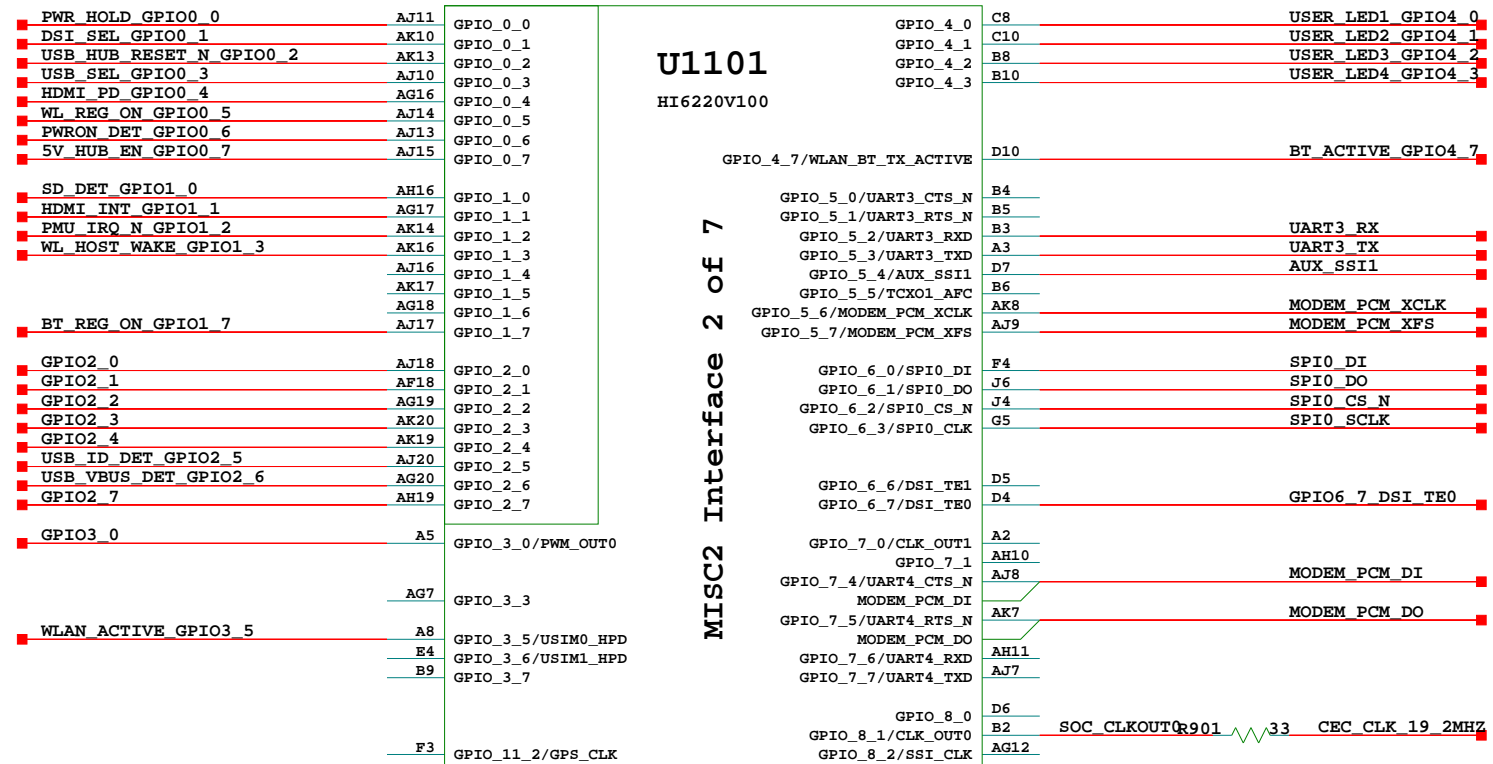
U1101
HI6220V100

MISC1 Interface 1 of 7

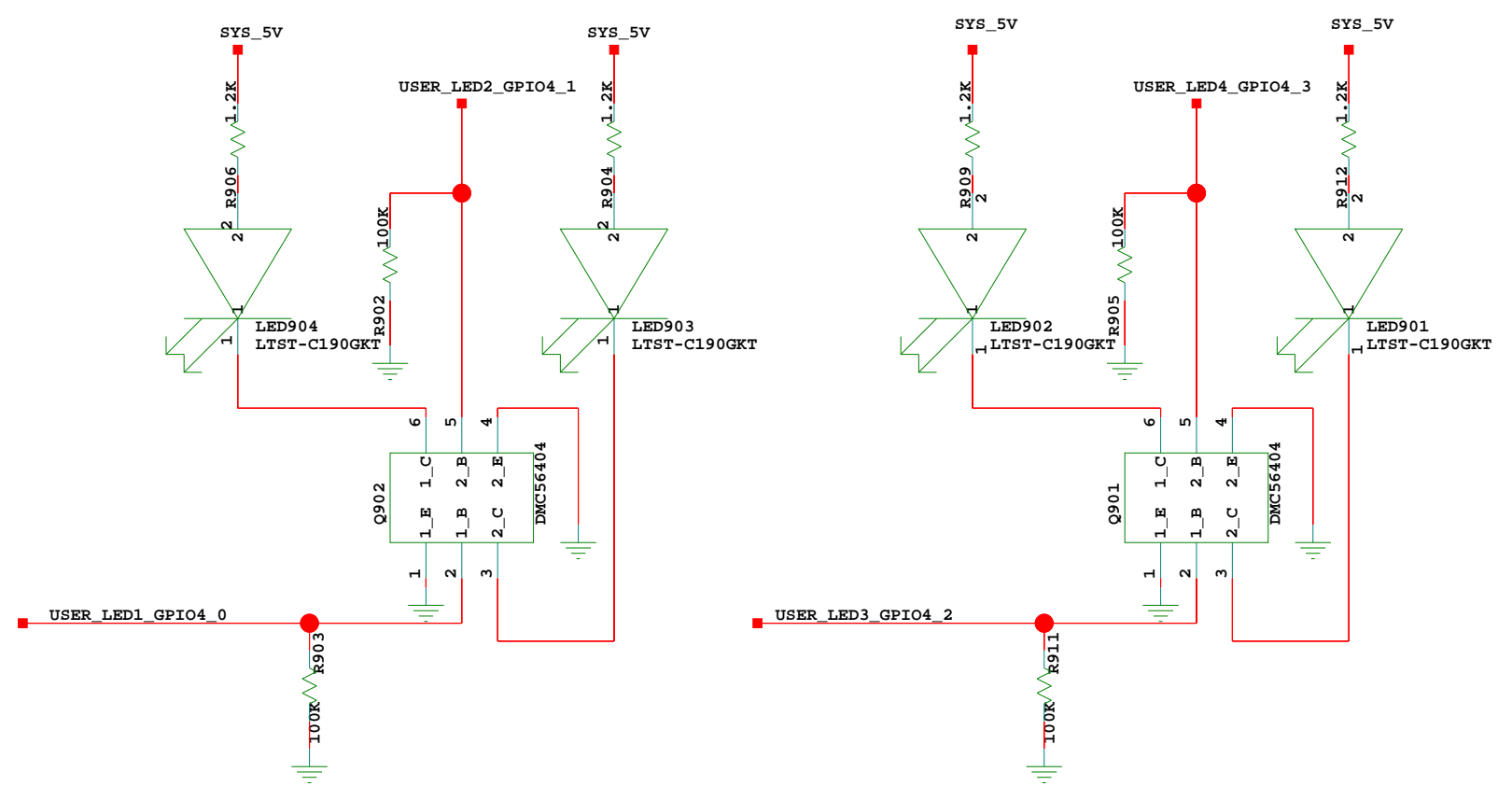
The type and specification of the components refer to the BOM

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			Hi6220HiKEY	HUAWEI TECH CO.,LTD.	

SOC GPIO IF



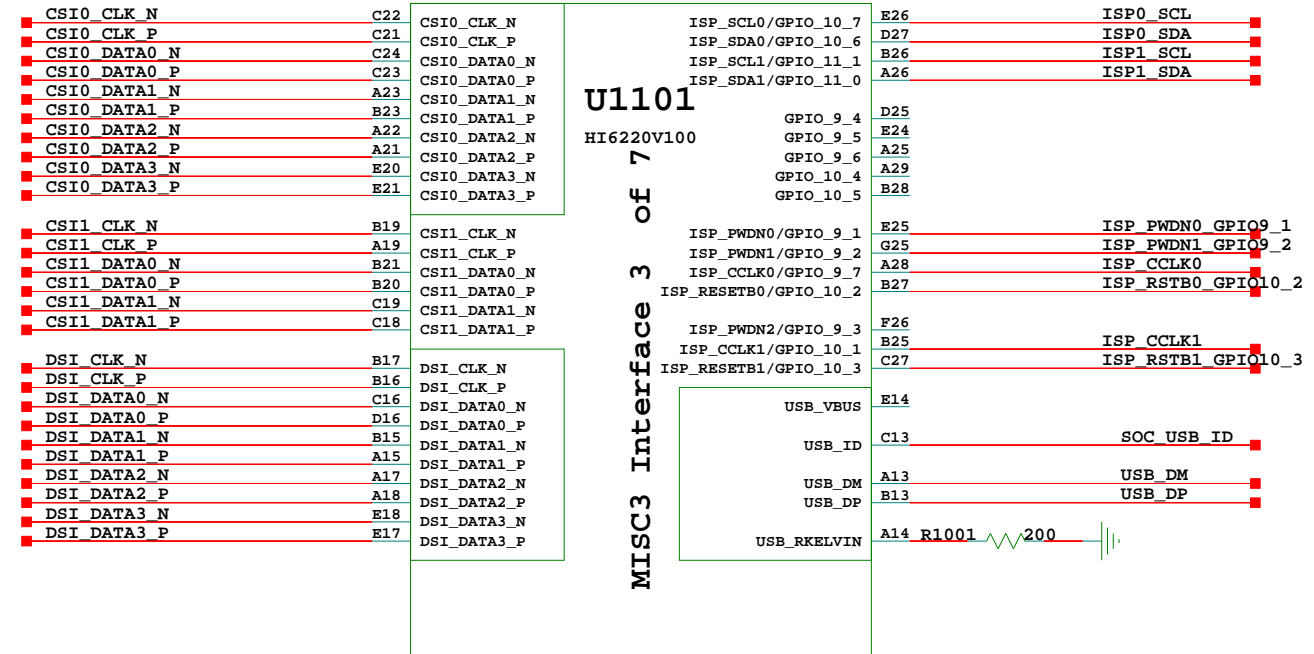
User LED's green



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REVIEWED									
		VER	PART_NUMBER	SHEET	OF				
			Hi6220HIKEY						HUAWEI TECH CO.,LTD.

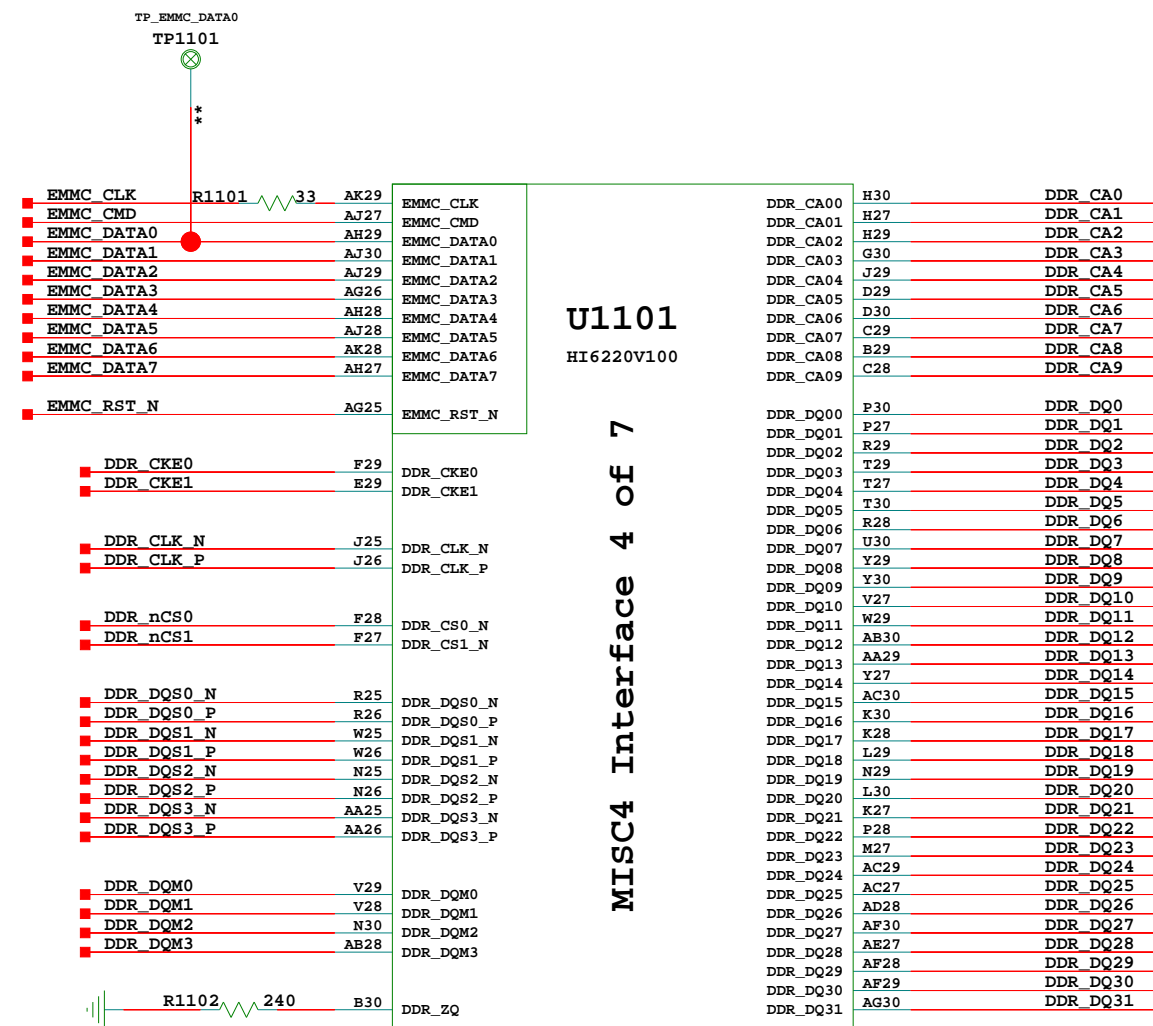
SOC Media IF



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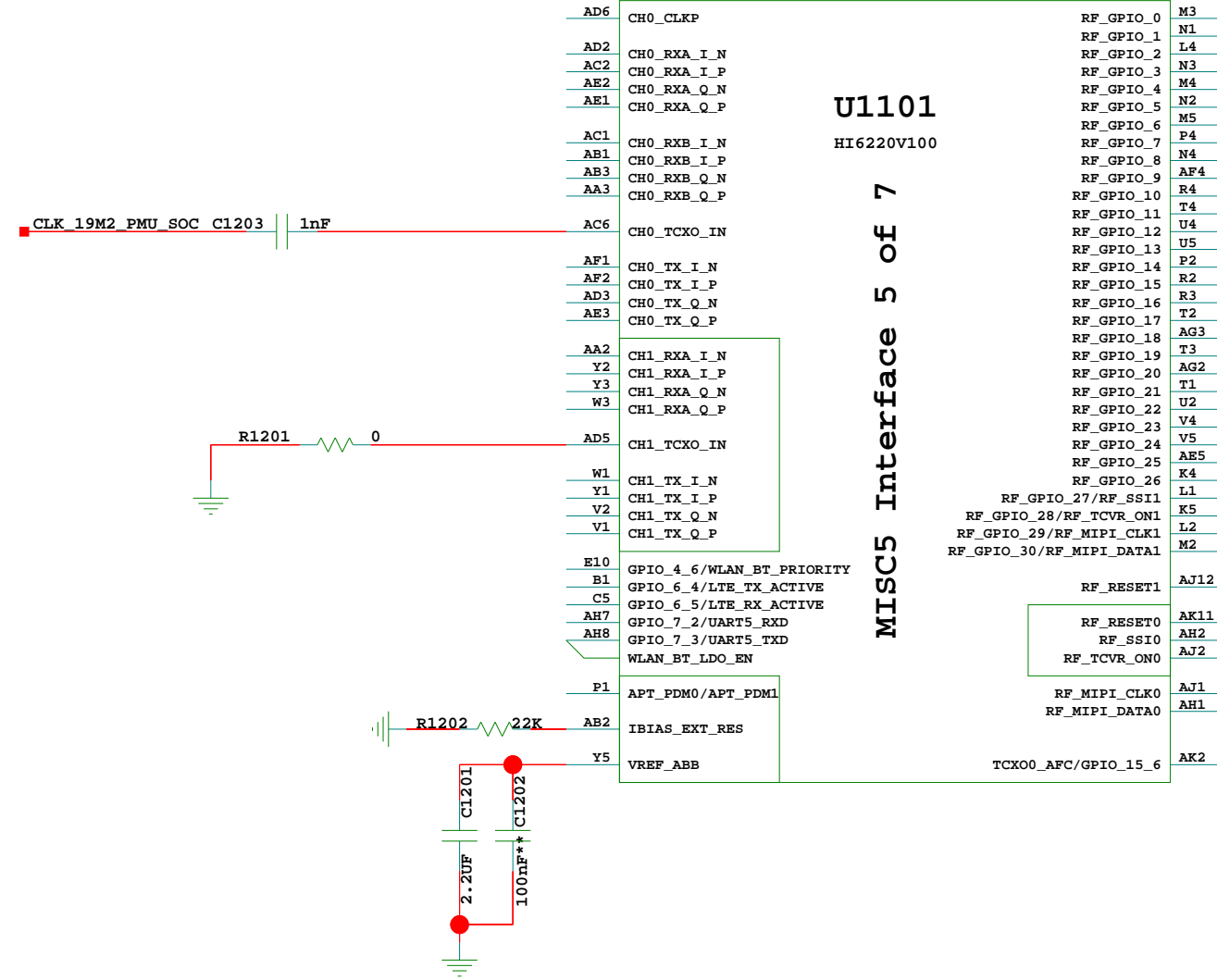
SOC Memory IF



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SOC RF IF



U1101
HI6220V100

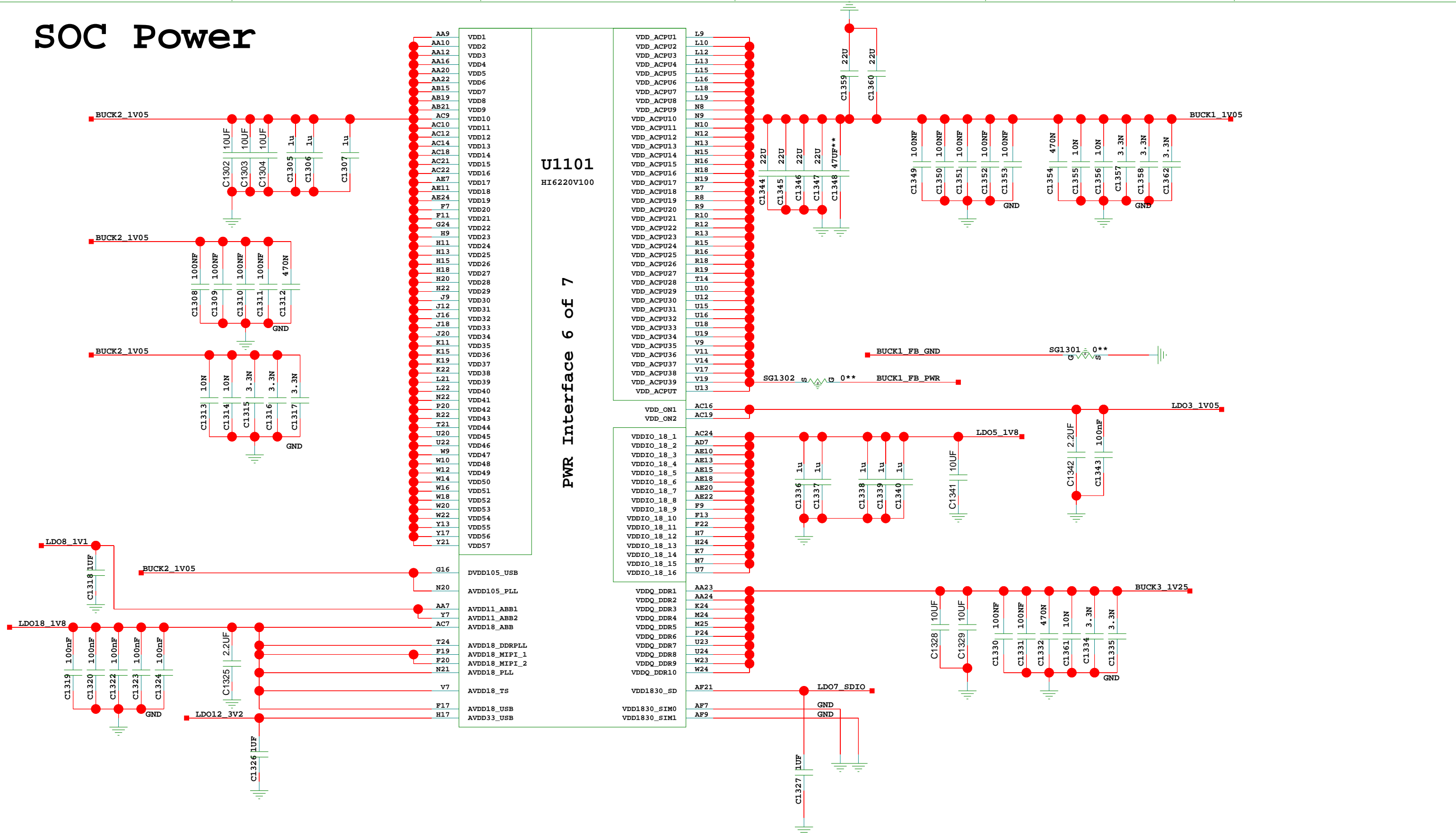
MISC5 Interface 5 of 7

- | | | | |
|-----|---------------------------|--------------------------|------|
| AD6 | CH0_CLKP | RF_GPIO_0 | M3 |
| AD2 | CH0_RXA_I_N | RF_GPIO_1 | N1 |
| AC2 | CH0_RXA_I_P | RF_GPIO_2 | L4 |
| AE2 | CH0_RXA_Q_N | RF_GPIO_3 | N3 |
| AE1 | CH0_RXA_Q_P | RF_GPIO_4 | M4 |
| AC1 | CH0_RXB_I_N | RF_GPIO_5 | N2 |
| AB1 | CH0_RXB_I_P | RF_GPIO_6 | P4 |
| AB3 | CH0_RXB_Q_N | RF_GPIO_7 | N4 |
| AA3 | CH0_RXB_Q_P | RF_GPIO_8 | N4 |
| | | RF_GPIO_9 | AF4 |
| AC6 | CH0_TCXO_IN | RF_GPIO_10 | R4 |
| AF1 | CH0_TX_I_N | RF_GPIO_11 | T4 |
| AF2 | CH0_TX_I_P | RF_GPIO_12 | U4 |
| AD3 | CH0_TX_Q_N | RF_GPIO_13 | U5 |
| AE3 | CH0_TX_Q_P | RF_GPIO_14 | P2 |
| | | RF_GPIO_15 | R2 |
| AA2 | CH1_RXA_I_N | RF_GPIO_16 | R3 |
| Y2 | CH1_RXA_I_P | RF_GPIO_17 | T2 |
| Y3 | CH1_RXA_Q_N | RF_GPIO_18 | AG3 |
| W3 | CH1_RXA_Q_P | RF_GPIO_19 | T3 |
| AD5 | CH1_TCXO_IN | RF_GPIO_20 | AG2 |
| W1 | CH1_TX_I_N | RF_GPIO_21 | T1 |
| Y1 | CH1_TX_I_P | RF_GPIO_22 | U2 |
| V2 | CH1_TX_Q_N | RF_GPIO_23 | V4 |
| V1 | CH1_TX_Q_P | RF_GPIO_24 | V5 |
| | | RF_GPIO_25 | AE5 |
| | | RF_GPIO_26 | K4 |
| | | RF_GPIO_27/RF_SSI1 | L1 |
| E10 | GPIO_4_6/WLAN_BT_PRIORITY | RF_GPIO_28/RF_TCVR_ON1 | K5 |
| B1 | GPIO_6_4/LTE_TX_ACTIVE | RF_GPIO_29/RF_MIPI_CLK1 | L2 |
| C5 | GPIO_6_5/LTE_RX_ACTIVE | RF_GPIO_30/RF_MIPI_DATA1 | M2 |
| AH7 | GPIO_7_2/UART5_RXD | RF_RESET1 | AJ12 |
| AH8 | GPIO_7_3/UART5_TXD | RF_RESET0 | AK11 |
| | WLAN_BT_LDO_EN | RF_SSI0 | AH2 |
| | | RF_TCVR_ON0 | AJ2 |
| P1 | APT_PDM0/APT_PDM1 | RF_MIPI_CLK0 | AJ1 |
| AB2 | IBIAS_EXT_RES | RF_MIPI_DATA0 | AH1 |
| Y5 | VREF_ABB | TCXO0_AFC/GPIO_15_6 | AK2 |

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SOC Power



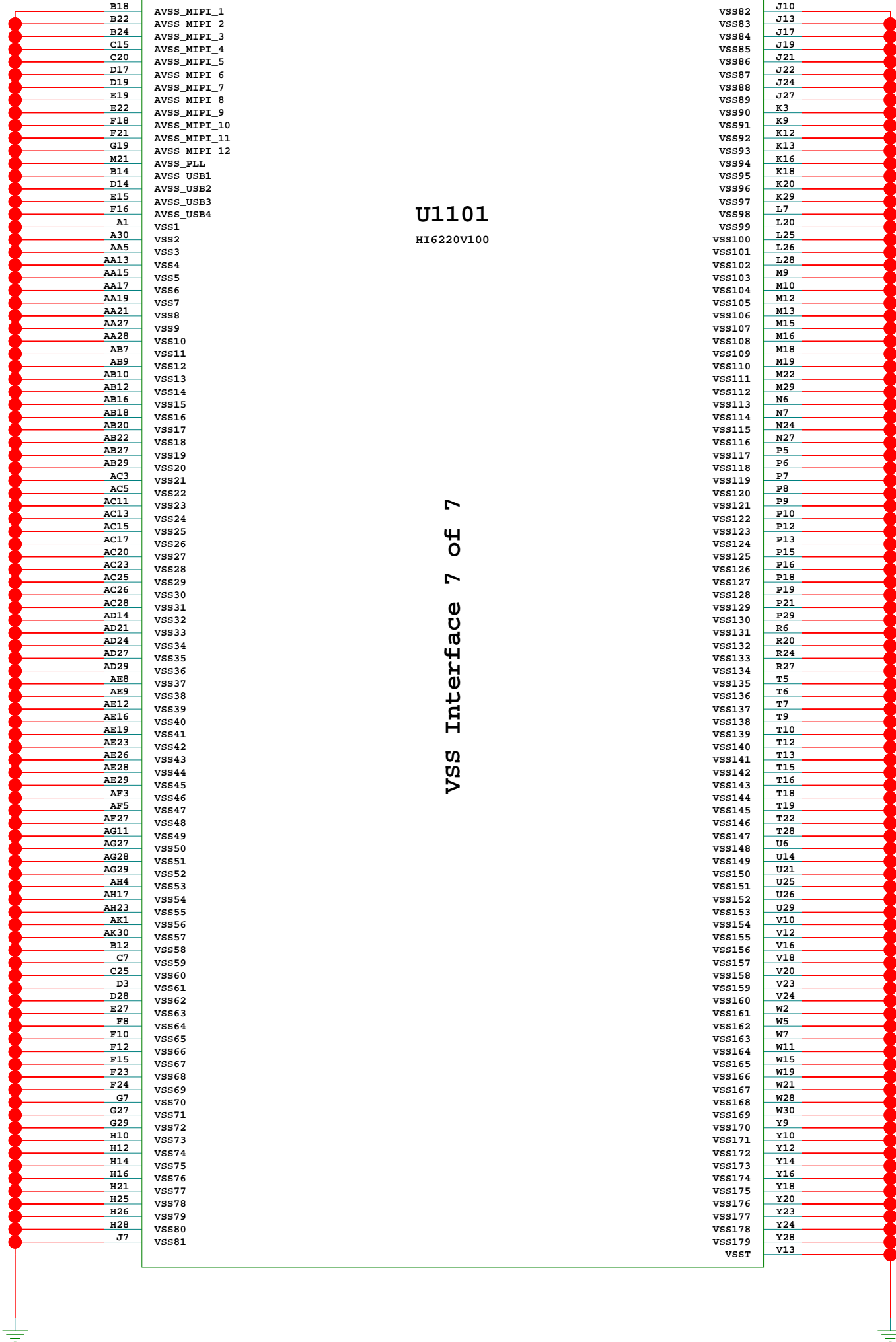
U1101
HI6220V100

PWR Interface 6 of 7

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SOC GND



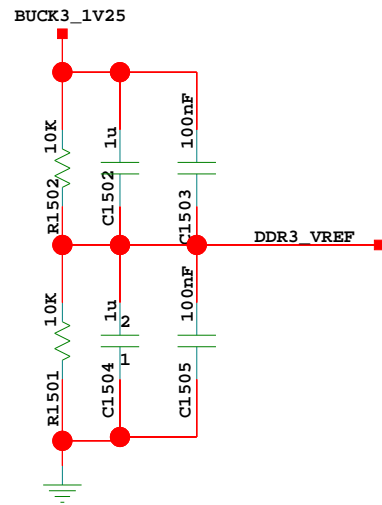
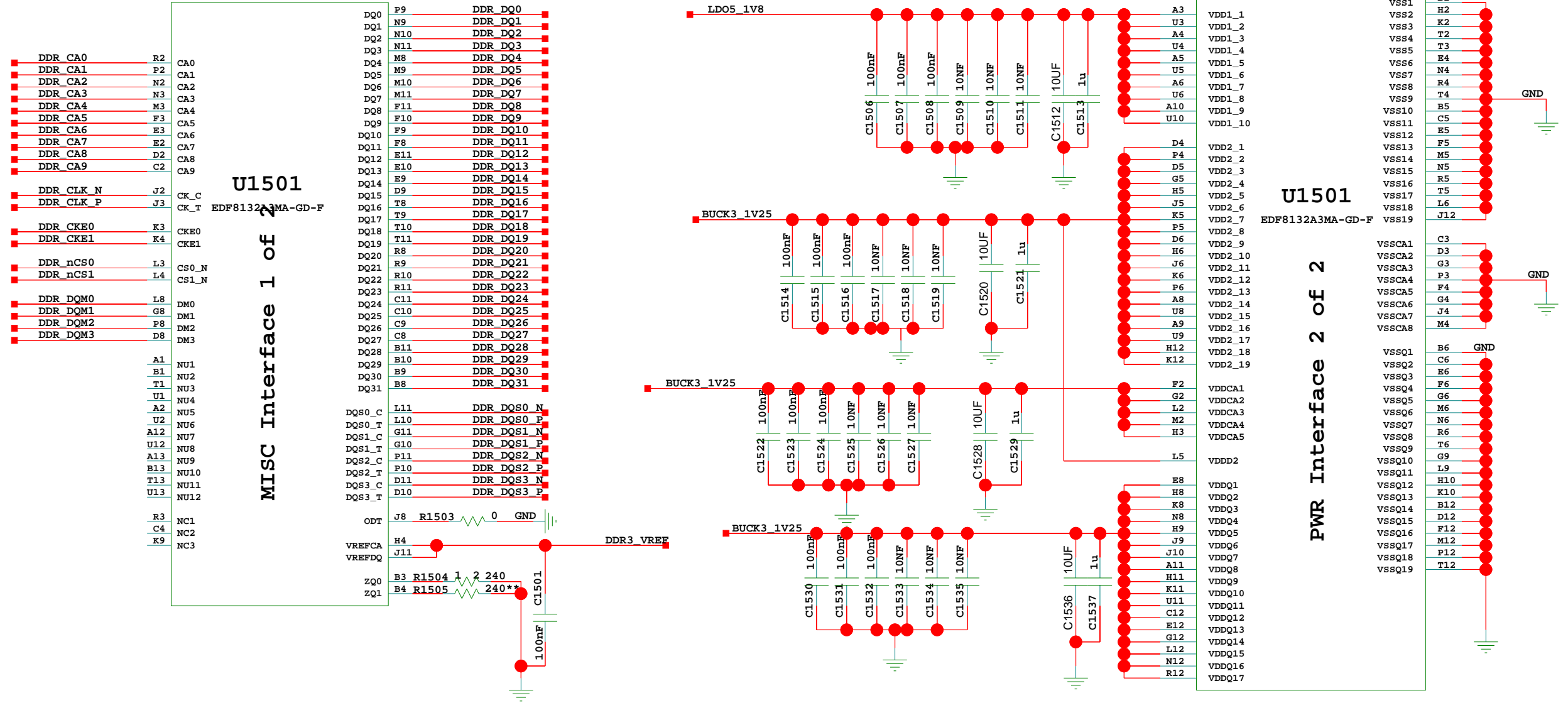
U1101
HI6220V100

VSS Interface 7 of 7

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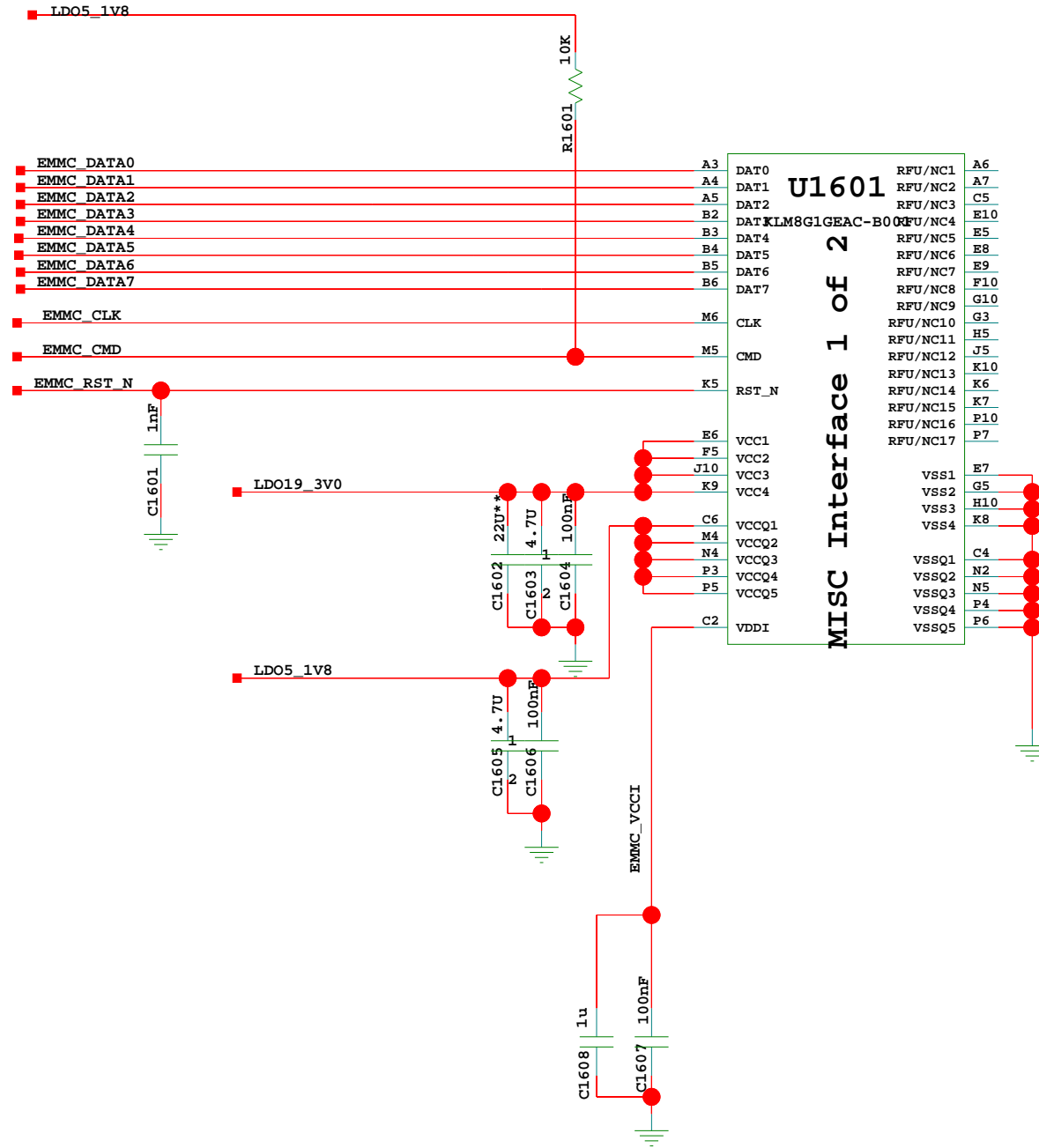
LP-DDR3



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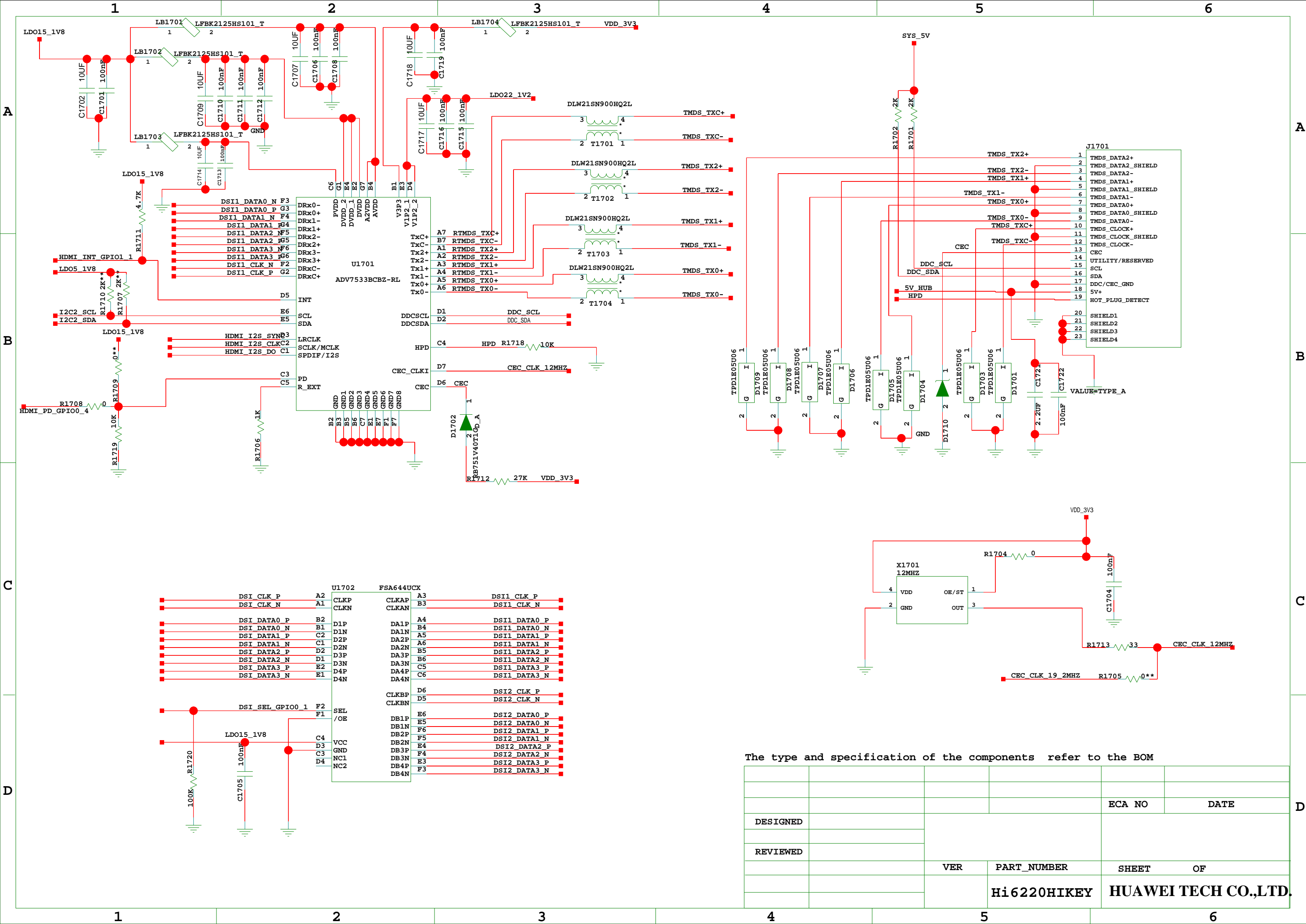
eMMC



MISC Interface of U1601			
A1	NC1	NC54	H12
A10	NC2	NC55	H13
A11	NC3	NC56	H14
A12	NC4	NC57	H2
A13	NC5	NC58	H3
A14	NC6	NC59	J1
A2	NC7	NC60	J12
A8	NC8	NC61	J13
A9	NC9	NC62	J14
B1	NC10	NC63	J2
B10	NC11	NC64	J3
B11	NC12	NC65	K1
B12	NC13	NC66	K12
B13	NC14	NC67	K13
B14	NC15	NC68	K14
B7	NC16	NC69	K2
B8	NC17	NC70	K3
B9	NC18	NC71	L1
C1	NC19	NC72	L12
C10	NC20	NC73	L13
C11	NC21	NC74	L14
C12	NC22	NC75	L2
C13	NC23	NC76	L3
C14	NC24	NC77	M1
C3	NC25	NC78	M10
C7	NC26	NC79	M11
C8	NC27	NC80	M12
C9	NC28	NC81	M13
D1	NC29	NC82	M14
D12	NC30	NC83	M2
D13	NC31	NC84	M3
D14	NC32	NC85	M7
D2	NC33	NC86	M8
D3	NC34	NC87	M9
D4	NC35	NC88	N1
E1	NC36	NC89	N10
E12	NC37	NC90	N11
E13	NC38	NC91	N12
E14	NC39	NC92	N13
E2	NC40	NC93	N14
E3	NC41	NC94	N3
F1	NC42	NC95	N6
F12	NC43	NC96	N7
F13	NC44	NC97	N8
F14	NC45	NC98	N9
F2	NC46	NC99	P1
F3	NC47	NC100	P11
G1	NC48	NC101	P12
G12	NC49	NC102	P13
G13	NC50	NC103	P14
G14	NC51	NC104	P2
G2	NC52	NC105	P8
H1	NC53	NC106	P9

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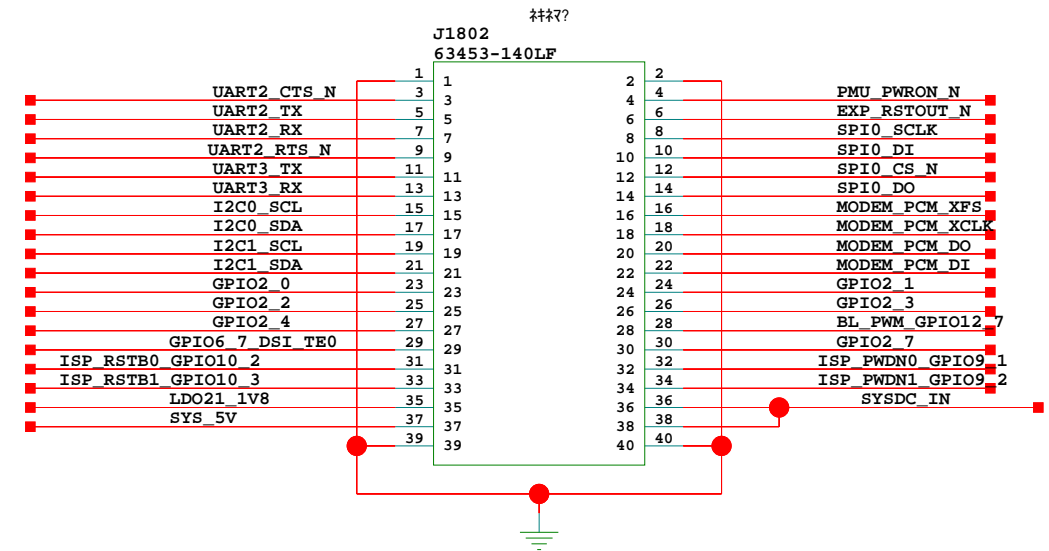
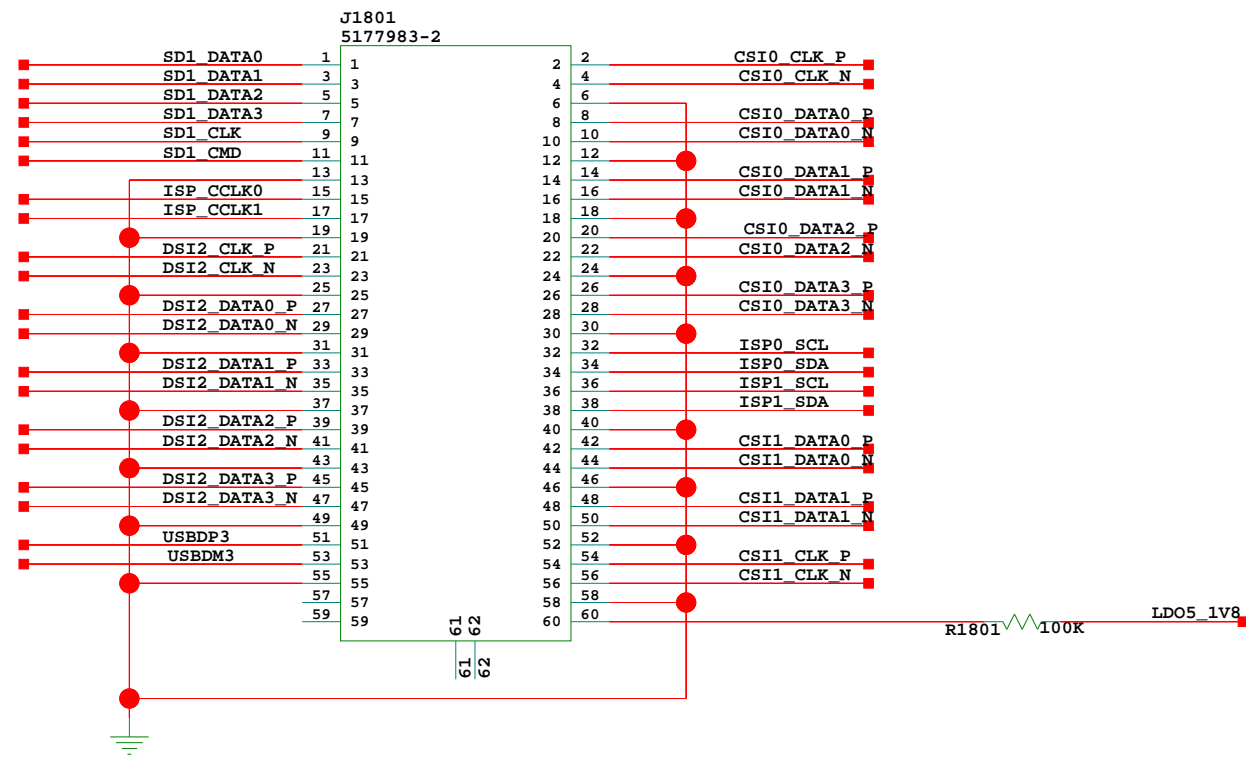


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A

A



B

B

C

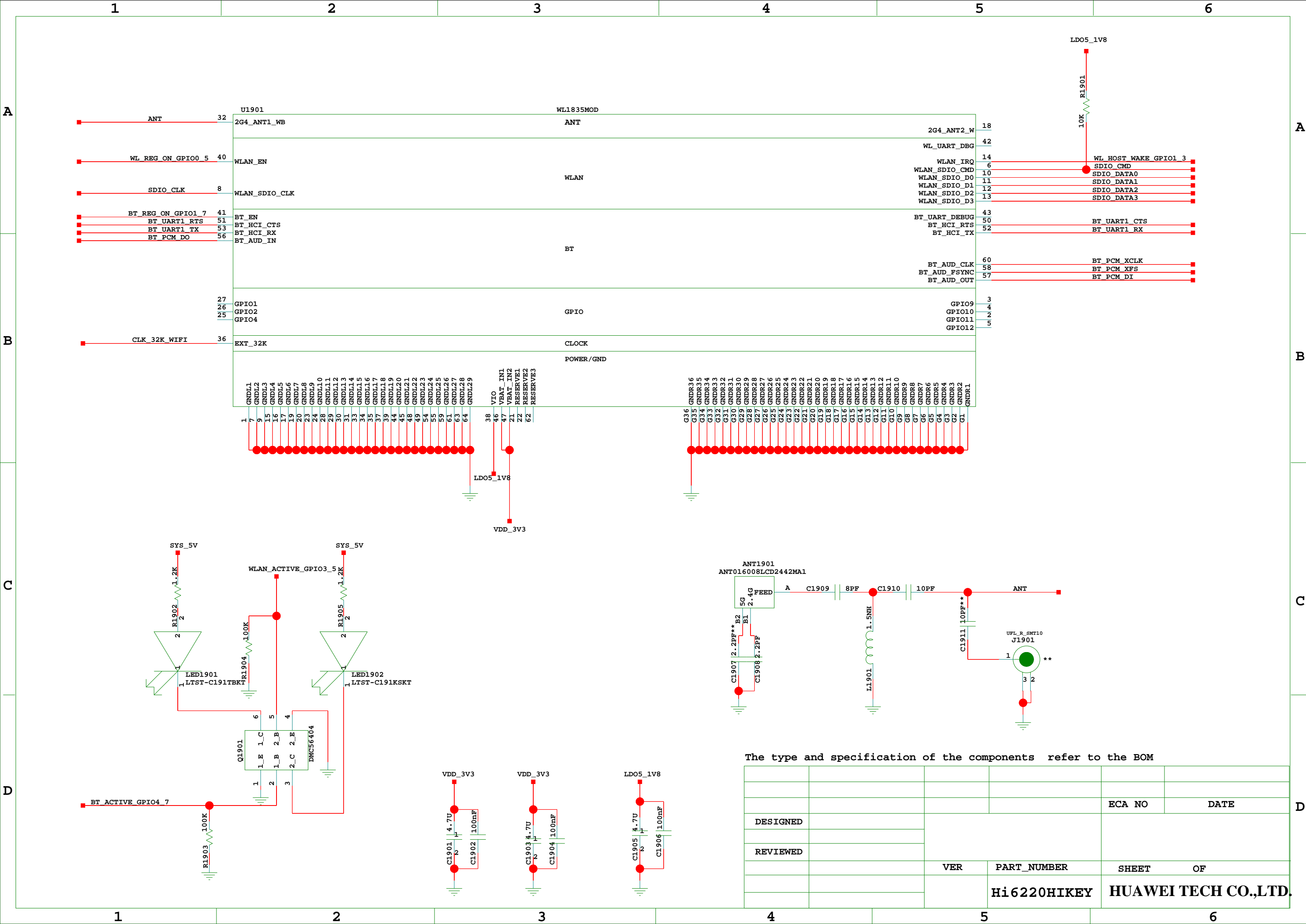
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D

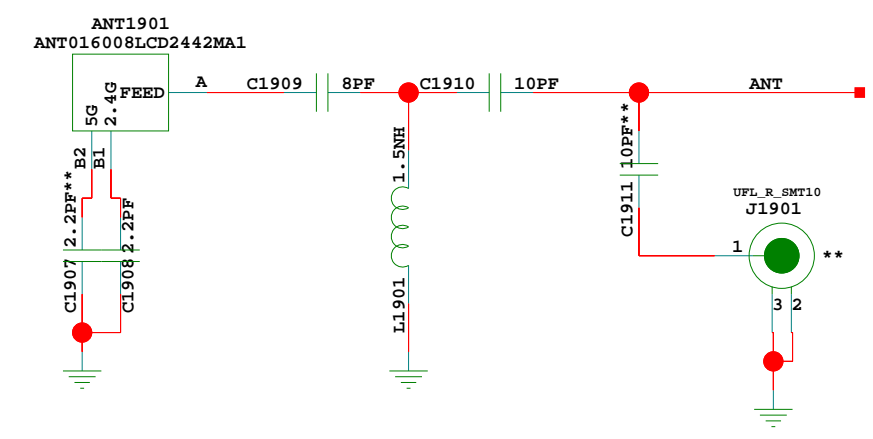
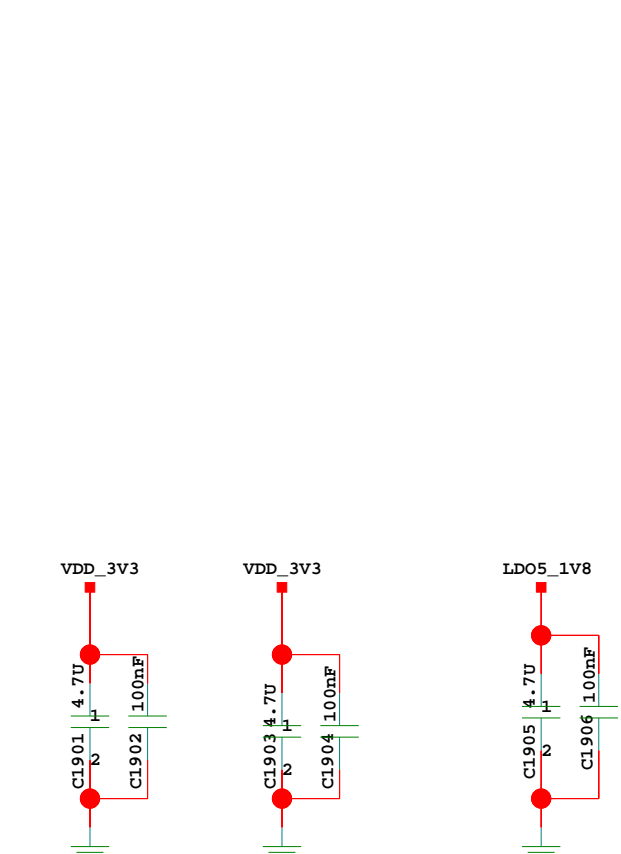
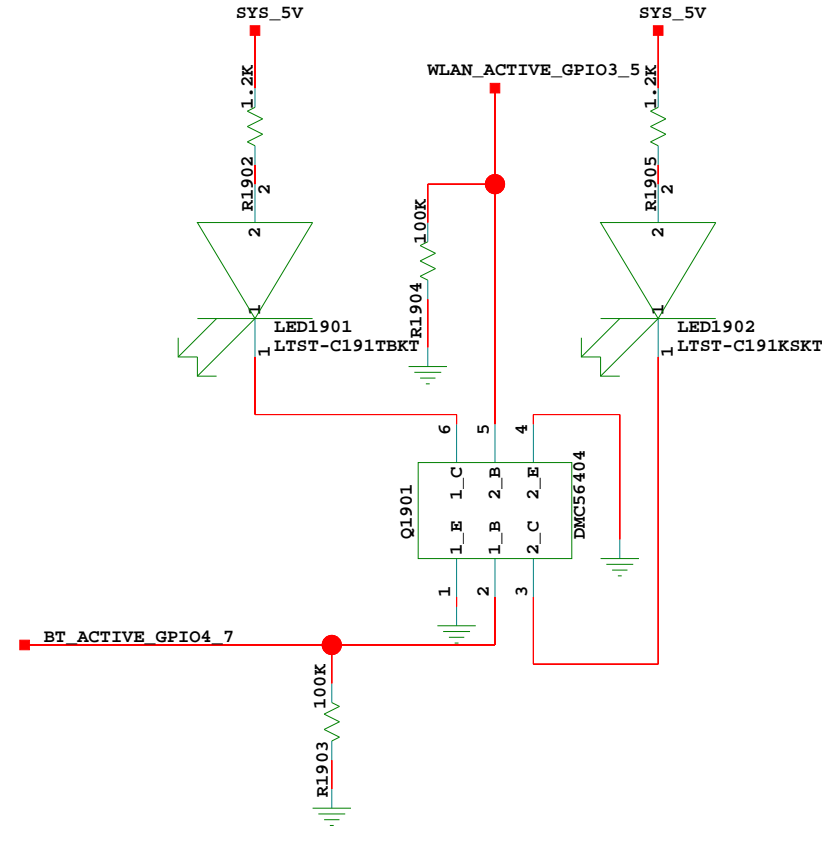
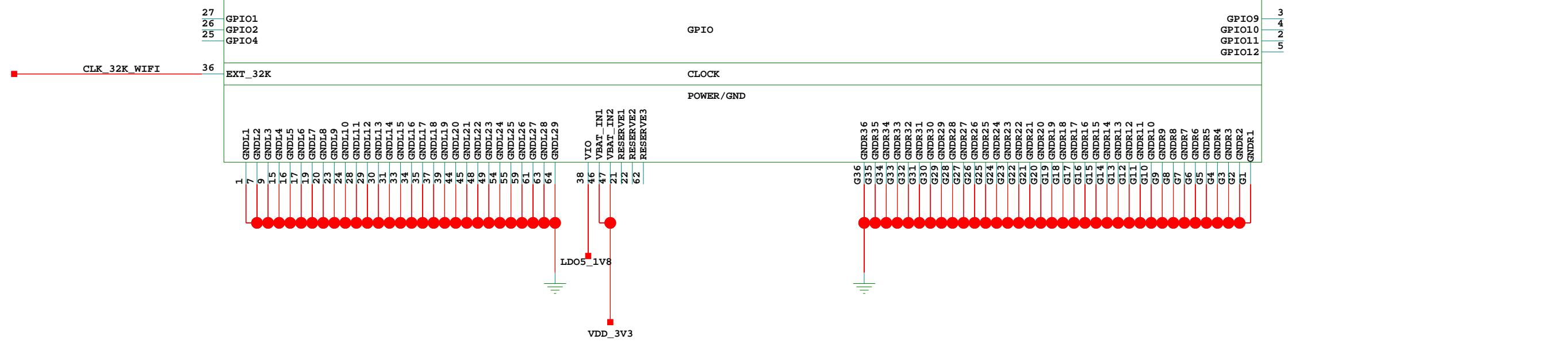
D

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U1901	WL1835MOD	U1901	WL1835MOD
ANT 32	2G4_ANT1_WB	ANT	2G4_ANT2_W 18
WL_REG_ON GPIO0_5 40	WLAN_EN	WLAN	WL_UART_DBG 42
SDIO_CLK 8	WLAN_SDIO_CLK	BT	WLAN_IRQ 14
BT_REG_ON GPIO1_7 41	BT_EN	GPIO	WLAN_SDIO_CMD 6
BT_UART1_RTS 51	BT_HCI_CTS	CLOCK	WLAN_SDIO_D0 10
BT_UART1_TX 53	BT_HCI_RX	POWER/GND	WLAN_SDIO_D1 11
BT_PCM_DO 56	BT_AUD_IN		WLAN_SDIO_D2 12
			WLAN_SDIO_D3 13
			BT_UART_DEBUG 43
			BT_HCI_RTS 50
			BT_HCI_TX 52
			BT_AUD_CLK 60
			BT_AUD_FSYNC 58
			BT_AUD_OUT 57
			BT_PCM_XCLK
			BT_PCM_XFS
			BT_PCM_DI
			GPIO9 3
			GPIO10 4
			GPIO11 2
			GPIO12 5



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