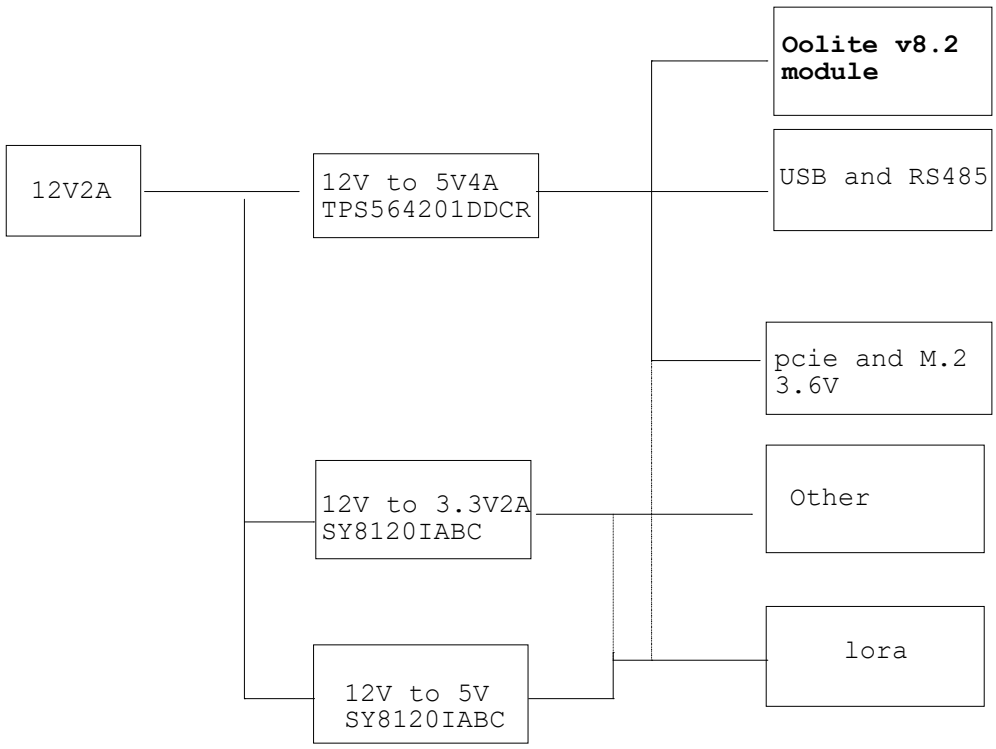

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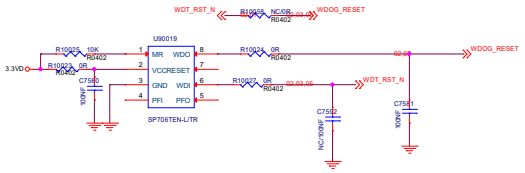

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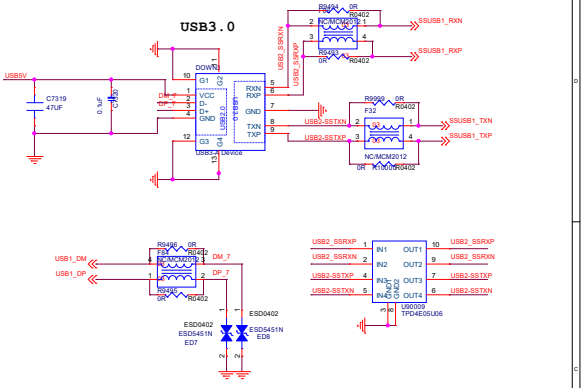
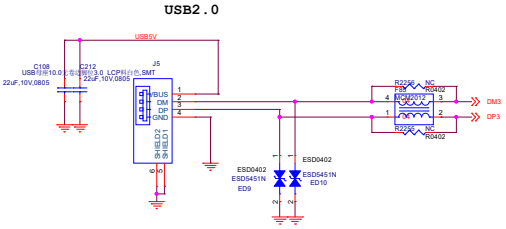
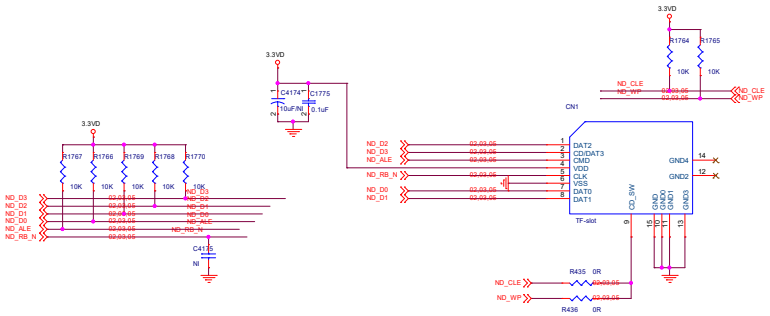
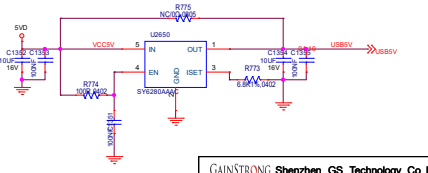






USB_POWER



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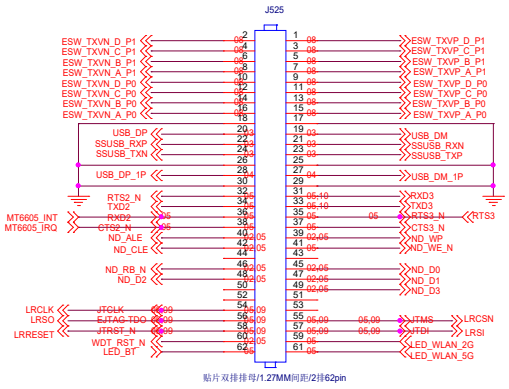

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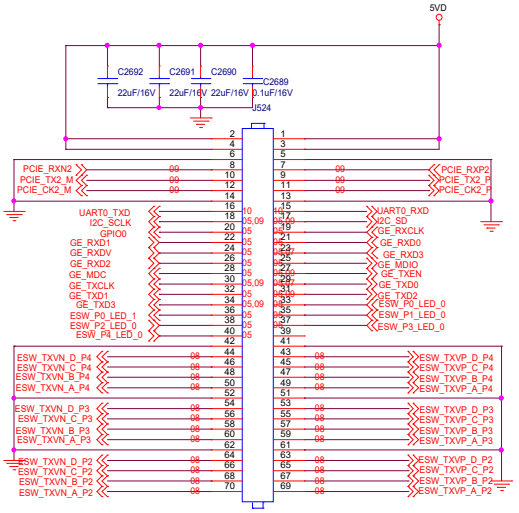

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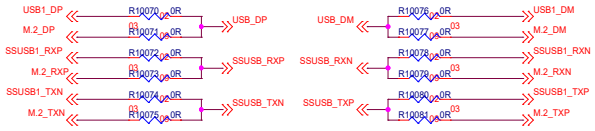

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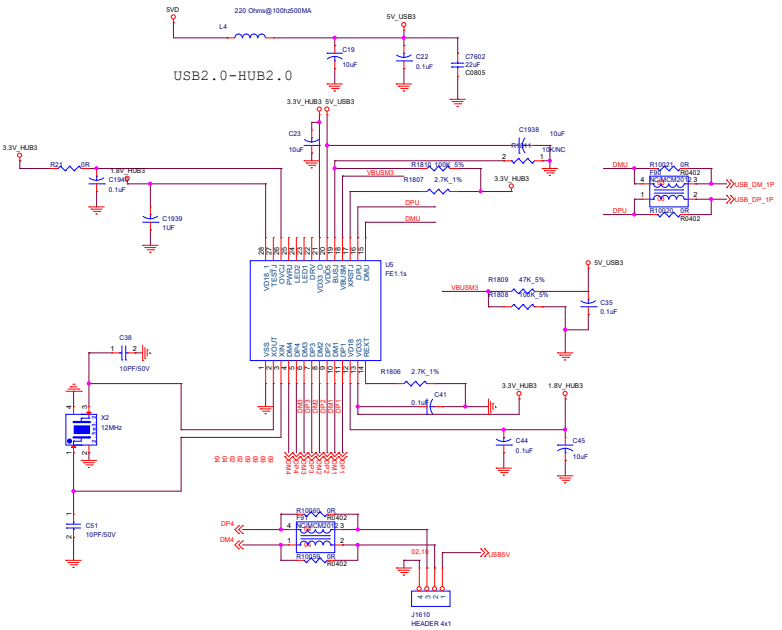

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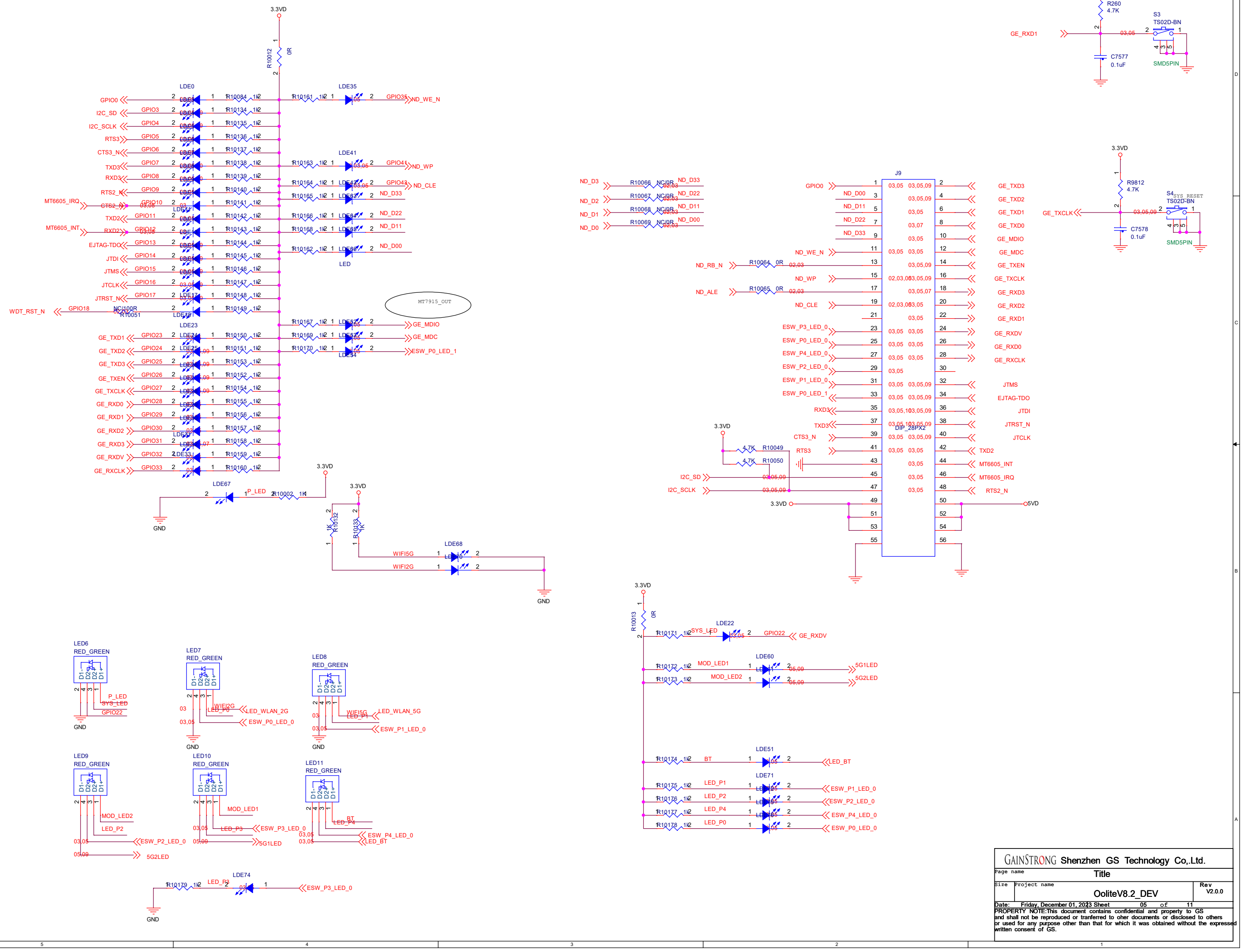
LED



3.3VD
R10012
0R
LDE0
LDE35
LDE41
GPIO0
I2C_SD
I2C_SCLK
RTS3
CTS3_N
TXD3
RXD3
RTS2_N
CTS2_N
TXD2
RXD2
MT6605_IRQ
MT6605_INT
EJTAG-TDO
JTDI
JTMS
JTCLK
JTRST_N
WDT_RST_N
GE_TXD1
GE_TXD2
GE_TXD3
GE_TXEN
GE_TXCLK
GE_RXD0
GE_RXD1
GE_RXD2
GE_RXD3
GE_RXDV
GE_RXCLK
ND_WE_N
ND_WP
ND_CLE
ND_D33
ND_D22
ND_D11
ND_D00
GE_MDIO
GE_MDC
ESW_P0_LED_1
MT7915_OUT
LDE67
P_LED
R10002
GND
LDE68
WIFI5G
WIFI2G
J9
DIP_28PX2
5VD
R260
4.7K
S3
TS02D-BN
C7577
0.1uF
SMD5PIN
R9812
S4
SYS_RESET
C7578
R10049
R10050
R10013
LDE22
SYS_LED
GPIO22
LDE60
MOD_LED1
MOD_LED2
5G1LED
5G2LED
LDE51
BT
LED_BT
LDE71
LED_P1
LED_P2
LED_P4
LED_P0
ESW_P1_LED_0
ESW_P2_LED_0
ESW_P4_LED_0
ESW_P0_LED_0
LED6
LED7
LED8
LED9
LED10
LED11
RED_GREEN
LED_WLAN_2G
LED_WLAN_5G
LED_P3
ESW_P3_LED_0
LDE74
R10179

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Boot Strapping

Pin Name	Description	Value	
SPI_CLK	DRAM_FROM_EE	For non scan mode: 0: DRAM/PLL configuration from EEPROM **1: DRAM configuration from Auto Detect**	For FT mode: 0: SUTIF 1: 3-wire SPI
{SPI_CS1_N, SPI_CS0_N, MDC}	XTAL_MODE	000: 20 MHz, Self Oscillation mode 001: 20 MHz, Single end input 010: 20 MHz, differential input **011: 40 MHz, Self Oscillation mode**	100: 40 MHz, Single end input 101: 40 MHz, differential input 110: 25 MHz, Self Oscillation mode 111: 25 MHz, Single end input
PERST_N	OCP_RATIO	**0: 1:3** 1: 1:4	
TXD2	DRAM_TYPE	**0: DDR3** 1: DDR2	
{RTS2_N, RTS3_N, TXD1, GPIO0}	CHIP_MODE[3:0]	0000: Normal / Boot from SPI 4-byte address and XTAL clock 0001: Normal / Boot from ROM (NAND page 2k+64 bytes) **0010: Normal / Boot from SPI 3-byte address** 0011: Normal / Boot from SPI 4-byte address 0100: iNIC RGMI / Boot from ROM 0101: iNIC MII / Boot from ROM 0110: iNIC RVMII / Boot from ROM 0111: iNIC PHY / Boot from ROM 1000: iNIC RGMII / Boot from ROM and XTAL clock 1001: Normal / Boot from internal SRAM 1010: Normal / Boot from ROM (NAND page 2k+128 bytes) 1011: Normal / Boot from ROM (NAND page 4k+128 bytes) 1100: Normal / Boot from ROM (NAND page 4k+224 bytes) 1101: Debug mode 1110: Scan mode 1111: Final Test	

Giga Switch Hardware Trap

Pin Name	Trap	Fuction	Description	Default
P0_LED_0	HWTRAP[0]	HT_CHIP_MODE[0]	chip_mode[3:0] 4'b0000: IDDQ mode 4'b0001: IOTEST mode 4'b0010: NANDTREE mode 4'b0011: RING mode (both IO and std-cell) 4'b0100: MBIST 4'b0101: SCAN mode (internal) 4'b0110: SCAN-COMP mode (compression) 4'b0111: SCAN-MBIST-OLT mode 4'b1000: AFE-OLT mode 4'b1001: GPHY ATE mode 4'b1010: GPHY ADUMP mode 4'b1011: GPHY ADUMP probe mode 4'b1100: Reserved 4'b1101: Reserved 4'b1110: bootup probe mode 4'b1111: normal mode	4'b1111
P1_LED_0	HWTRAP[1]	HT_CHIP_MODE[1]		
P2_LED_0	HWTRAP[2]	HT_CHIP_MODE[2]		
P0_LED_1	HWTRAP[3]	HT_CHIP_MODE[3]		
P3_LED_0	HWTRAP[9]	HT_XTAL_FSEL[0]	External Crystal Frequency Selection xtal_freq_sel[1:0] 2'b01: 20MHz 2'b10: 40MHz 2'b11: 25MHz	2'b10
P4_LED_0	HWTRAP[10]	HT_XTAL_FSEL[1]		

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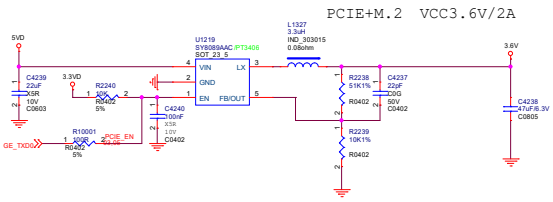

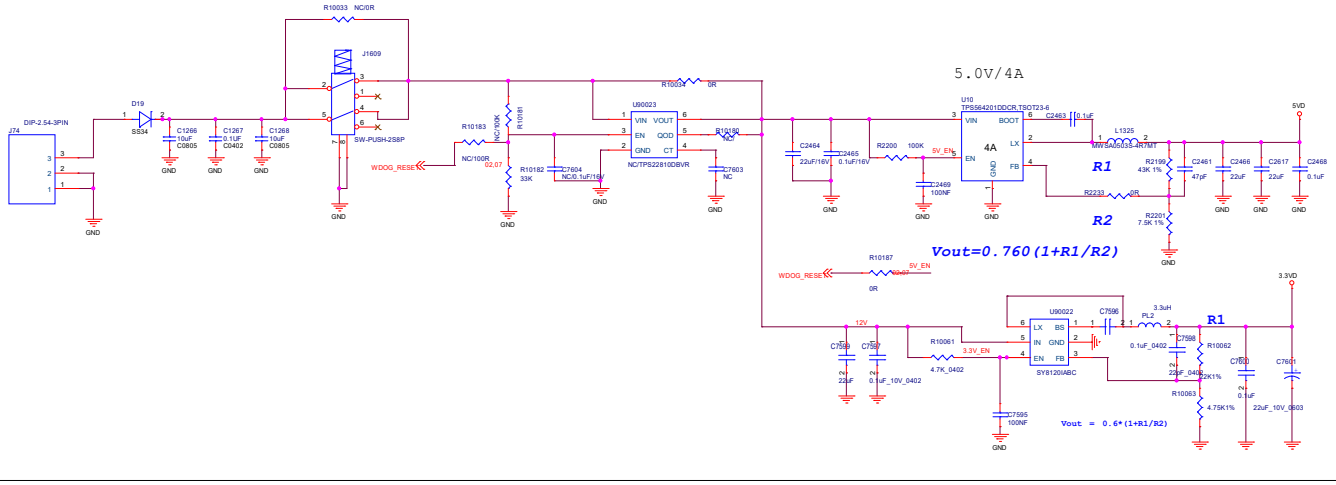

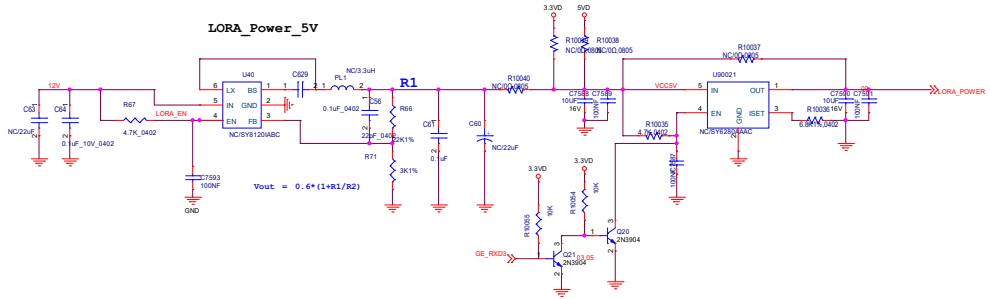

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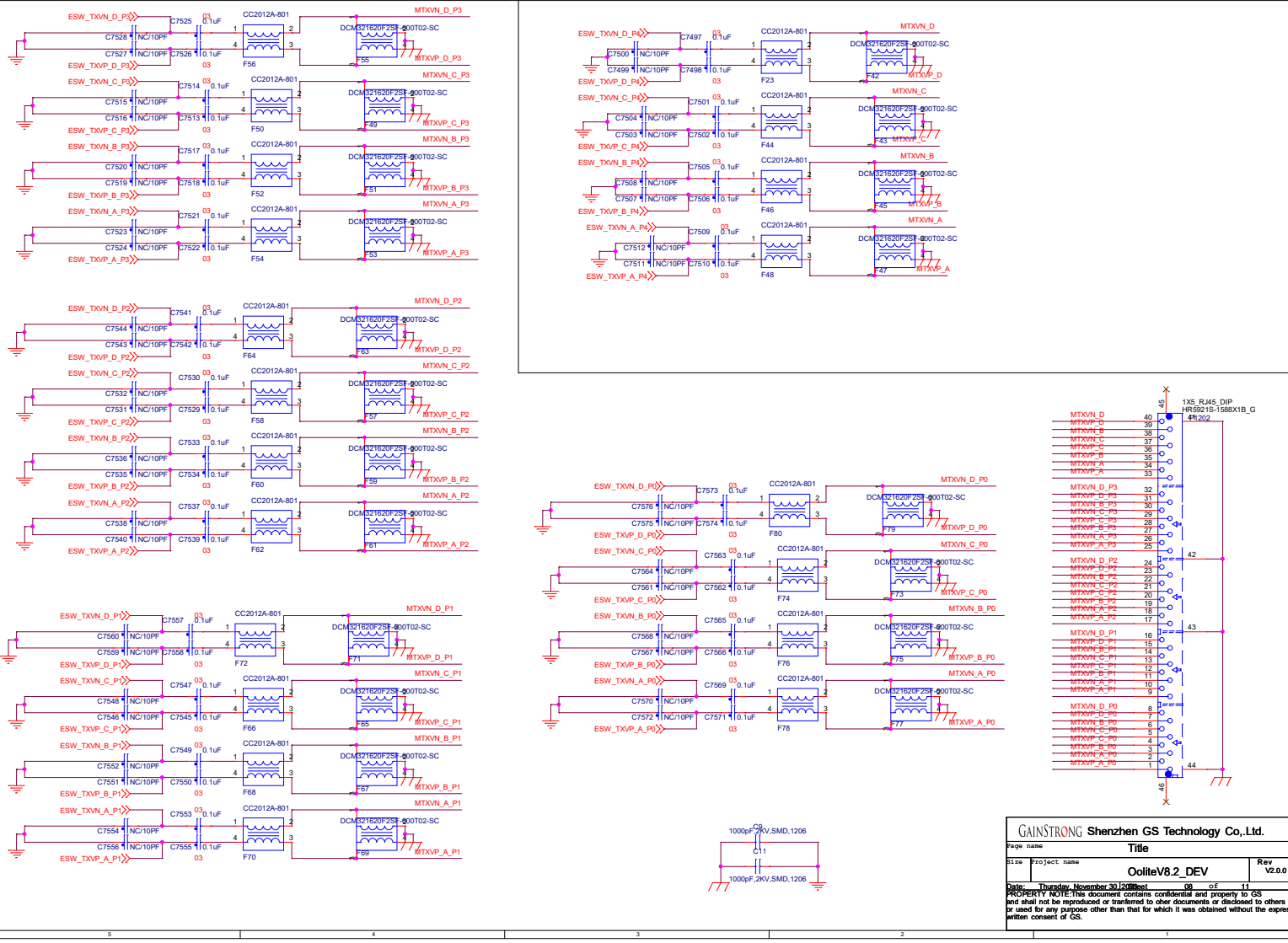

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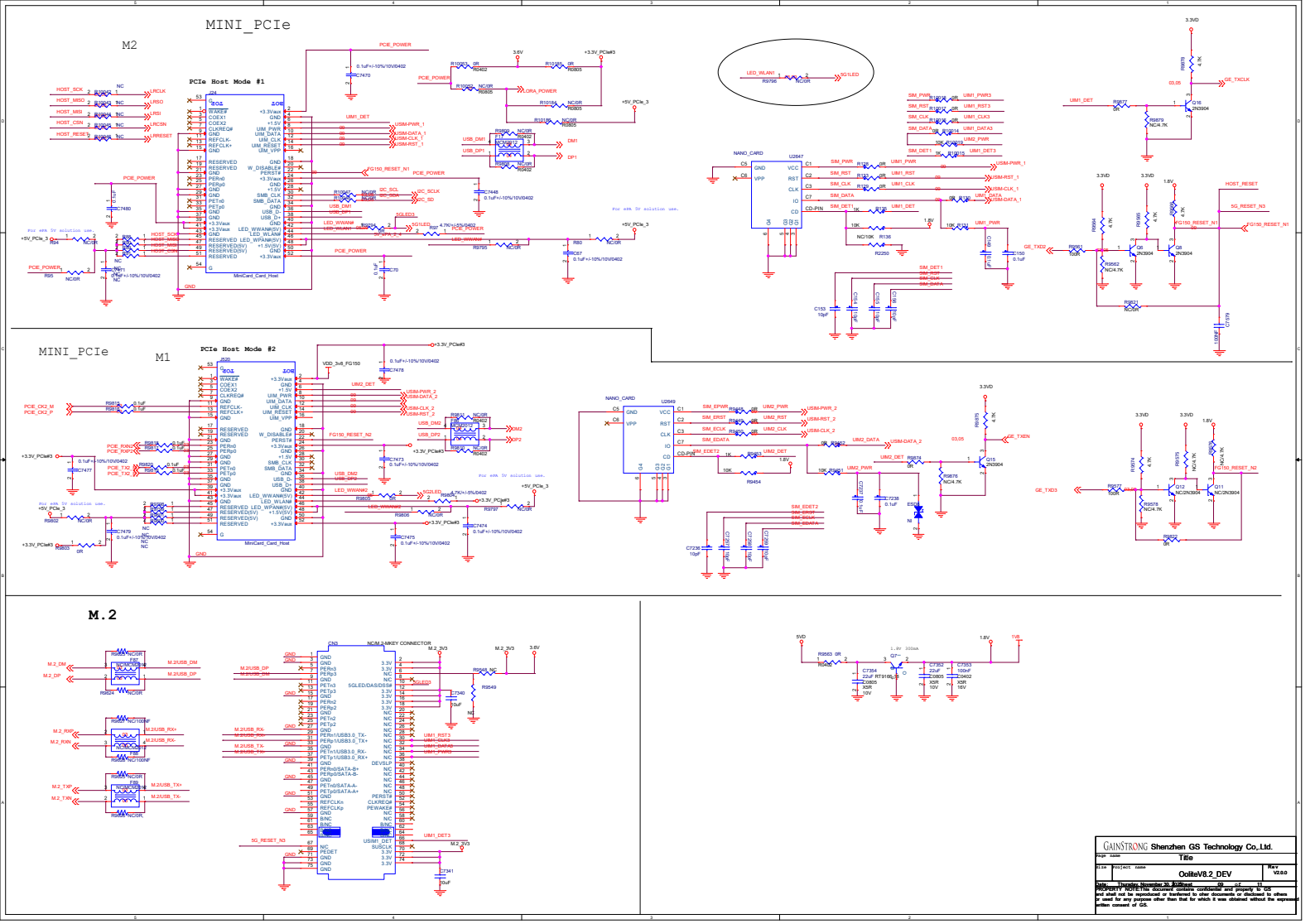

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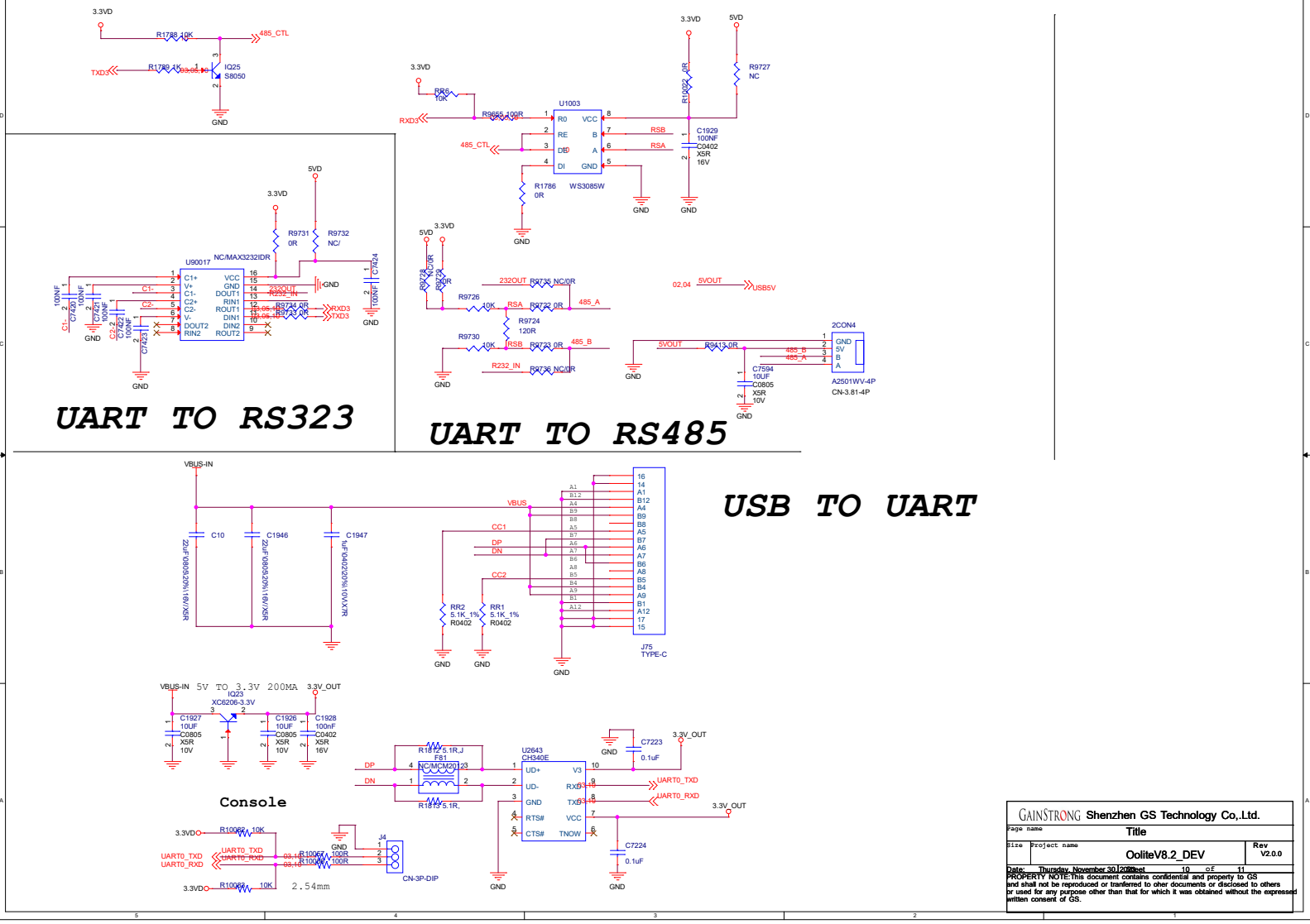

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GPIO编号	IO分组	PIN名称	复用1	软件引脚配置建议	主板功能定义	底板功能定义	备注
0	GPIO	GPIO0		2.54插针	启动配置，硬件默认拉低	测试LED	
1	UART	RXD1		调试串口		主UART通讯	
2		TXD1				主UART通讯	
3	I2C	I2C_SD		LORA温度传感器I2C 预留2.54插针		测试LED	
4		I2C_SCLK		LORA温度传感器I2C 预留2.54插针		测试LED	
5	UART	RTS3_N		2.54插针	启动配置，硬件默认拉低	测试LED	
6		CTS3_N		2.54插针		测试LED	
7		TXD3		RS485/RS232 UART		测试LED	
8		RXD3				测试LED	
9	UART	RTS2_N		UART /2.54插针	启动配置，硬件默认拉低/MT7905_CTS	测试LED	主板已经使用，底板禁止使用
10		CTS2_N			MT7905_RTS	测试LED	主板已经使用，底板禁止使用
11		TXD2			系统DDR配置、MT7905_RXD	测试LED	主板已经使用，底板禁止使用
12		RXD2			MT7905_TXD	测试LED	主板已经使用，底板禁止使用
13	JTAG	JTDO		LoRa SPI MOSI		测试LED	
14		JTDI		LoRa SPI MISO		测试LED	
15		JTMS		LoRa SPI 片选		测试LED	
16		JTCLK		LoRa SPI CLK		测试LED	
17		JTRST_N		LoRa SPI 复位		测试LED	
18	WDT_RST_N	WDT_RST_N		看门狗信号		可选LED	启用外部看门狗后此PIN脚禁止上下拉
19	PCIe	PERST_N		MT7915复位	OCP_RATIO,硬件默认上拉，MT7905置位	无	主板已经使用，底板禁止使用
20	MDC/MDIO	MDIO		2.54插针		测试LED	
21		MDC				测试LED	
22	GE2	GE2_TXD0		Mini PCIe槽 电源启用			
23		GE2_TXD1		2.54插针		测试LED	
24		GE2_TXD2		Mini PCIe槽1复位		测试LED	
25		GE2_TXD3		Mini PCIe槽2复位		测试LED	
26		GE2_TXEN		SIM卡1检测		PCIE供电开关	
27		GE2_TXCLK		SIM卡2检测		测试LED	
28		GE2_RXD0		复位按钮		测试LED	
29		GE2_RXD1		WPS按钮		测试LED	
30		GE2_RXD2		2.54插针		测试LED	
31		GE2_RXD3		lora电源使能		测试LED	
32		GE2_RXDV		系统LED		测试LED	
33		GE2_RXCLK				测试LED	
34	NAND	ND_CS_N	SPI_CS0	主SPI，固件启动用	nor_flash		主板已经使用，底板禁止使用
35		ND_WE_N	SPI_CS1		晶振配置	测试LED	主板已经使用，底板禁止使用
36		ND_RE_N	SPI_CLK		nor_flash		主板已经使用，底板禁止使用
37		ND_D4	SPI_MISO		nor_flash		主板已经使用，底板禁止使用
38		ND_D5	SPI_MOSI		nor_flash		主板已经使用，底板禁止使用
39		ND_D6	SPI_WP		nor_flash		主板已经使用，底板禁止使用
40		ND_D7	SPI_HOLD		nor_flash		主板已经使用，底板禁止使用
41		ND_WP	SD_WP	TF卡		TF_卡插拔侦测	
42		ND_RB_N	SD_CLK			TF_CLK	
43		ND_CLE	SD_CD			TF_卡插拔侦测	
44		ND_ALE	SD_CMD			TF_CMD	
45		ND_D0	SD_DATA0			TF_DATA0	
46		ND_D1	SD_DATA1			TF_DATA1	
47		ND_D2	SD_DATA2			TF_DATA2	
48		ND_D3	SD_DATA3			TF_DATA3	

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