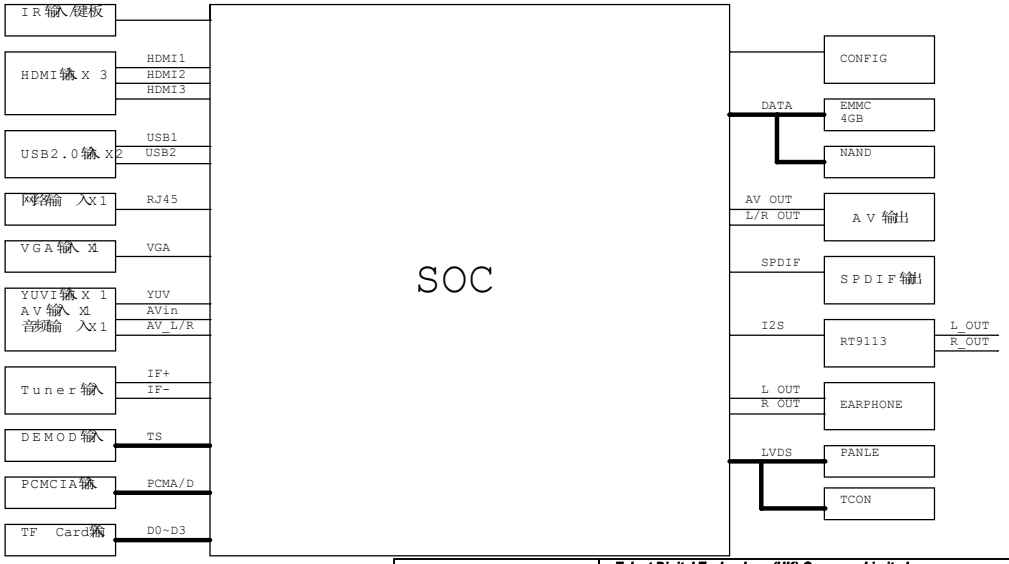
Ver	Date	Change-List
V1.0.0	2017/10/27	Initial
V1.0.1	2017/11/1	1. 更新 EMMC封装; 2. 精简电源滤波电容 。
V1.0.2	2017/11/7	1.L101/102/103 footprint改为SMD05×5 2.删掉C201/C204/C205; 3.更新IC型号 。
V1.0.3	2017/11/9	新的ballout更新IC, 其他: 1. Tuner座子更新封装和PCB; 2. +5V_Normal的OCD选用SY8113B 。
V1.0.4	2017/11/14	1. CA卡信号定义从TS1出 ; 2. 修改IC pad: E9/E8定义 。
V1.0.5	2017/11/24	1. 修改IC pad: R10, L13, 删除 ; 2. +3.3V_EMMC输入电容(C108 0.1uF) 。 3. 更新封装: (1)SOC: IC-400P-P08-17_5+20_2 ; (2)散热片 : 62x8 MM。
V1.0.6	2017/12/08	1.重新说明MSD6A358AT和MSD6A358AX的原理图差异。 2.WoW信号从GPIO_P24出, 对外串4.7K电阻 3.TF-Card SD_CDZ信号R41上拉电压更改为+3.3V_Scan。
V1.0.7	2018/1/19	1.修改电阻参数 : R103-100K, R125-100K, R231-0R。 2.电容件 : C112/C133不NC。 3.修改电容参数 : C306/C120/C318-22uF, C315-2.2uF 。 4.晶振封装修改 : 改为 从XTALO出, C220-100pF, R738-0R 。
V1.0.8	2018/07/01	1,VDDC power SY8113B(3A)更换为SY8120B1(8A) 2,增加EMMC/nand兼容的描述 , 如下: 注意: 如果只使用EMMC,其中的0R电阻以及0R两端的过孔删除, 直连即可 如果nand和EMMC同时必须要有0R, 防止短断



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Title: REV		
Size: Custom	Schematic Name: TH358C1	Rev: T1
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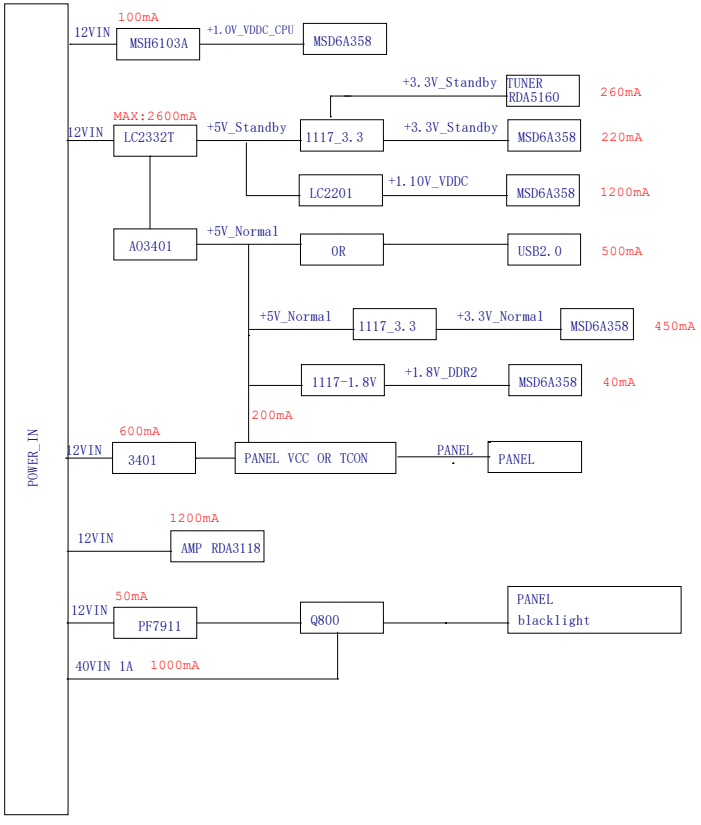
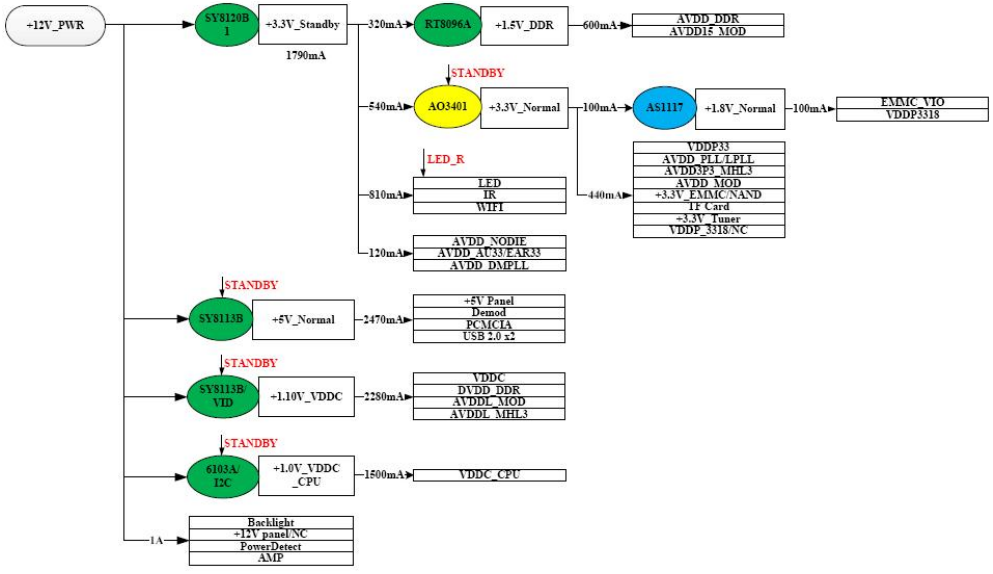
POWER BLOCK





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Title: POWER NET

Size	Schematic Name	Rev
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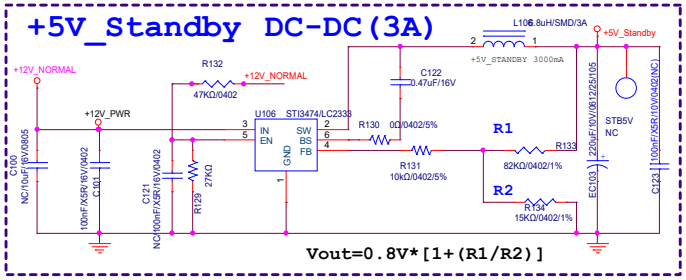
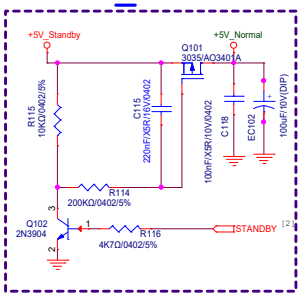
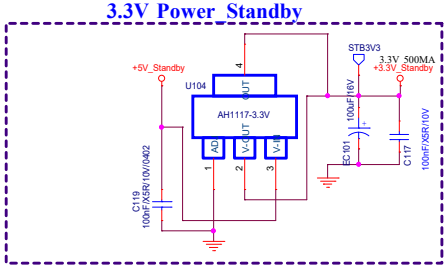
+5V_Standby DC-DC(3A)



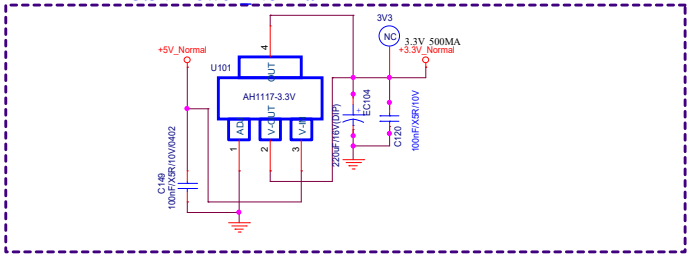
+5V_Normal



3.3V Power_Standby

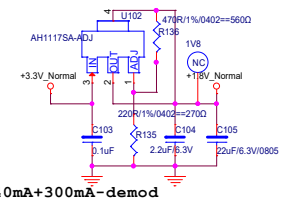


3.3V Power_Normal



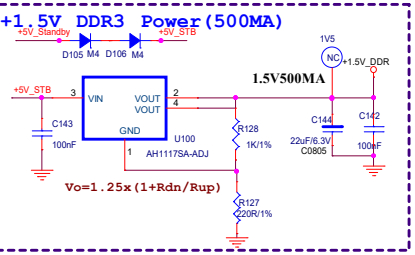
+1.835V_Normal

Vo=1.25x(1+Rdn/Rup)

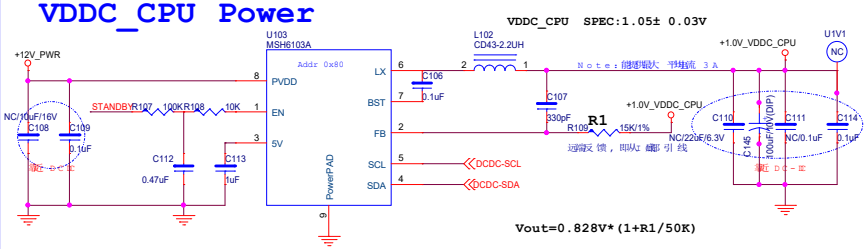


40mA+300mA-demod

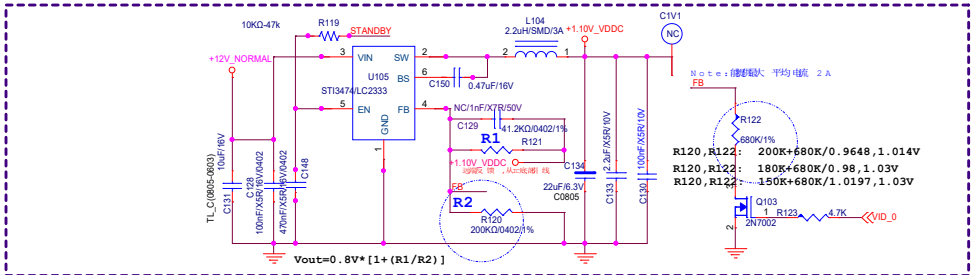
+1.5V DDR3 Power(500MA)



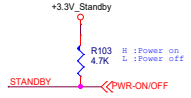
VDDC_CPU Power



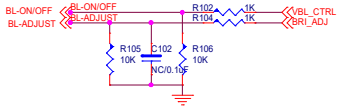
VDDC Power(2A)



Power-Control



BL-Control



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	Title: System power	
	Size: C	Schematic Name: TH358C1
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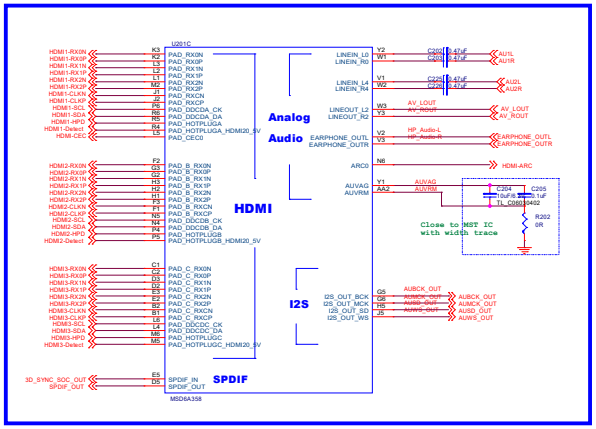
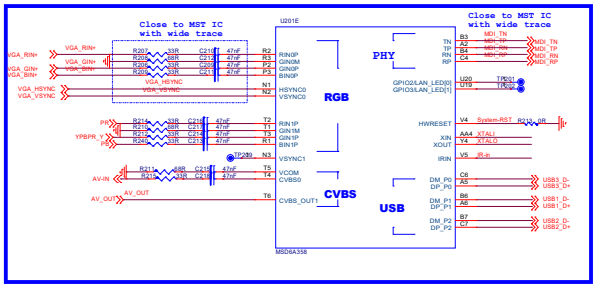
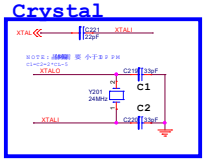
HDMI/Audio Block



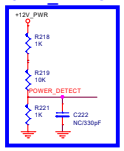
RGB/CVBS/PHY/USB Block



Crystal

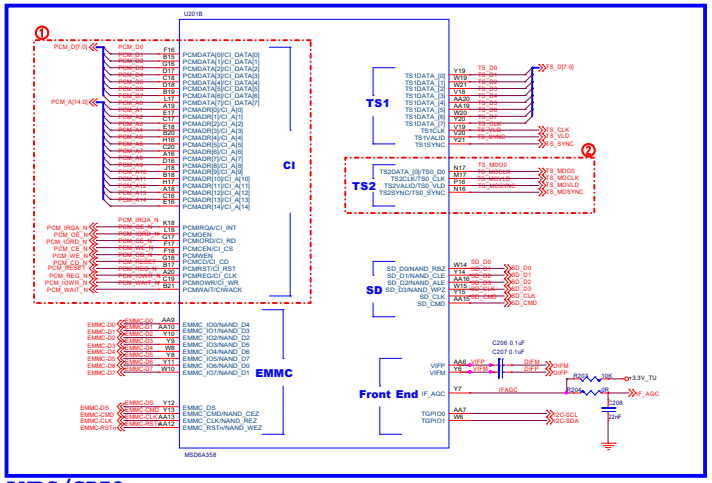


POWER_DETECT

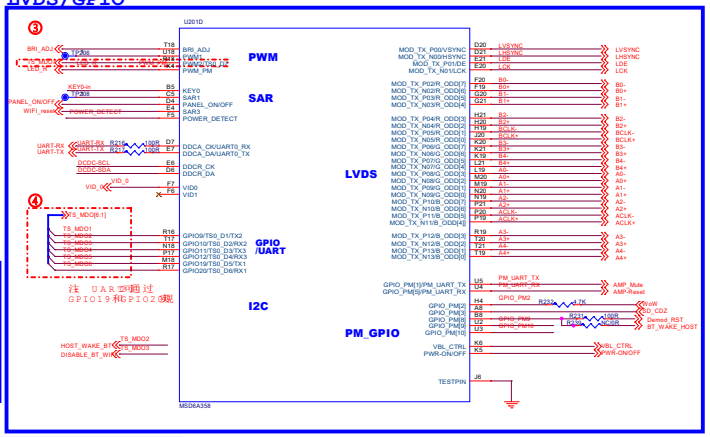


Heat Sink

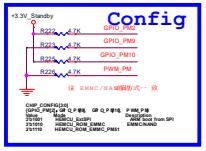
PCMCIA/EMMC/TS/SD/FE



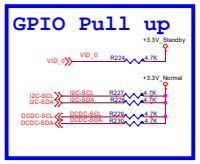
LVDS/GPIO



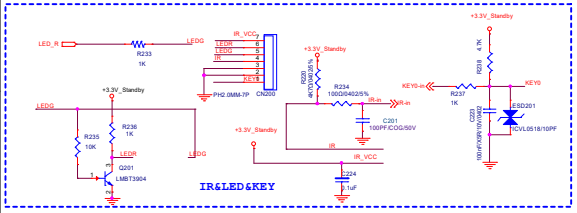
Config



GPIO Pull up



版 次	MSD6A358AX	MSD6A358AY
①	I²C 功能, 保留此电阻	I²C 功能, 不能
②	I²C 功能, 保留此电阻	I²C 功能, 可
③	I²C 功能, 保留此电阻	I²C 功能, 可
④	I²C 功能, 保留此电阻	I²C 功能, 可



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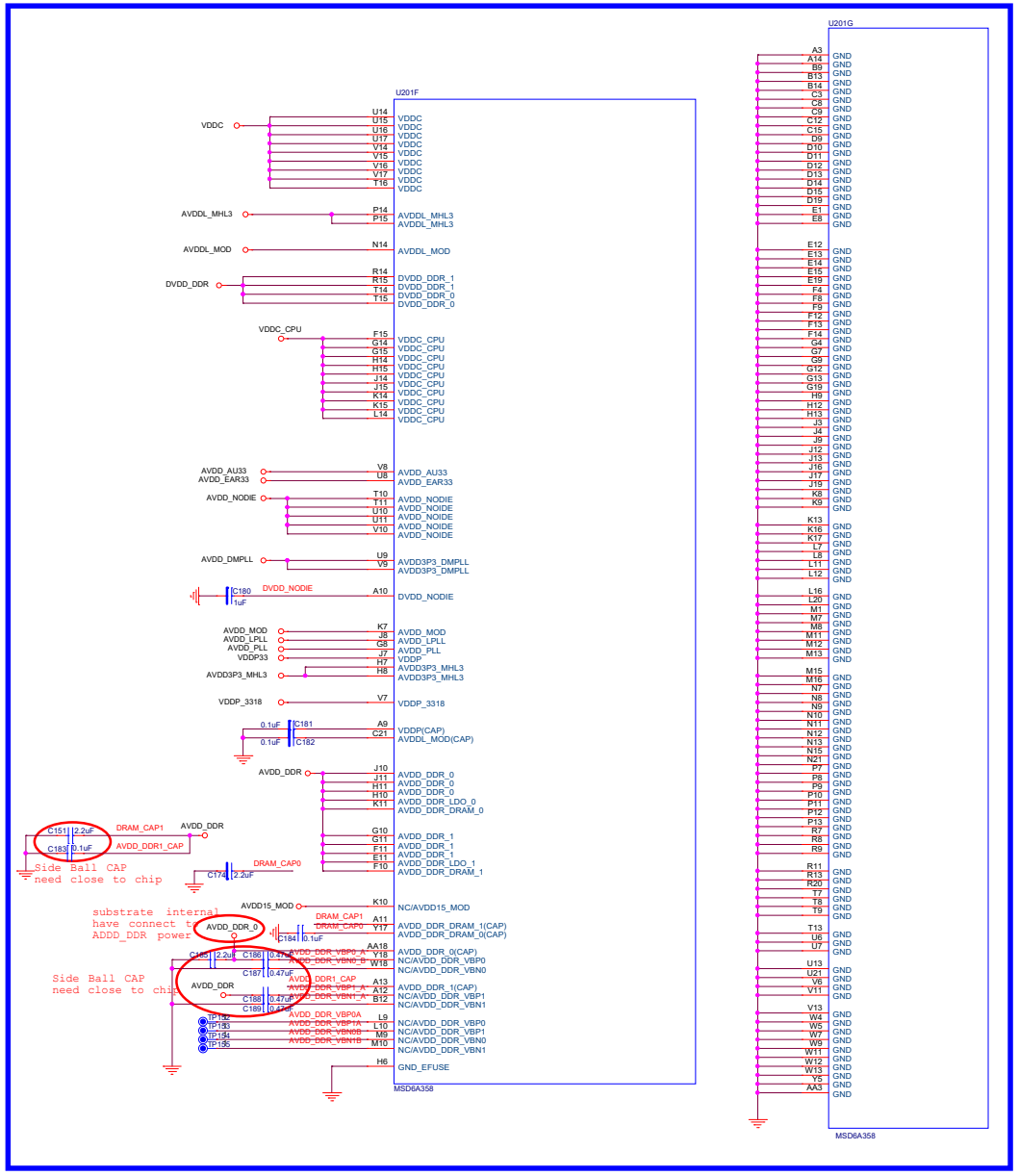
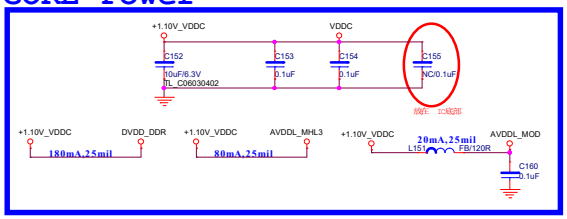
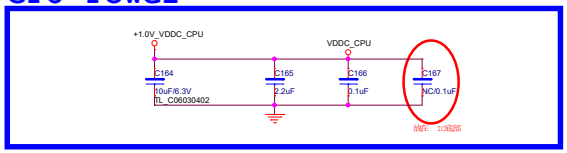
IC



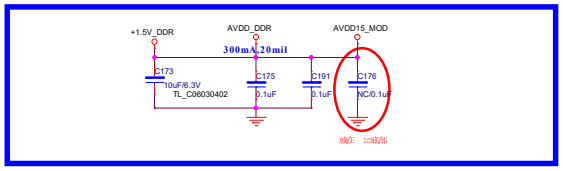
CORE Power



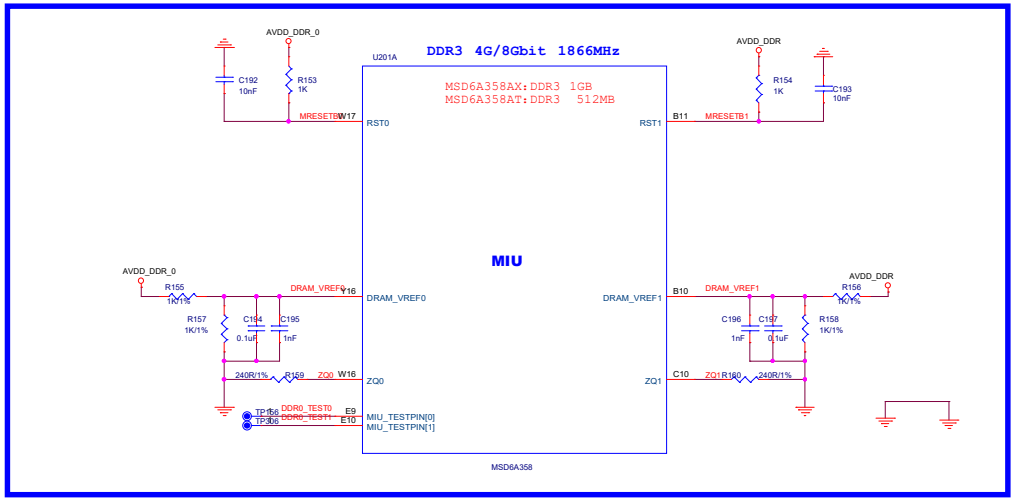
CPU Power



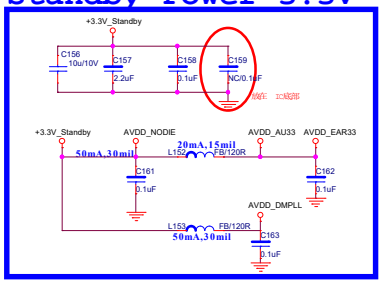
DDR3



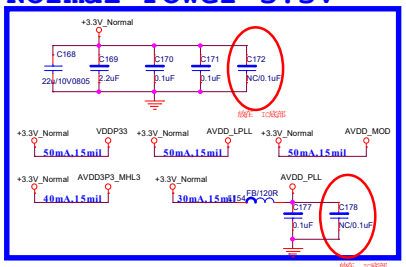
MIU



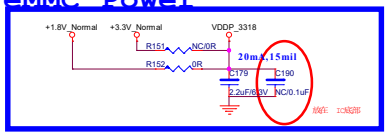
Standby Power 3.3V



Normal Power 3.3V



eMMC Power



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Title: MSD6A358 Power
Size: Custom | Schematic Name: TH358C1 | Rev: T1
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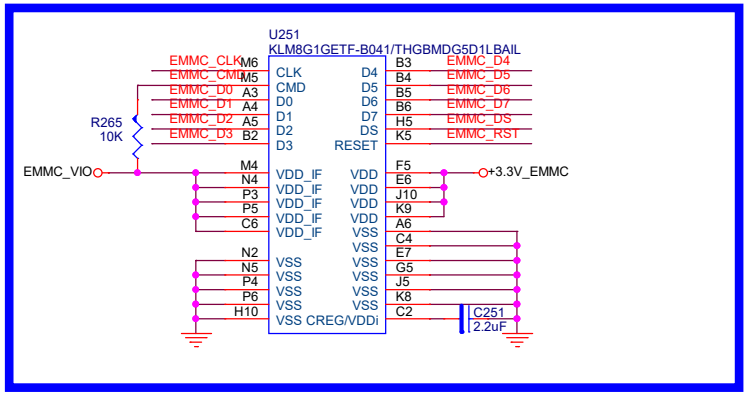
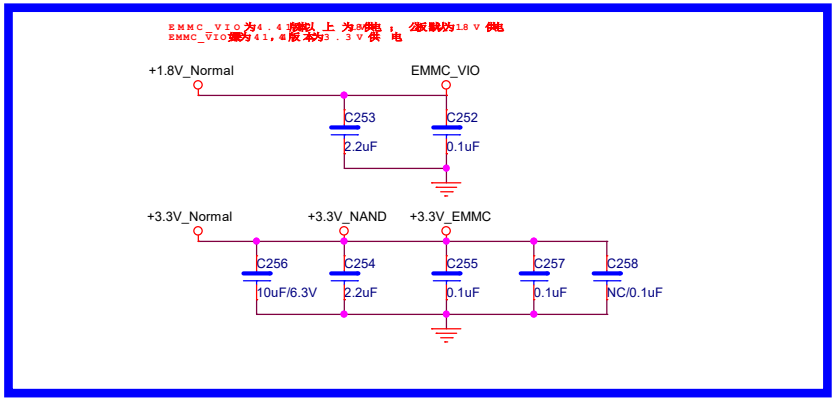
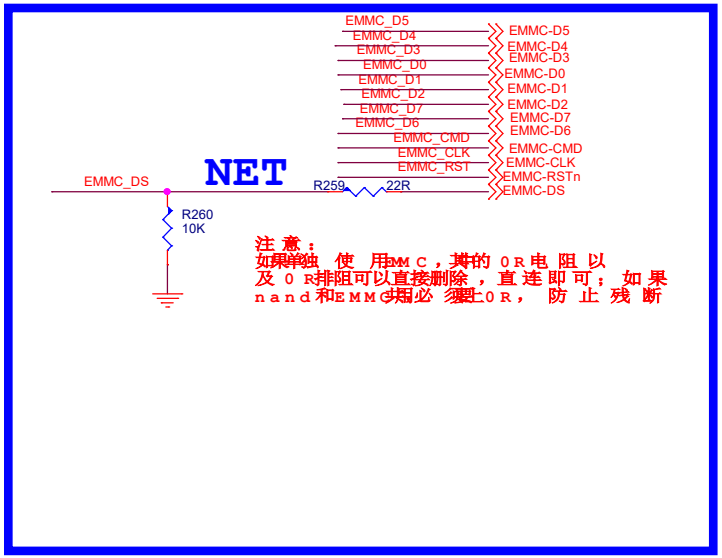
eMMC



eMMC/NAND POWER





注 意 ：
如果单独 使 用EMMC，其的 0R电 阻 以 及 0 R排阻可以直接删除 ， 直 连 即 可； 如 果 nand和EMMC共用必 须要0R， 防 止 残 断

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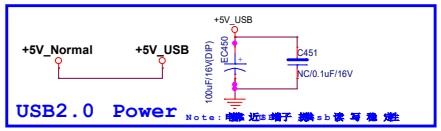
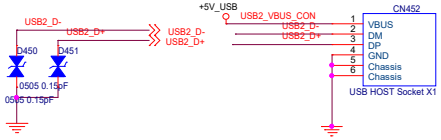
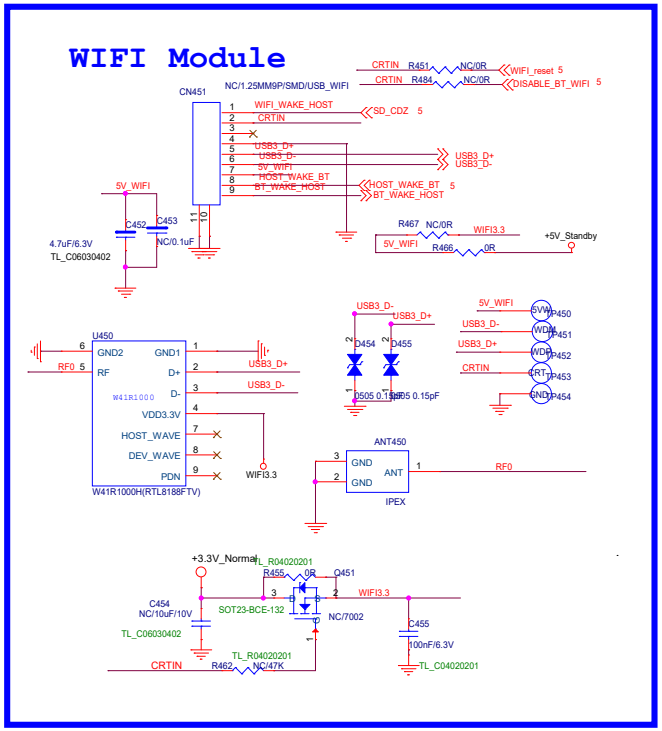
	Title: EMMC & NAND & SD	
	Size: B	Schematic Name: TH358C1 / Rev: T1
	Date: Wednesday, August 10, 2022	Sheet 5 of 15

USB Interface







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Title			
USB & Wifi			
Size	Schematic Name		Rev
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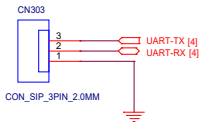
UART



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Title: HDMI RX		
Size: C	Schematic Name: TH358C1	Rev: T1
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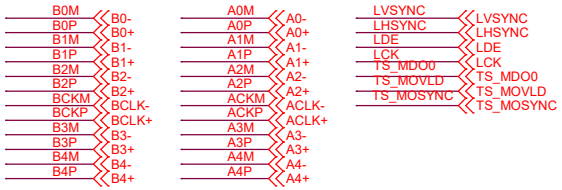
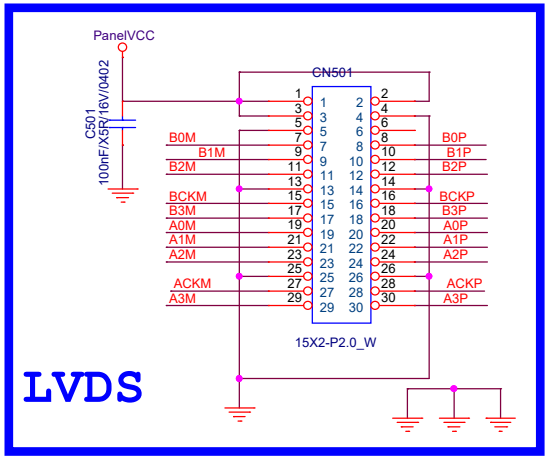
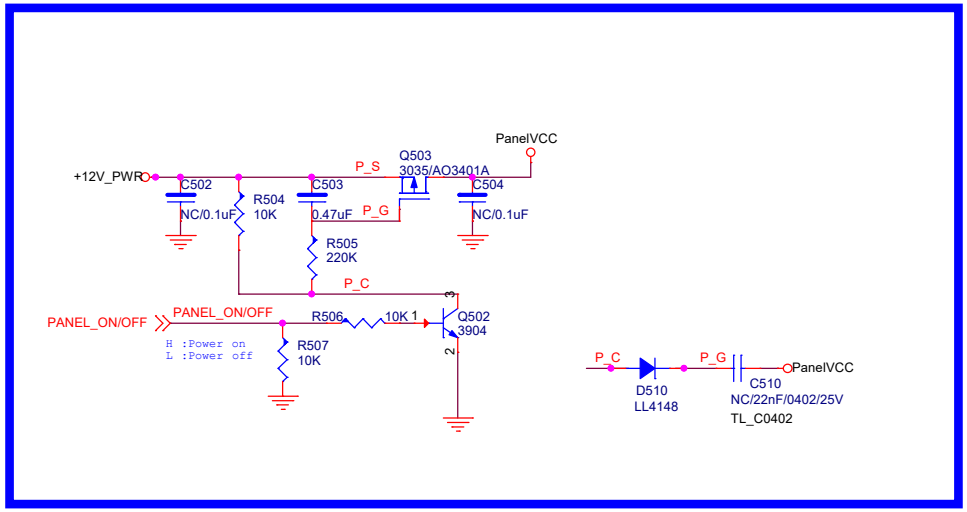
VB1 and LVDS Nets







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	Title: LVDS & TCON	
	Size: B — Schematic Name: TH358C1	Rev: T1
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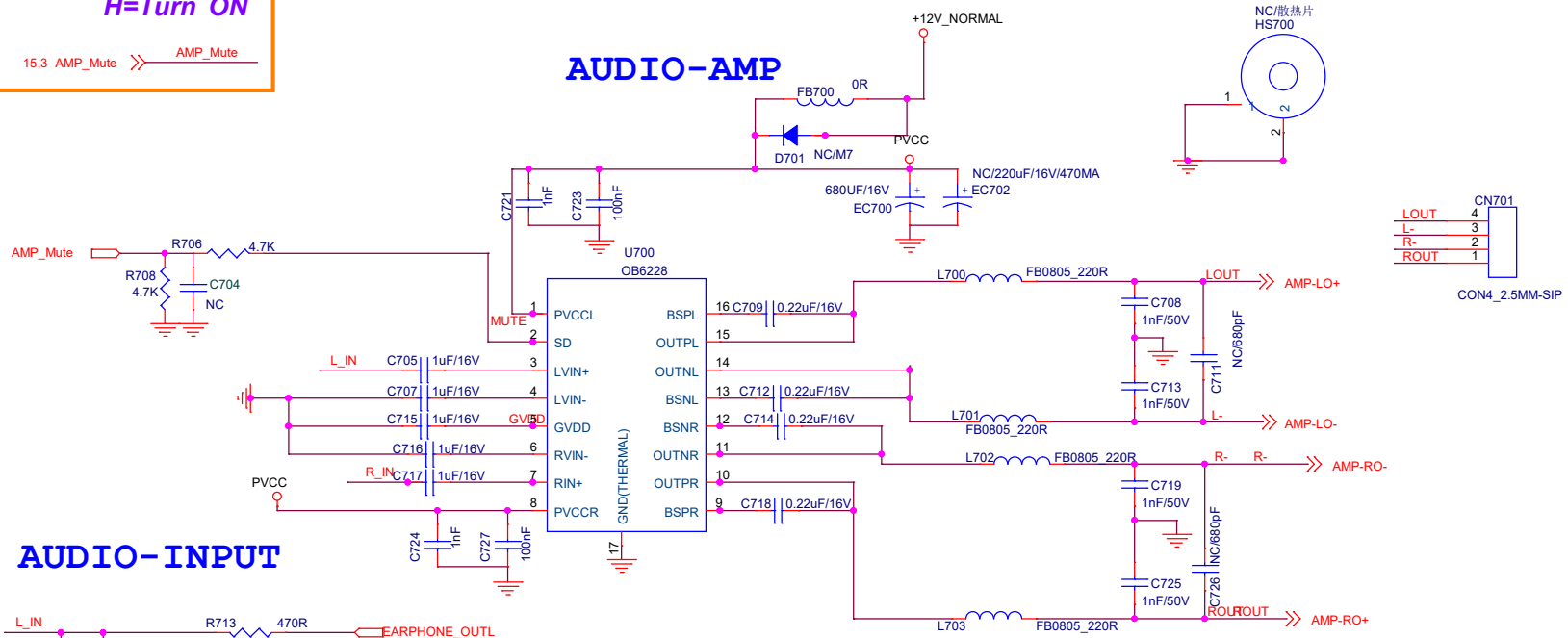
From Main Chip

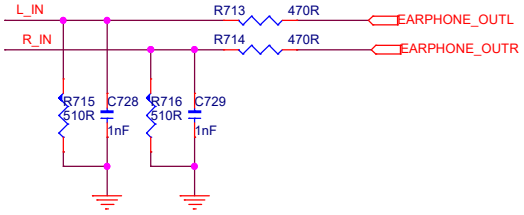
L=Mute
H=Turn ON

15,3 AMP_Mute >> AMP_Mute

AUDIO-AMP



AUDIO-INPUT



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Title: Amplify	
Size: B	Schematic Name: TH358C1 — Rev: T1
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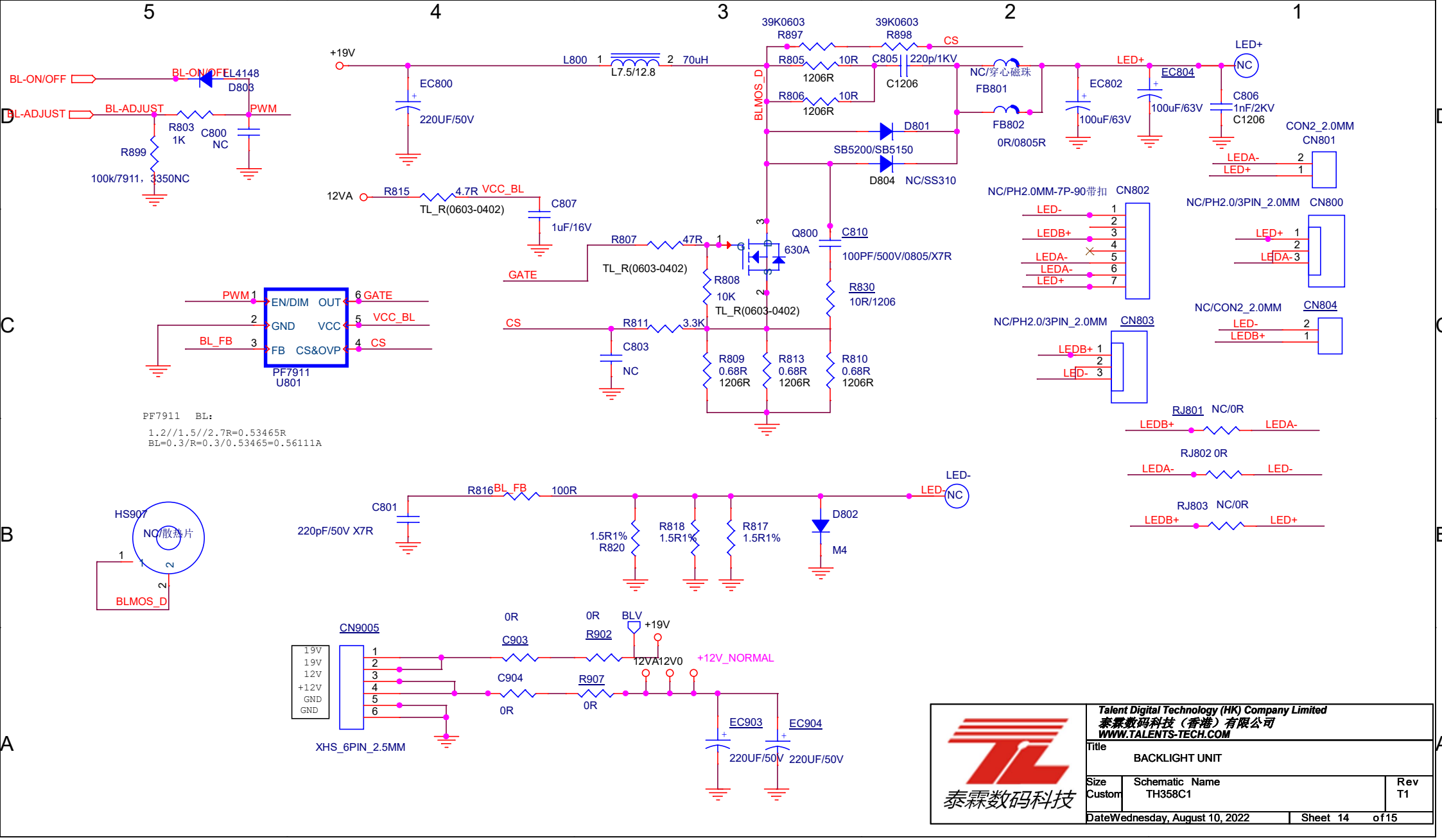
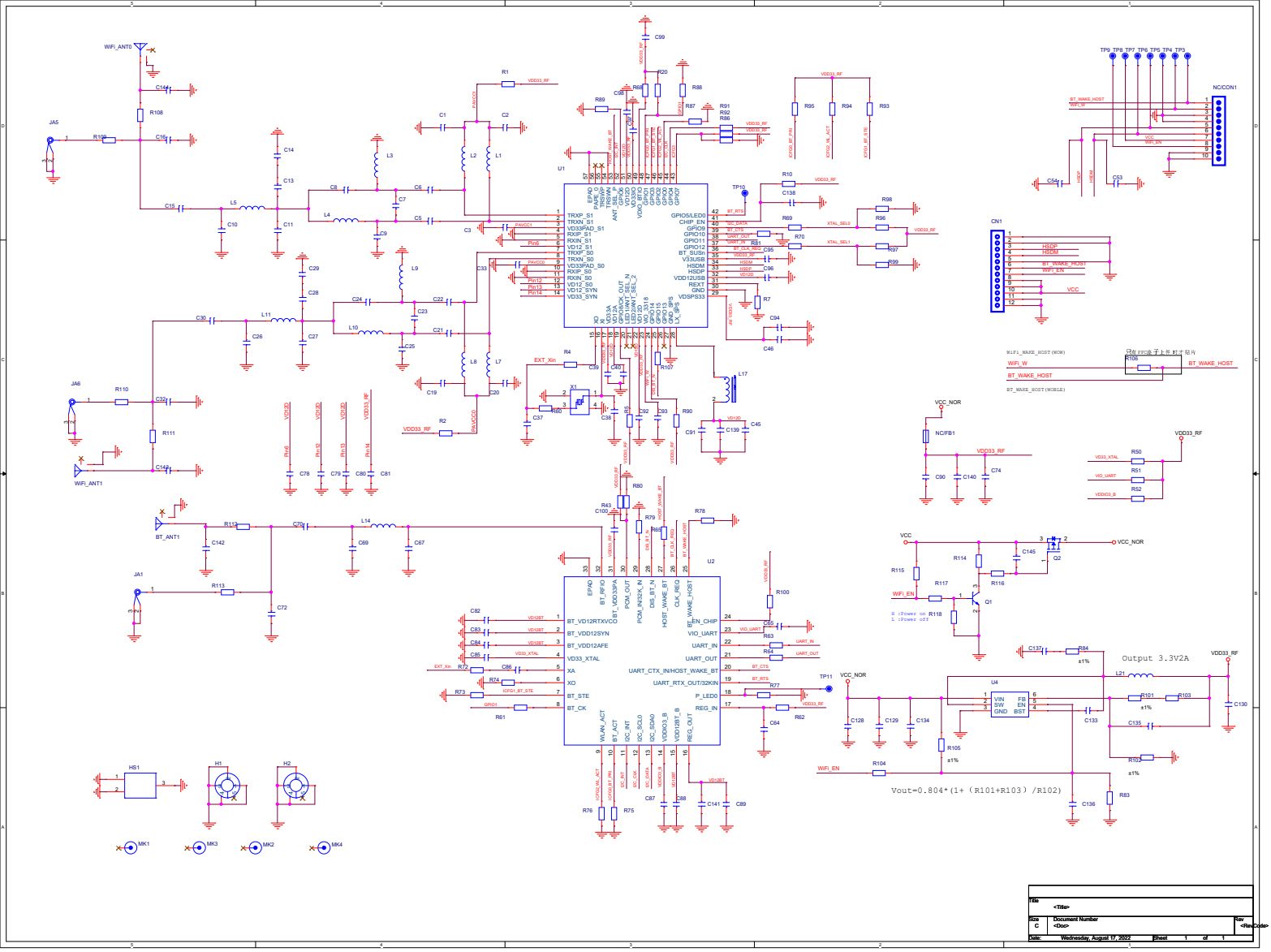

BL-ON/OFF
BL-ON/OFF
EL4148
D803
BL-ADJUST
BL-ADJUST
PWM
R803
1K
C800
NC
R899
100k/7911，3350NC
+19V
EC800
220UF/50V
L800
L7.5/12.8
70uH
39K0603
R897
39K0603
R898
CS
R805
10R
1206R
C805
220p/1KV
C1206
R806
10R
1206R
BLMOS_D
NC/穿心磁珠
FB801
FB802
0R/0805R
D801
SB5200/SB5150
D804
NC/SS310
EC802
100uF/63V
LED+
EC804
100uF/63V
LED+
NC
C806
1nF/2KV
C1206
CON2_2.0MM
CN801
LEDA-
LED+
12VA
R815
4.7R
VCC_BL
TL_R(0603-0402)
C807
1uF/16V
R807
47R
TL_R(0603-0402)
GATE
Q800
630A
C810
100PF/500V/0805/X7R
R808
10K
TL_R(0603-0402)
R830
10R/1206
CS
R811
3.3K
C803
NC
R809
0.68R
1206R
R813
0.68R
1206R
R810
0.68R
1206R
PWM
EN/DIM
OUT
GATE
GND
VCC
VCC_BL
BL_FB
FB
CS&OVP
CS
PF7911
U801
NC/PH2.0MM-7P-90带扣
CN802
LED-
LEDB+
LEDA-
LEDA-
LED+
NC/PH2.0/3PIN_2.0MM
CN800
LED+
LEDA-
NC/PH2.0/3PIN_2.0MM
CN803
LEDB+
LED-
NC/CON2_2.0MM
CN804
LED-
LEDB+
RJ801
NC/0R
LEDB+
LEDA-
RJ802 0R
LEDA-
LED-
RJ803
NC/0R
LEDB+
LED+
PF7911 BL:
1.2//1.5//2.7R=0.53465R
BL=0.3/R=0.3/0.53465=0.56111A
HS907
NC/散热片
BLMOS_D
C801
220pF/50V X7R
R816
BL_FB
100R
LED-
NC
1.5R1%
R820
R818
1.5R1%
R817
1.5R1%
D802
M4
CN9005
19V
19V
12V
+12V
GND
GND
XHS_6PIN_2.5MM
0R
C903
0R
R902
BLV
+19V
12VA12V0
+12V_NORMAL
C904
0R
R907
0R
EC903
220UF/50V
EC904
220UF/50V
Talent Digital Technology (HK) Company Limited
泰霖数码科技（香港）有限公司
WWW.TALENTS-TECH.COM
泰霖数码科技
Title
BACKLIGHT UNIT
Size
Custom
Schematic Name
TH358C1
Rev
T1
Date Wednesday, August 10, 2022
Sheet 14 of 15


WIFI_ANT0
WIFI_ANT1
BT_ANT1
U1
U2
U4
CN1
NC/CON1
TP9 TP8 TP7 TP6 TP5 TP4 TP3
TP10
TP11
VCC_NOR
VDD33_RF
Output 3.3V2A
Vout=0.804*(1+ (R101+R103) /R102)
H :Power on
L :Power off
BT_WAKE_HOST
WIFI_W
WIFI_EN
HSDP
HSDM
VCC
XTAL_SEL0
XTAL_SEL1
EXT_Xin
BT_RTS
BT_CTS
UART_OUT
UART_IN
VIO_UART
VDD33_XTAL
VDDIO3_B
BT_VDD12RTXVCO
BT_VDD12SYN
BT_VDD12AFE
BT_VDD33PA
BT_VDD33_XTAL
BT_XA
BT_XO
BT_STE
BT_CK
BT_INFO
BT_EN_CHIP
VIO_UART
UART_IN
UART_OUT
UART_CTX_IN/HOST_WAKE_BT
UART_RTX_OUT/32KIN
P_LED0
REG_IN
HOST_WAKE_BT
BT_WAKE_HOST
CLK_REQ
WLAN_ACT
BT_ACT
I2C_ANT
I2C_SCLO
I2C_SDAO
VDDIO3_B
VDD12BT_B
REG_OUT
GPIOS_LED0
CHIP_EN
GPIO9
GPIO10
GPIO11
GPIO12
BT_SUSn
V3AUSB
HSDM
HSDP
VDD12USB
REXT
GND
VDSPS33
TRXP_S1
TRXN_S1
VD33PAD_S1
RXIP_S1
RXIN_S1
VD12_S1
TRXP_S0
TRXN_S0
VD33PAD_S0
RXIP_S0
RXIN_S0
VD12_S0
VD12_SYN
VD33_SYN
Title
<Title>
Size C
Document Number
<Doc>
Rev
<RevCode>
Date: Wednesday, August 17, 2022
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