
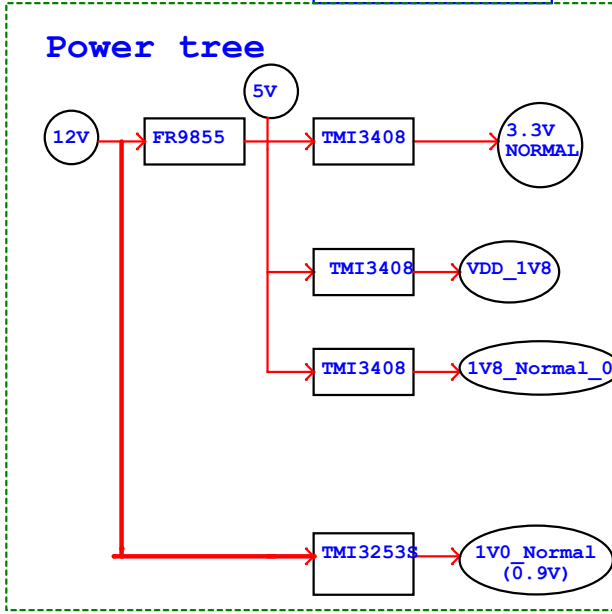
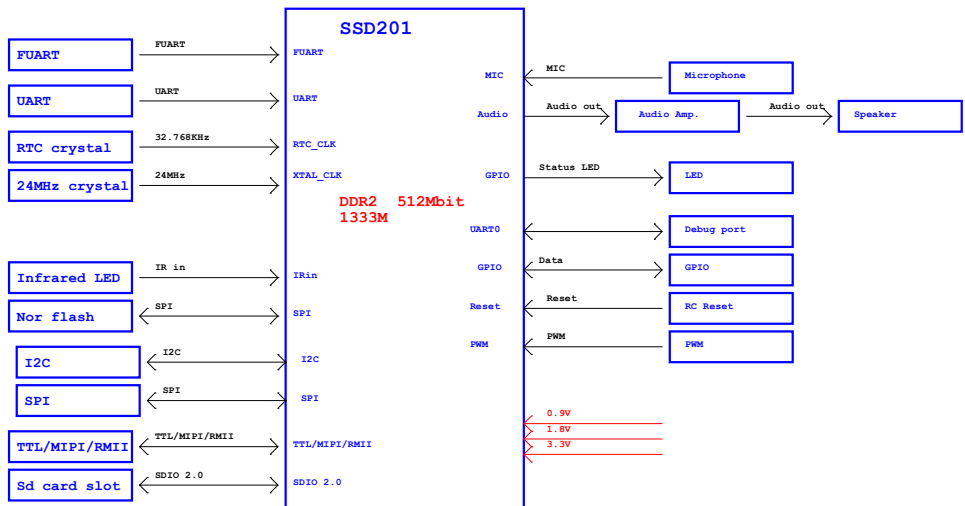
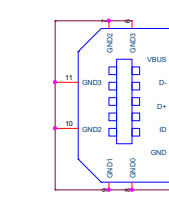


| Revision | | | |
|----------|--|------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| S01A | Init | | |
| | <p>First Release</p> <p>1 Add ESD Protect 2 Add PMOS Control WIFI Power 2 Add SSD201 GPIO Control WIFI Reset ,remove SSW101B 19 Pin ,NC</p> | | |
| | | | |

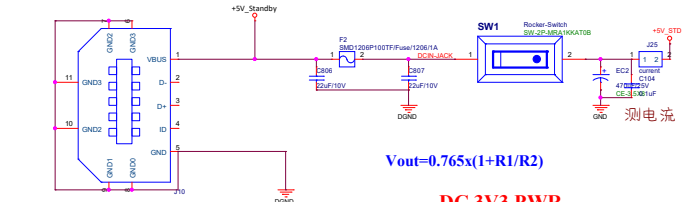
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|---|-----------------------------|---|---------------|
|  | | 10F-2, No.1, Talyuan 2nd St., Zhubei City, Hsinch County 30288, Taiwan Tel: +886-3-5601333 | |
| SSD201 Display Demo Board | | | |
| Title | | | |
| Size | Document Number | | Rev |
| B | Revision History | | 0.1 |
| Date: | Saturday, November 02, 2019 | | Sheet 1 of 11 |



DC 12V Input



+5V Power

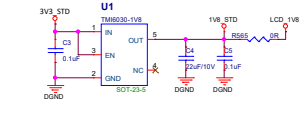


$$V_{out} = 0.765 \times (1 + R1/R2)$$

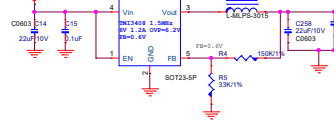
Power

- VDD
- VDDIO_DURK
- VDDIO_DDR
- AVDDIO_DRAM
- VDDIO_DRAM
- VDDIO_DATA
- AVDDIO_NODIE
- AVDDIO_NODIE
- AVDDIO_AUD
- AVDDIO_USB
- AVDDIO_ETH
- AVDDIO_XTAL
- AVDDIO_PLL4
- VDDIP_1

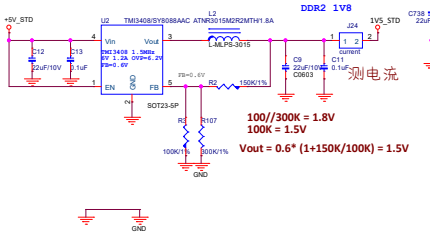
LDO 1V8 MIPI Panel



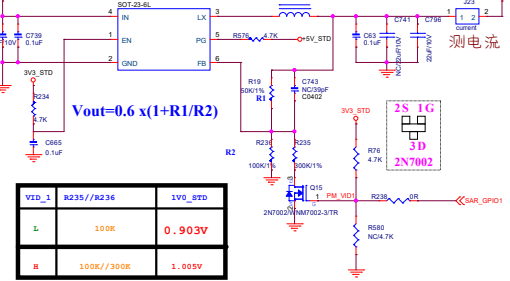
DC 3V3 PWR



DC 1V8 DDR2 PWR (Internal)



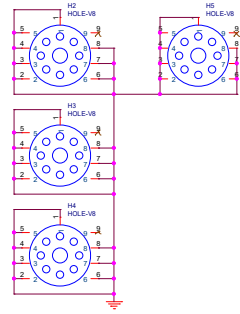
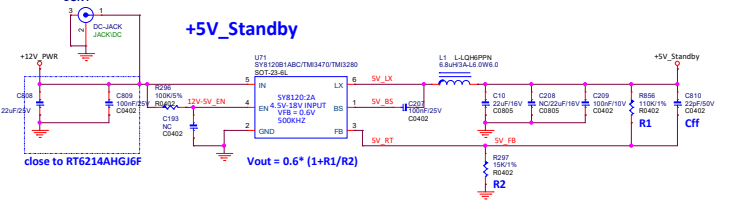
DC 1V0 Core Power



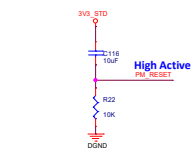
$$V_{out} = 0.6 \times (1 + R1/R2)$$

| VDD_1 | R235 // R236 | 1V0_2FDD |
|-------|--------------|----------|
| L | 100K | 0.903V |
| H | 100K // 300K | 1.005V |

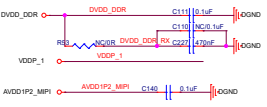
非容5-12V适配器



RESET

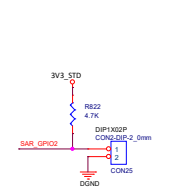


| | |
|-------------|-------------|
| AVDD_AUD | AVDD_AUD |
| AVDD_USB | AVDD_USB |
| AVDD_ETH | AVDD_ETH |
| AVDD_STAL | AVDD_STAL |
| AVDD_NODE | AVDD_NODE |
| VDD | VDD |
| AVDD_RTC | AVDD_RTC |
| VDDIO_DATA | VDDIO_DATA |
| AVDDIO_DRAM | AVDDIO_DRAM |
| AVDD_PA | AVDD_PA |

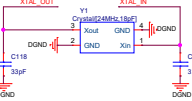


| | |
|---------|-------------|
| UART_TX | UART_TX [B] |
| UART_RX | UART_RX [B] |
| DMC_DP | DMC_DP [B] |
| DMC_CLK | DMC_CLK [B] |

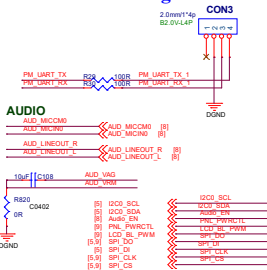
| | |
|------------------|-------------|
| [10] WPI_EN | WPI_EN |
| [5] DMC_D1 | DMC_D1 |
| [5] DMC_DP | DMC_DP [B] |
| [5] DMC_CLK | DMC_CLK [B] |
| [5] PWR_KEY | PWR_KEY |
| [5] S14_PWR_EN | S14_PWR_EN |
| [5] SAR_GPI01 | SAR_GPI01 |
| [H,10] SAR_GPI02 | SAR_GPI02 |
| [10] SE_XTAL_OUT | SE_XTAL_OUT |
| [5] UART_TX | UART_TX [B] |
| [5] UART_RX | UART_RX [B] |
| [5] GP104 | GP104 |
| [10] DM_P1 | DM_P1 |
| [10] DP_P1 | DP_P1 |
| [H,10] SAR_GPI02 | SAR_GPI02 |



System XTAL (24MHz) RTC XTAL (32.768KHz)

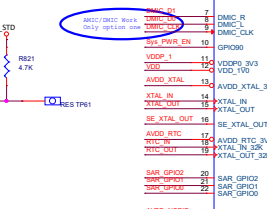


Debug UART



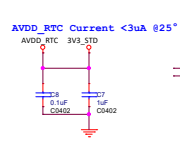
| | |
|-------------|-------------|
| AVDD_AUD | AVDD_AUD |
| AVDD_USB | AVDD_USB |
| AVDD_ETH | AVDD_ETH |
| AVDD_STAL | AVDD_STAL |
| AVDD_NODE | AVDD_NODE |
| VDD | VDD |
| AVDD_RTC | AVDD_RTC |
| VDDIO_DATA | VDDIO_DATA |
| AVDDIO_DRAM | AVDDIO_DRAM |
| AVDD_PA | AVDD_PA |

| | |
|------------------|-------------|
| [5] DMC_D1 | DMC_D1 |
| [5] DMC_DP | DMC_DP [B] |
| [5] DMC_CLK | DMC_CLK [B] |
| [5] PWR_KEY | PWR_KEY |
| [5] S14_PWR_EN | S14_PWR_EN |
| [5] SAR_GPI01 | SAR_GPI01 |
| [H,10] SAR_GPI02 | SAR_GPI02 |
| [10] SE_XTAL_OUT | SE_XTAL_OUT |
| [5] UART_TX | UART_TX [B] |
| [5] UART_RX | UART_RX [B] |
| [5] GP104 | GP104 |
| [10] DM_P1 | DM_P1 |
| [10] DP_P1 | DP_P1 |
| [H,10] SAR_GPI02 | SAR_GPI02 |



| | |
|------------------|-------------|
| [5] DMC_D1 | DMC_D1 |
| [5] DMC_DP | DMC_DP [B] |
| [5] DMC_CLK | DMC_CLK [B] |
| [5] PWR_KEY | PWR_KEY |
| [5] S14_PWR_EN | S14_PWR_EN |
| [5] SAR_GPI01 | SAR_GPI01 |
| [H,10] SAR_GPI02 | SAR_GPI02 |
| [10] SE_XTAL_OUT | SE_XTAL_OUT |
| [5] UART_TX | UART_TX [B] |
| [5] UART_RX | UART_RX [B] |
| [5] GP104 | GP104 |
| [10] DM_P1 | DM_P1 |
| [10] DP_P1 | DP_P1 |
| [H,10] SAR_GPI02 | SAR_GPI02 |

RTC PWR

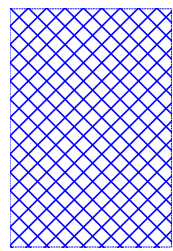


| | |
|-------------|-------------|
| AVDD_AUD | AVDD_AUD |
| AVDD_USB | AVDD_USB |
| AVDD_ETH | AVDD_ETH |
| AVDD_STAL | AVDD_STAL |
| AVDD_NODE | AVDD_NODE |
| VDD | VDD |
| AVDD_RTC | AVDD_RTC |
| VDDIO_DATA | VDDIO_DATA |
| AVDDIO_DRAM | AVDDIO_DRAM |
| AVDD_PA | AVDD_PA |



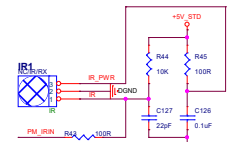
| | |
|------------------|-------------|
| [5] DMC_D1 | DMC_D1 |
| [5] DMC_DP | DMC_DP [B] |
| [5] DMC_CLK | DMC_CLK [B] |
| [5] PWR_KEY | PWR_KEY |
| [5] S14_PWR_EN | S14_PWR_EN |
| [5] SAR_GPI01 | SAR_GPI01 |
| [H,10] SAR_GPI02 | SAR_GPI02 |
| [10] SE_XTAL_OUT | SE_XTAL_OUT |
| [5] UART_TX | UART_TX [B] |
| [5] UART_RX | UART_RX [B] |
| [5] GP104 | GP104 |
| [10] DM_P1 | DM_P1 |
| [10] DP_P1 | DP_P1 |
| [H,10] SAR_GPI02 | SAR_GPI02 |

QFN 128p (12.3x12.3)



| | |
|------------------|-------------|
| [5] DMC_D1 | DMC_D1 |
| [5] DMC_DP | DMC_DP [B] |
| [5] DMC_CLK | DMC_CLK [B] |
| [5] PWR_KEY | PWR_KEY |
| [5] S14_PWR_EN | S14_PWR_EN |
| [5] SAR_GPI01 | SAR_GPI01 |
| [H,10] SAR_GPI02 | SAR_GPI02 |
| [10] SE_XTAL_OUT | SE_XTAL_OUT |
| [5] UART_TX | UART_TX [B] |
| [5] UART_RX | UART_RX [B] |
| [5] GP104 | GP104 |
| [10] DM_P1 | DM_P1 |
| [10] DP_P1 | DP_P1 |
| [H,10] SAR_GPI02 | SAR_GPI02 |

IR Receiver

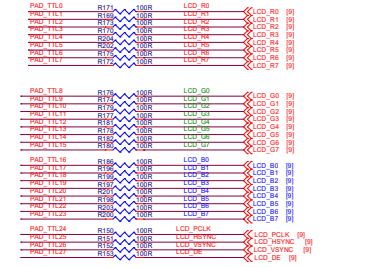


| | |
|-------------|-------------|
| AVDD_AUD | AVDD_AUD |
| AVDD_USB | AVDD_USB |
| AVDD_ETH | AVDD_ETH |
| AVDD_STAL | AVDD_STAL |
| AVDD_NODE | AVDD_NODE |
| VDD | VDD |
| AVDD_RTC | AVDD_RTC |
| VDDIO_DATA | VDDIO_DATA |
| AVDDIO_DRAM | AVDDIO_DRAM |
| AVDD_PA | AVDD_PA |

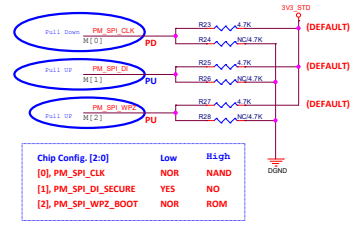


| | |
|------------------|-------------|
| [5] DMC_D1 | DMC_D1 |
| [5] DMC_DP | DMC_DP [B] |
| [5] DMC_CLK | DMC_CLK [B] |
| [5] PWR_KEY | PWR_KEY |
| [5] S14_PWR_EN | S14_PWR_EN |
| [5] SAR_GPI01 | SAR_GPI01 |
| [H,10] SAR_GPI02 | SAR_GPI02 |
| [10] SE_XTAL_OUT | SE_XTAL_OUT |
| [5] UART_TX | UART_TX [B] |
| [5] UART_RX | UART_RX [B] |
| [5] GP104 | GP104 |
| [10] DM_P1 | DM_P1 |
| [10] DP_P1 | DP_P1 |
| [H,10] SAR_GPI02 | SAR_GPI02 |

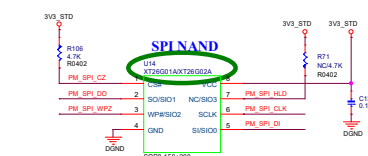
Series Resistance TTL ESD Protect



BOOT STRAPPING



Default Boot From SPI NAND



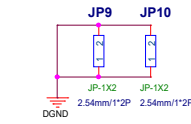
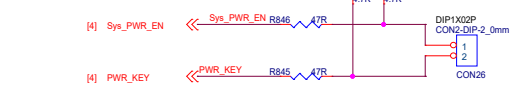
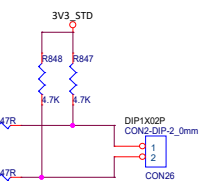
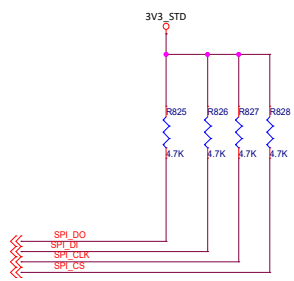
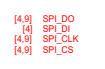
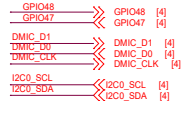
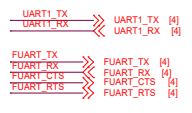
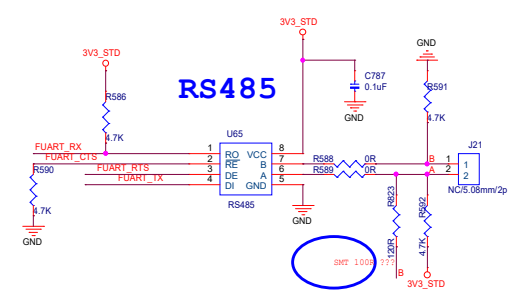
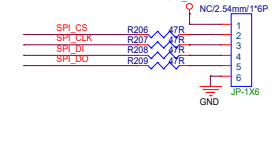
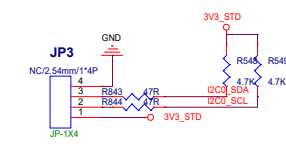
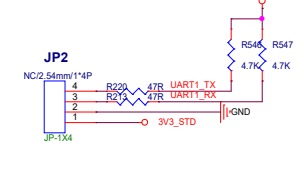
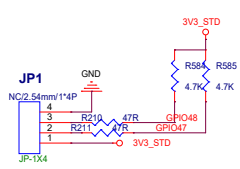
Sigmastar 10F-2, No.1, Teyuan 2nd St., Zhubei City, Hsinch County 30288, Taiwan
Tel: +886-3-4661333

SSD201 Display Board

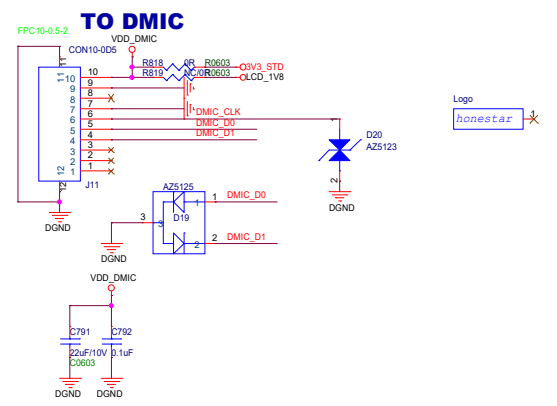
Doc Number: **SSD201**

Size: **SOC_SPI Flash / JTAG / IR eFuse** Rev: **1.1**

Tracking Number: **TP-SPI-Board** 4 of 11

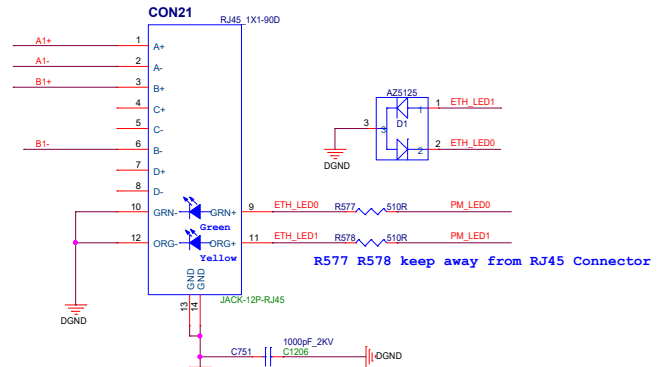
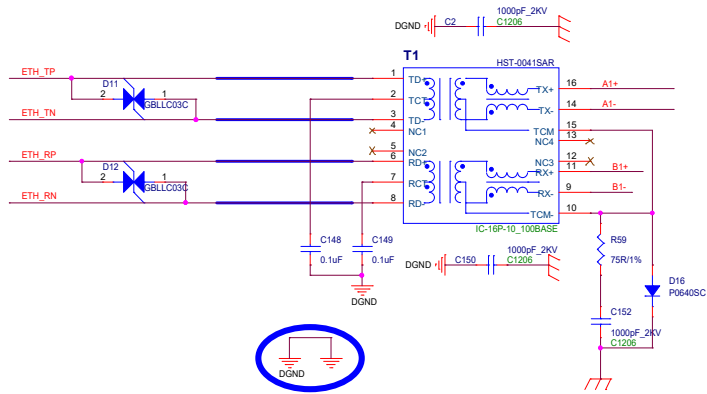


放在板边，供调试接地使用

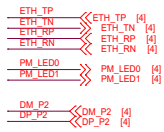


SigmStar 10F-2, No.1, Talyuan 2nd St., Zhubei City, Hsinch County 30288, Taiwan Tel: +886-3-5601333

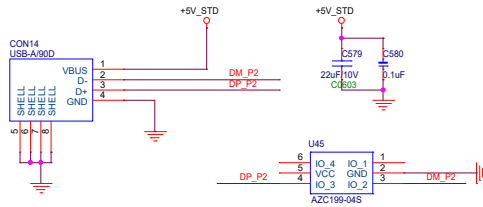
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|-------|----------------------------|---------------------------|--------------|
| Title | | SSD201 Display Demo Board | |
| Size | B | Document Number | UART/I2C/SPI |
| Date: | Tuesday, November 12, 2019 | Sheet | 6 of 11 |
| Rev | r01 | | |



LED_PM[1] Active when linked in 100Base-TX and blinking when transmitting or receiving
 LED_EM[0] Active when linked.



P2 - USB2.0 Host

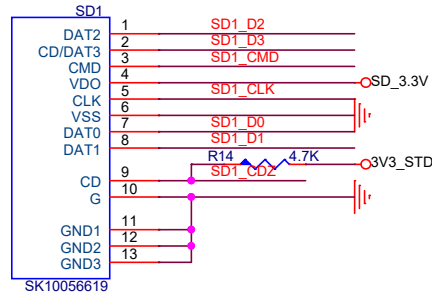
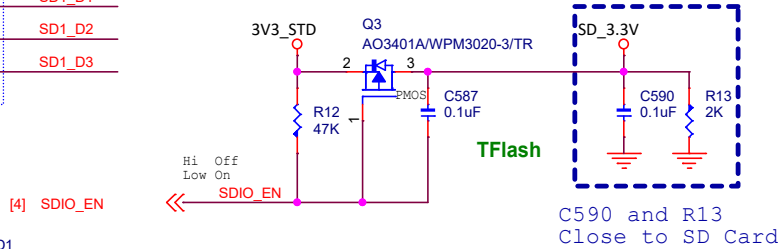
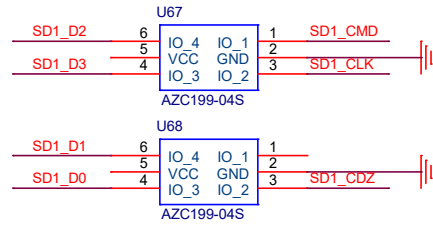
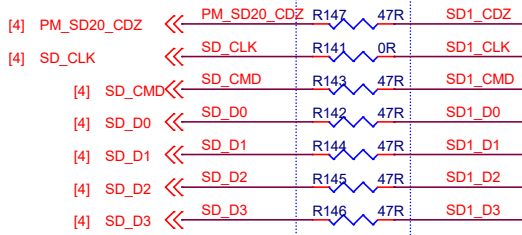


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 Tel: +886-3-5601333

Title: **SSD201 Display Demo Board**
 Size: **B** Document Number: **USB** Row: **r01**
 Date: **Wednesday, March 25, 2020** Sheet **6** of **11**

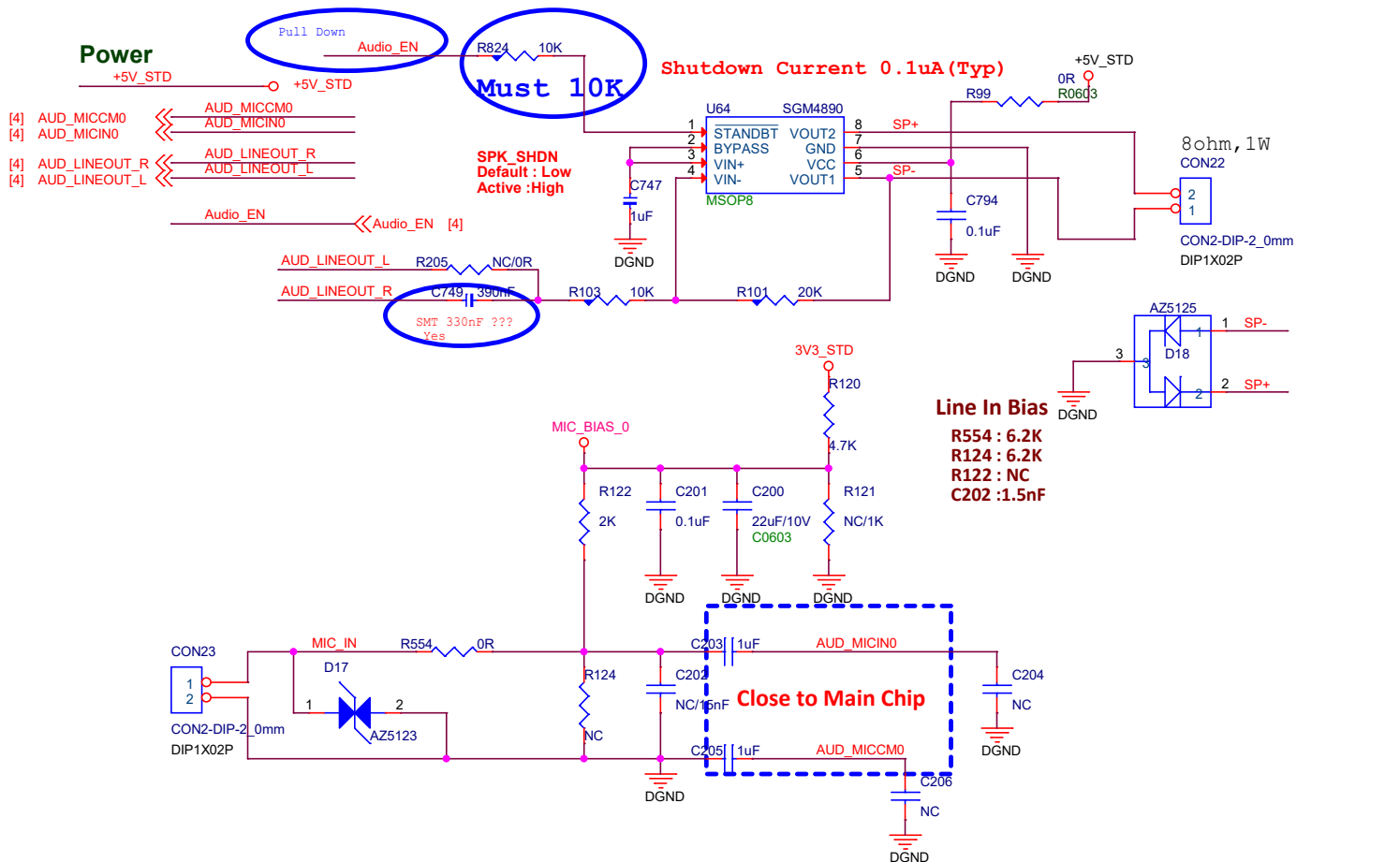
SDIO 2.0

Series Resistance TTL ESD Protect



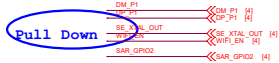
SigStar 10F-2, No.1, Talyuan 2nd St., Zhubei City, Hsinch County 30288, Taiwan
Tel: +886-3-5601333

| | | |
|----------------------------------|-----------------------------|---------------|
| Title | | |
| SSD201 Display Demo Board | | |
| Size | Document Number | Rev |
| A | SD | r01 |
| Date: | Saturday, November 02, 2019 | Sheet 7 of 11 |



SigStar 10F-2, No.1, Talyuan 2nd St., Zhubei City, Hsinch County 30288, Taiwan
Tel: +886-3-5601333

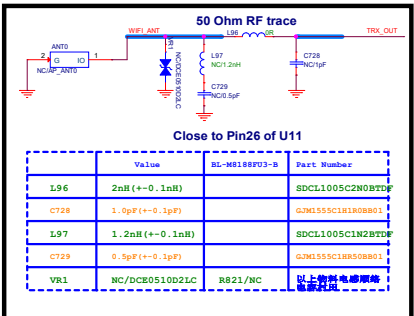
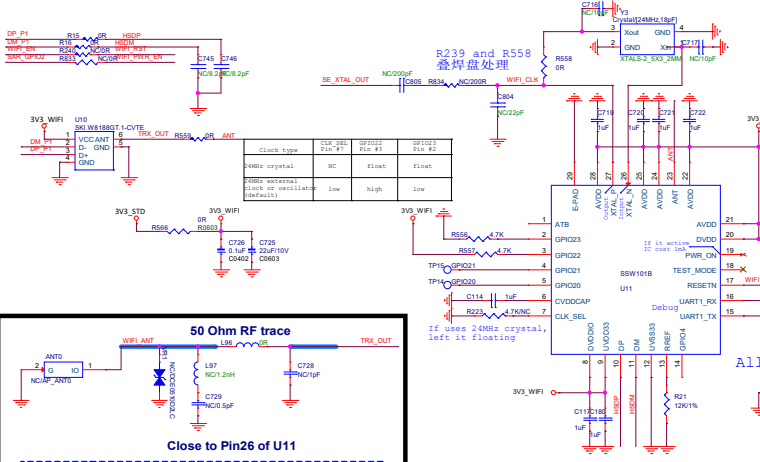
| | | |
|----------------------------------|-----------------------------|------------|
| Title | | |
| SSD201 Display Demo Board | | |
| Size | Document Number | Rev |
| A | Audio | r01 |
| Date: | Saturday, November 02, 2019 | |
| | Sheet | 8 of 11 |



If use External clock or Oscillator, must connect XTAL_P (Pin #27)

Note 1:XTAL CL
If CLK15pF,
C716&C717 can NC

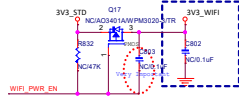
Note 2:XTAL SPEC
Xtal Size: 3225, 2520
Nominal Frequency: 24/40MHz
Frequency Tolerance: $\pm 20ppm$ at 25 ± 3
Frequency Stability(TC): $\pm 10ppm$ at $-25 \sim +85$
Load capacitance: 9-11pF
Equivalent Series Resistance(ESR): < 50
Shunt Capacitance (CO): ∞ 3pF



Close to Pin26 of U11

| Value | EL-M8188P03-B | Part Number |
|-------|-----------------|------------------------------|
| L96 | 2nH (+0.1nH) | SDCL1005C2N0BTD0F |
| C728 | 1.9pF (+-0.1pF) | G2ML555C18100B801 |
| L97 | 1.2nH (+0.1nH) | SDCL1005C1N2BTD0F |
| C729 | 0.5pF (+-0.1pF) | G2ML555C18050B801 |
| VR1 | NC/DC0510D2LC | R821/NC 以上物料电脑采购 请核对型号 |

All Caps close to IC pad.



- ON Board WIFI use WFI_RST Pin;
- WIFI Daughter Board use PMOS Control WIFI Power.

