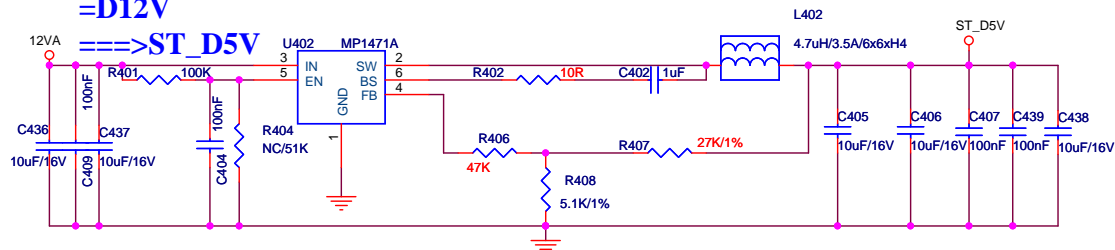
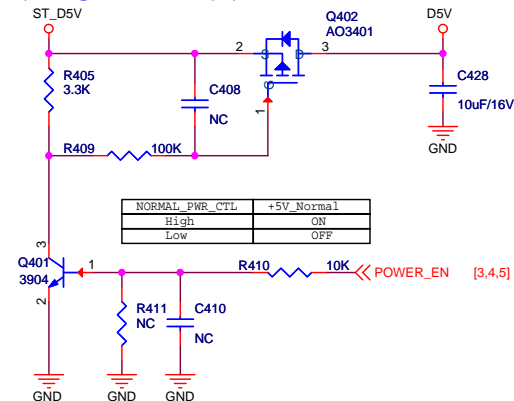


DC Source =D12V

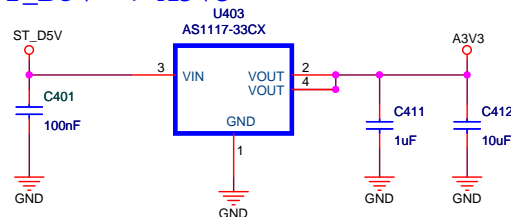
$$0.8 * (1 + 27/5.1) = 5.03V$$



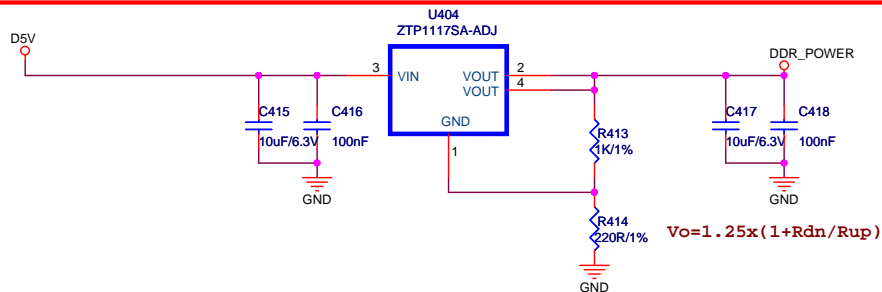
ST_D5V CONTROL==>D5V



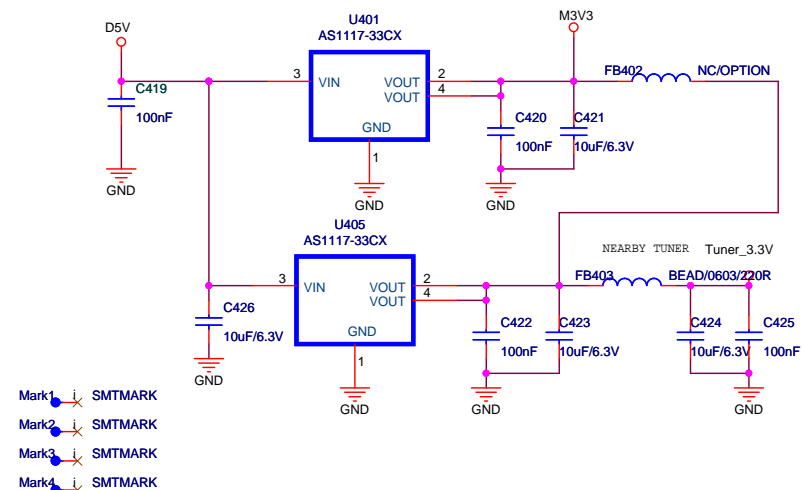
ST_D5V==> A3V3



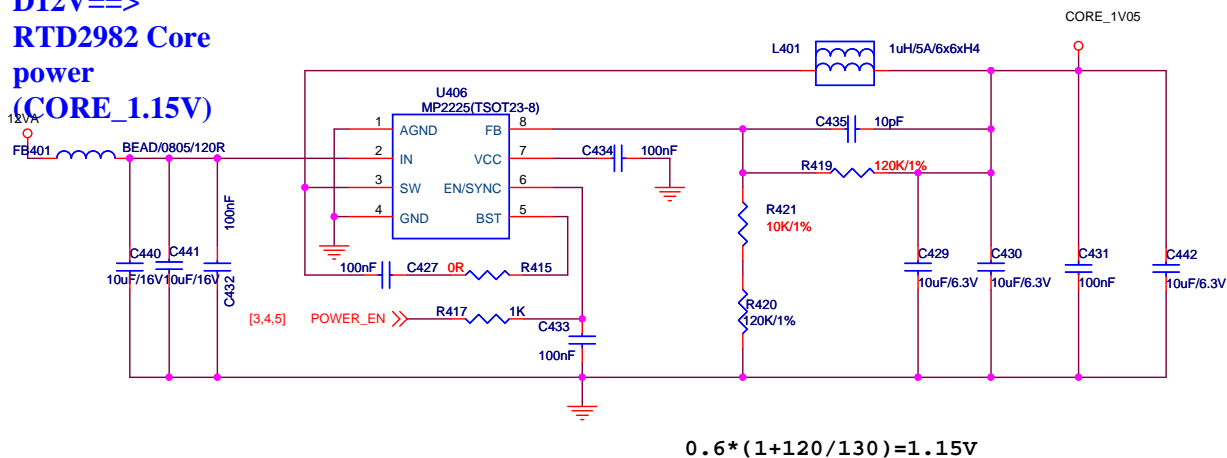
D5V==>DDR_1.5V

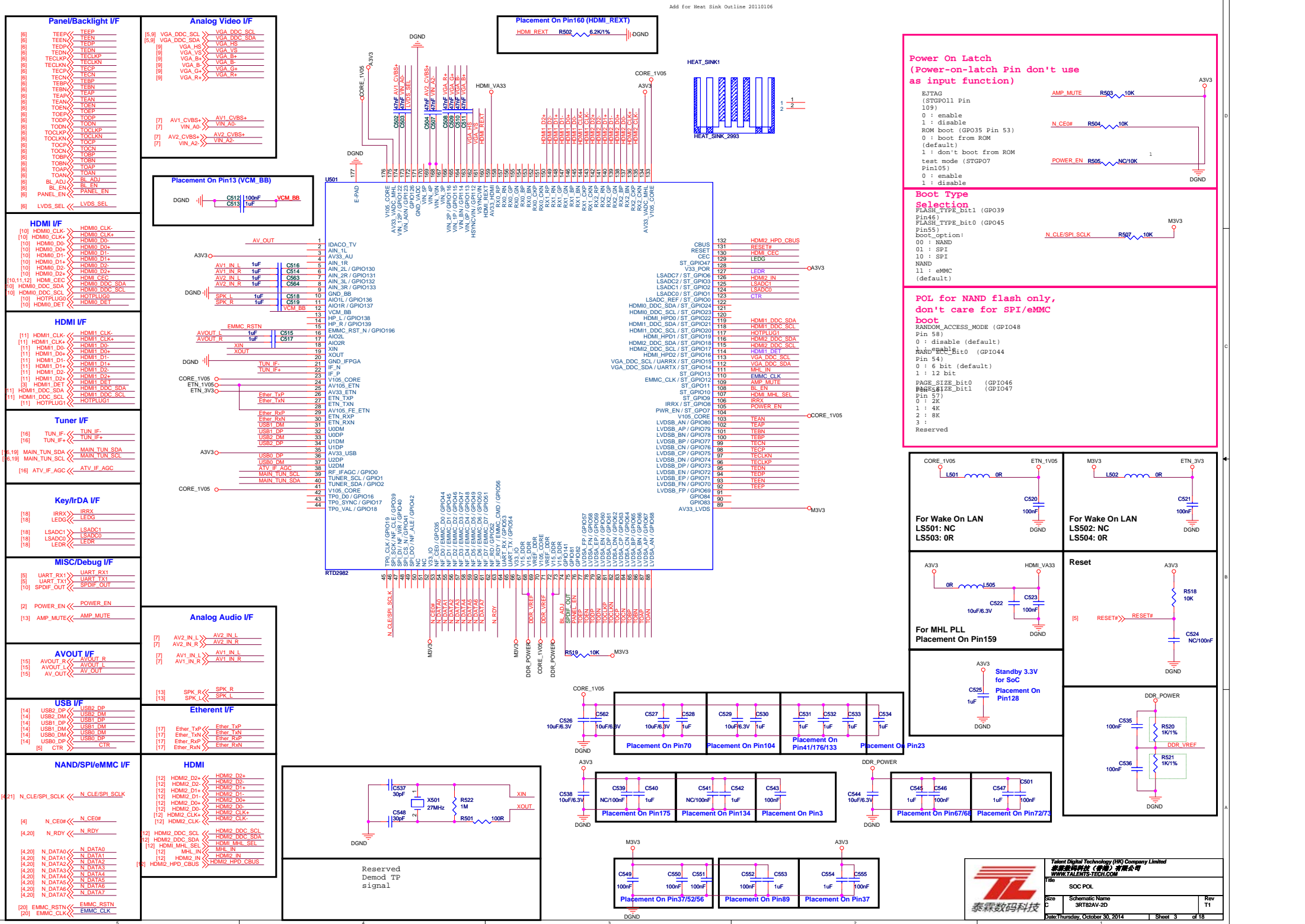


D5V==> TUNER 3V3

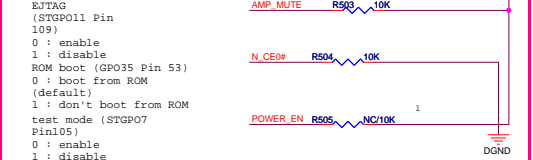


D12V==> RTD2982 Core power (CORE_1.15V)





Power On Latch
(Power-on-latch Pin don't use as input function)

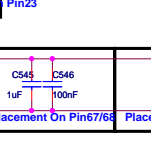
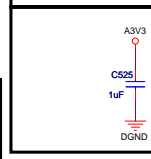
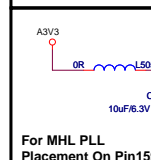
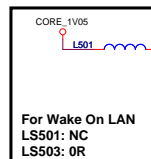


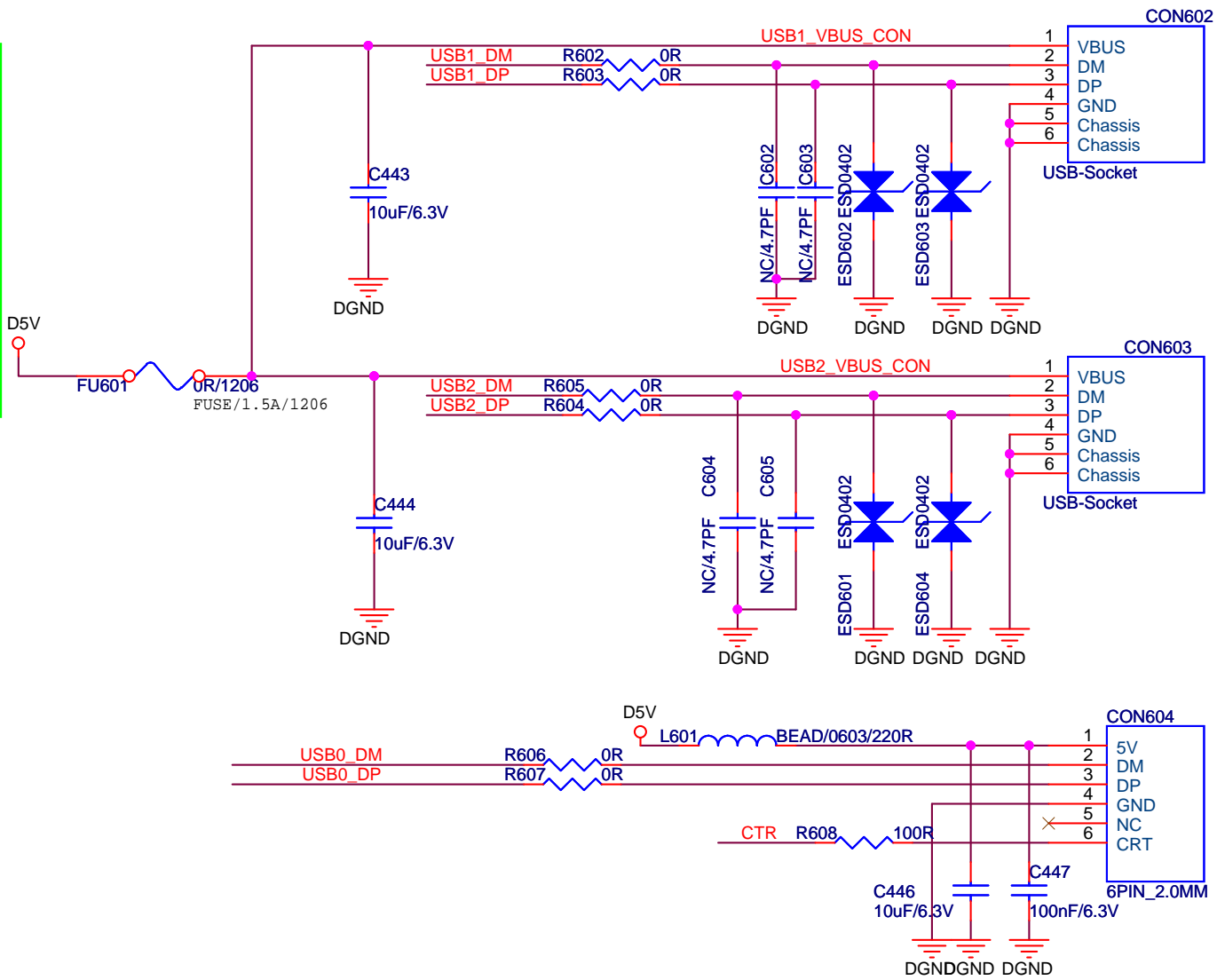
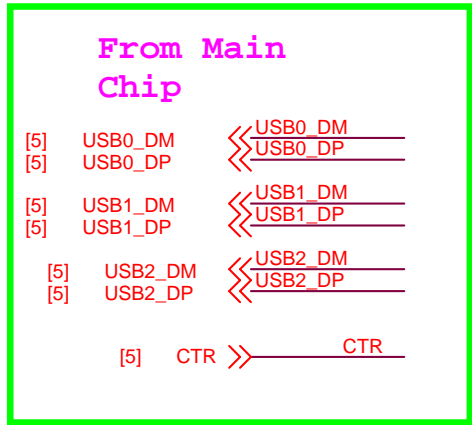
Boot Type Selection

FLASH_TYPE_bit1 (GP039 Pin46)
FLASH_TYPE_bit0 (GP045 Pin55)
boot_option:
00 : NAND
01 : SPI
10 : SPI
11 : eMMC
(default)

POL for NAND flash only, don't care for SPI/eMMC boot


RANDOM_ACCESS_MODE (GPIO48 Pin 58)
0 : disable (default)
1 : enable
RANDOM_BOOT_BIT0 (GPIO44 Pin 54)
0 : 6 bit (default)
1 : 12 bit
PAGE_SIZE_bit0 (GPIO46 Pin 57)
PAGE_SIZE_bit1 (GPIO47 Pin 58)
0 : 2K
1 : 4K
2 : 8K
3 : Reserved





USB trace :
diffenentail 90 R

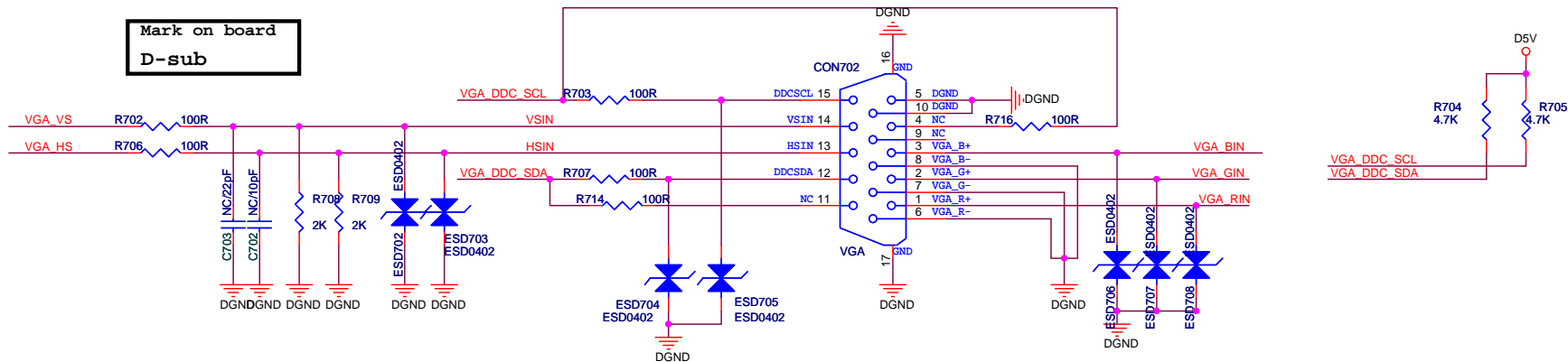
USB

 <p>Talent Digital Technology (HK) Company Limited 泰霖数码科技(香港)有限公司 WWW.TALENTS-TECH.COM</p>			Title		
			USB 2.0		
Size A	Schematic Name		Rev		
	3RT82AV-2D		T1		
Date: Thursday, October 30, 2014			Sheet 5		of 18

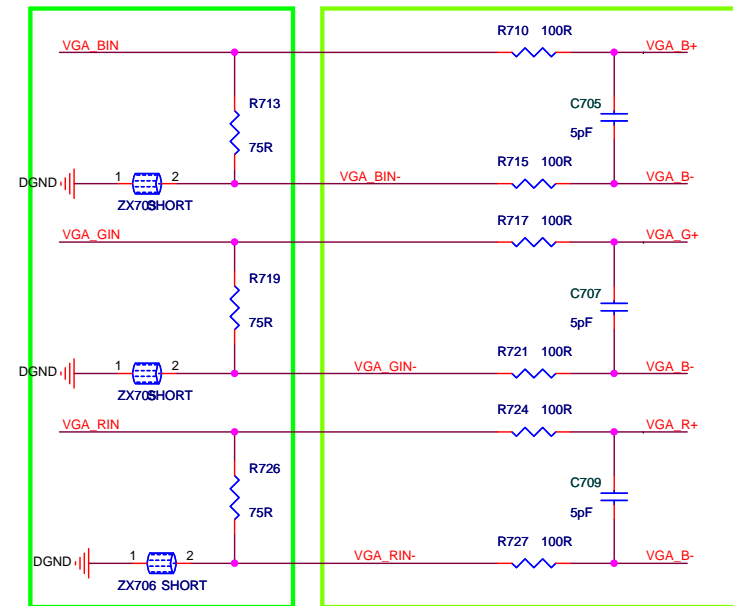
From Main
Chip

[7] VGA_B+ <-> VGA_B+
[7] VGA_B- <-> VGA_B-
[7] VGA_G+ <-> VGA_G+
[7] VGA_R+ <-> VGA_R+
[7] VGA_HS <-> VGA_HS
[7] VGA_VS <-> VGA_VS
[7] VGA_DDC_SCL <-> VGA_DDC_SCL
[7] VGA_DDC_SDA <-> VGA_DDC_SDA

Mark on board
D-sub



VGA Audio input share with AV



靠近芯片放置



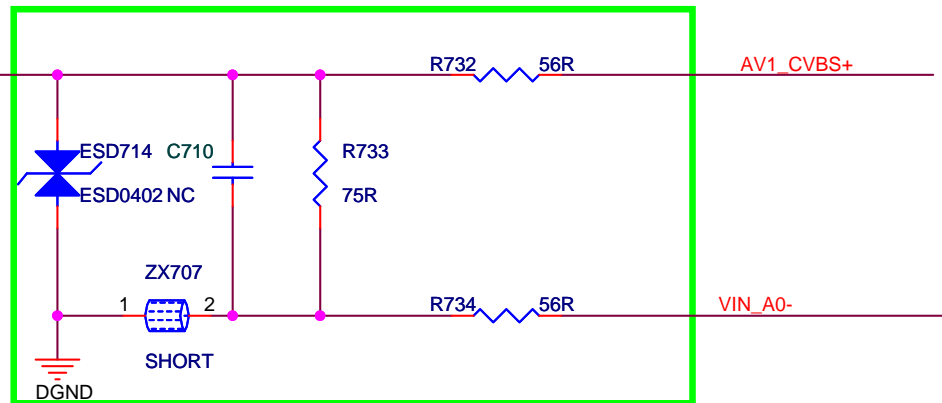
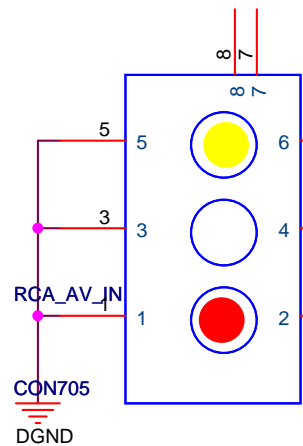
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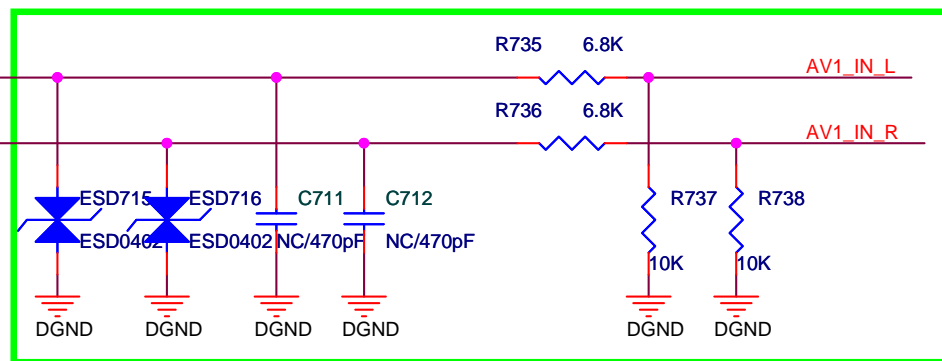
Title Video VGA Input		
Size 5	Schematic Name 3RT82AV-2D	Rev T1
Date: Thursday, October 30, 2014		
Sheet 6 of 18		

CVBS+Audio In

[7] AV1_CVBS+ <-- AV1_CVBS+
 [7] VIN_A0- <-- VIN_A0-
 [7] AV1_IN_L <-- AV1_IN_L
 [7] AV1_IN_R <-- AV1_IN_R



Close to
Connector



Close to
Connector



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Title
 Video/Audio AV1_Input

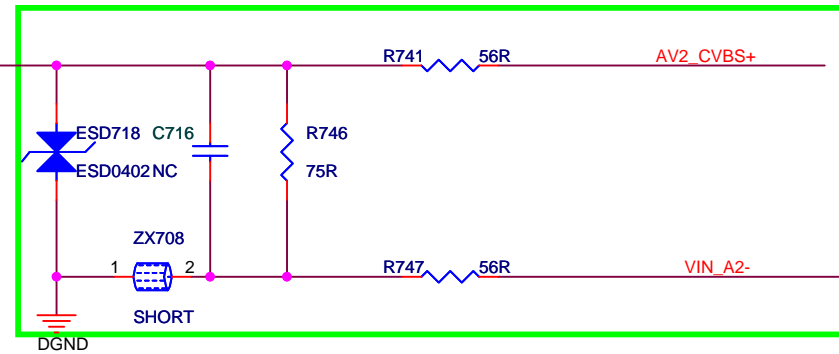
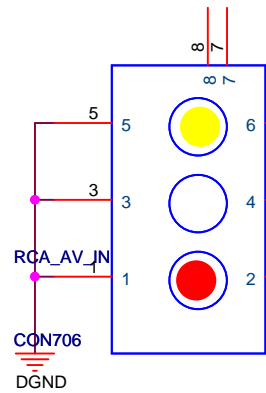
Size
 A Schematic Name
 3RT82AV-2D

Rev
 T1

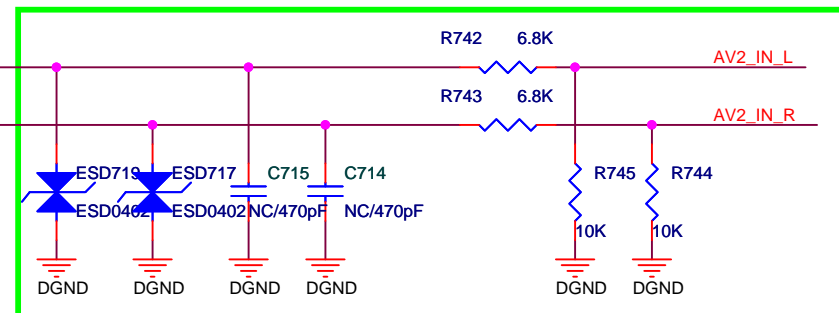
Date: Thursday, October 30, 2014

Sheet 7 of 18

CVBS+Audio In



Close to
Connector

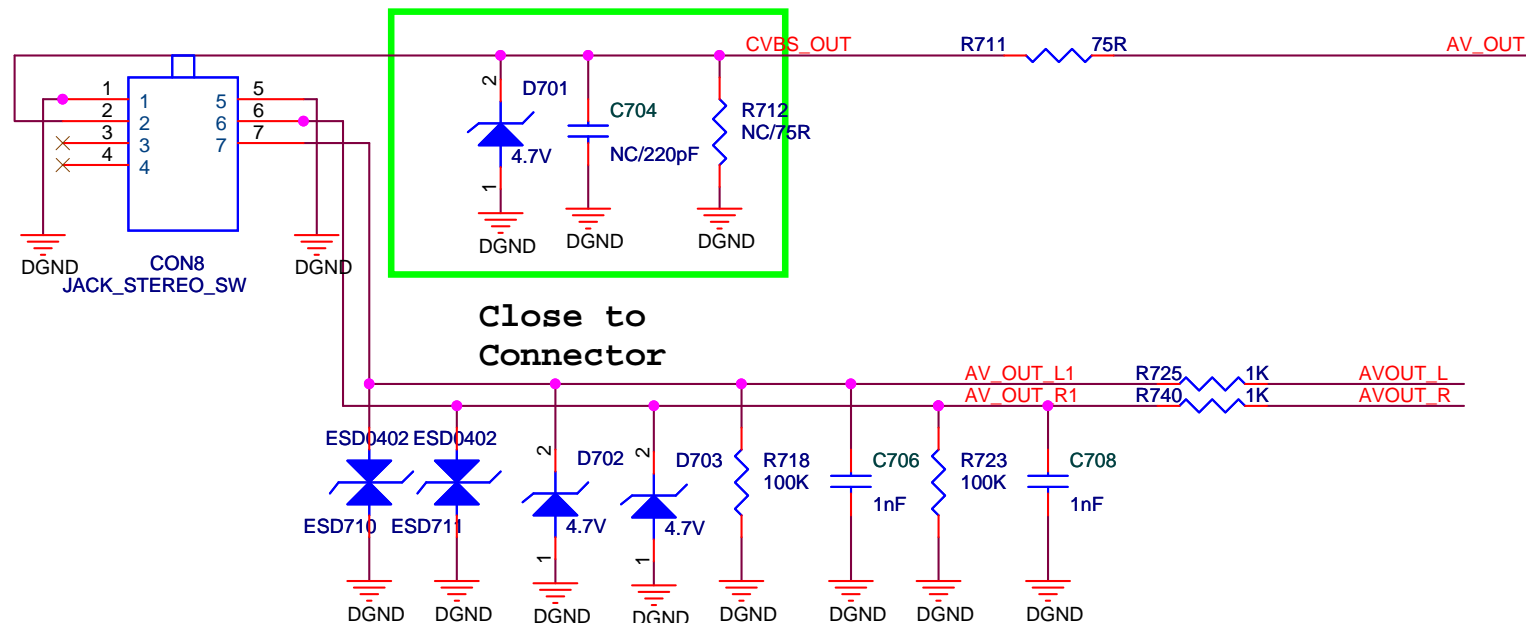


Close to
Connector

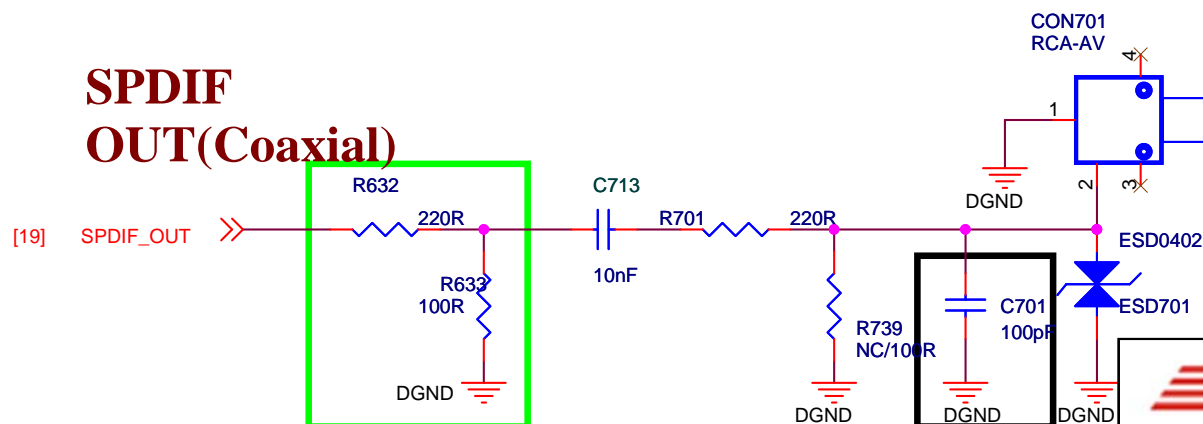


AV OUT

CVBS OUT +
Audio Out



SPDIF OUT(Coaxial)



AVOUT I/F



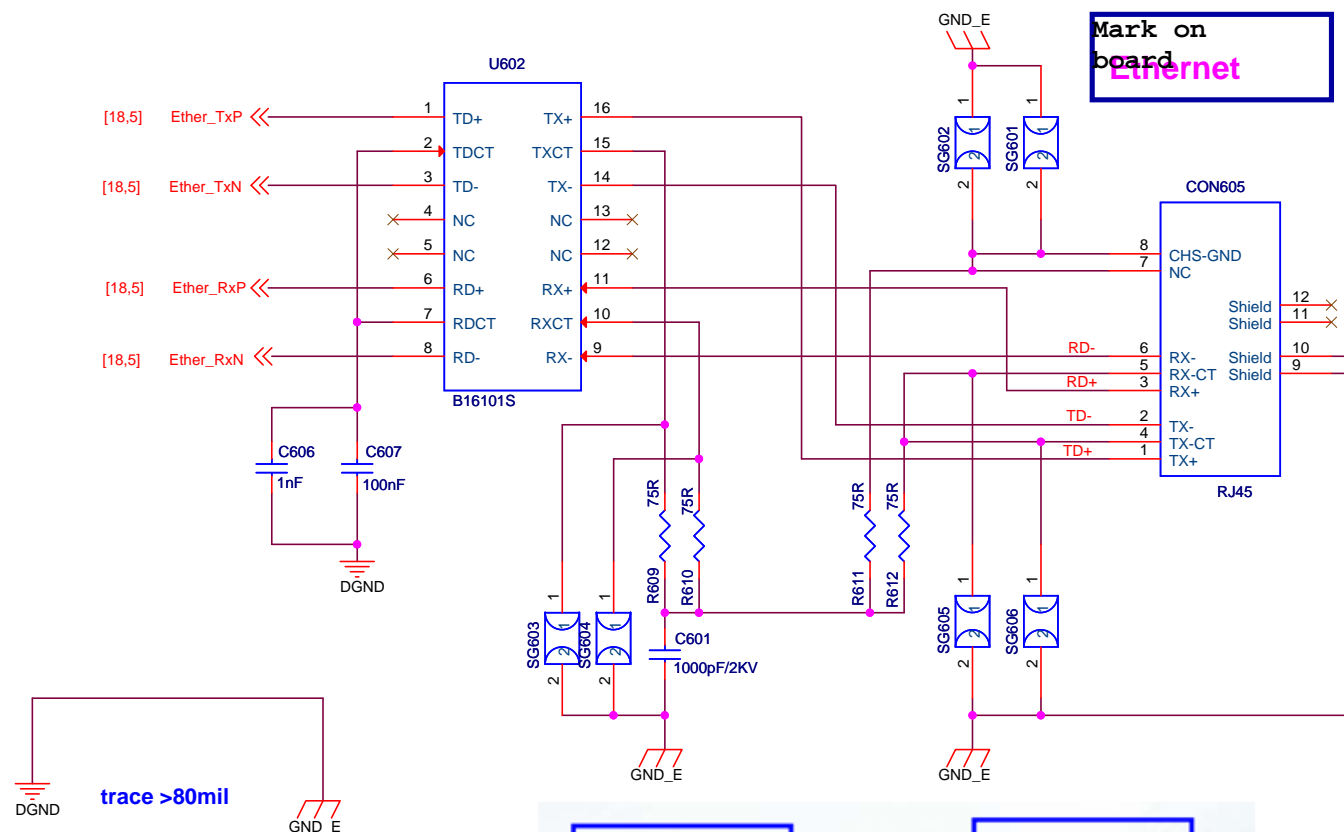
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Title Video/Audio Output		
Size A	Schematic Name 3RT82AV-2D	Rev T1
Date: Thursday, October 30, 2014		Sheet 8 of 18

<-->

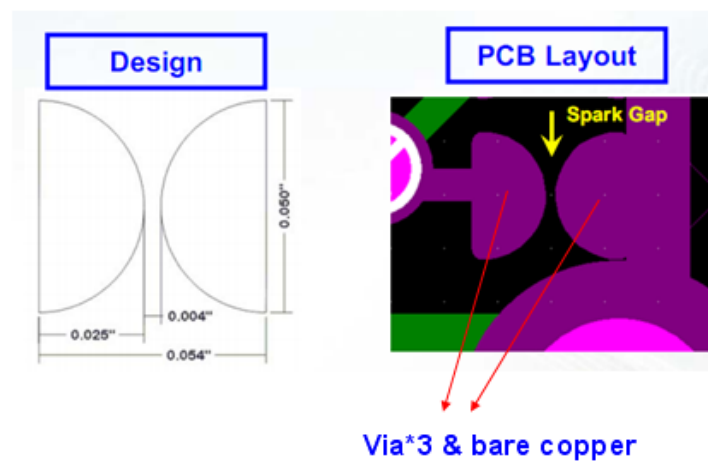
[18,5] Ether_TxN
[18,5] Ether_TxP

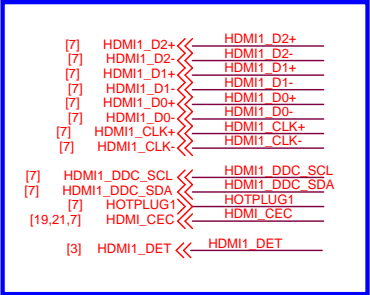
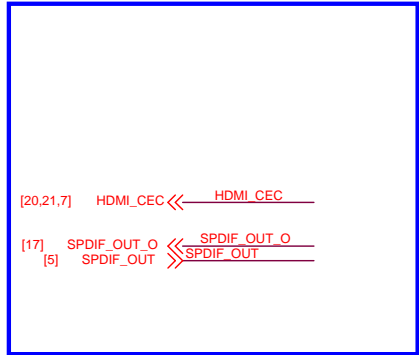
[18,5] Ether_RxN
[18,5] Ether_RxP



```
trace : diffentail
100 R
```

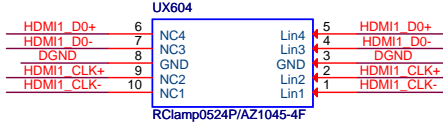
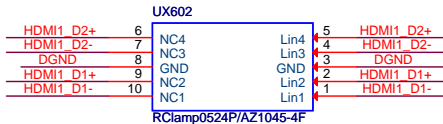
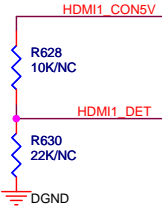
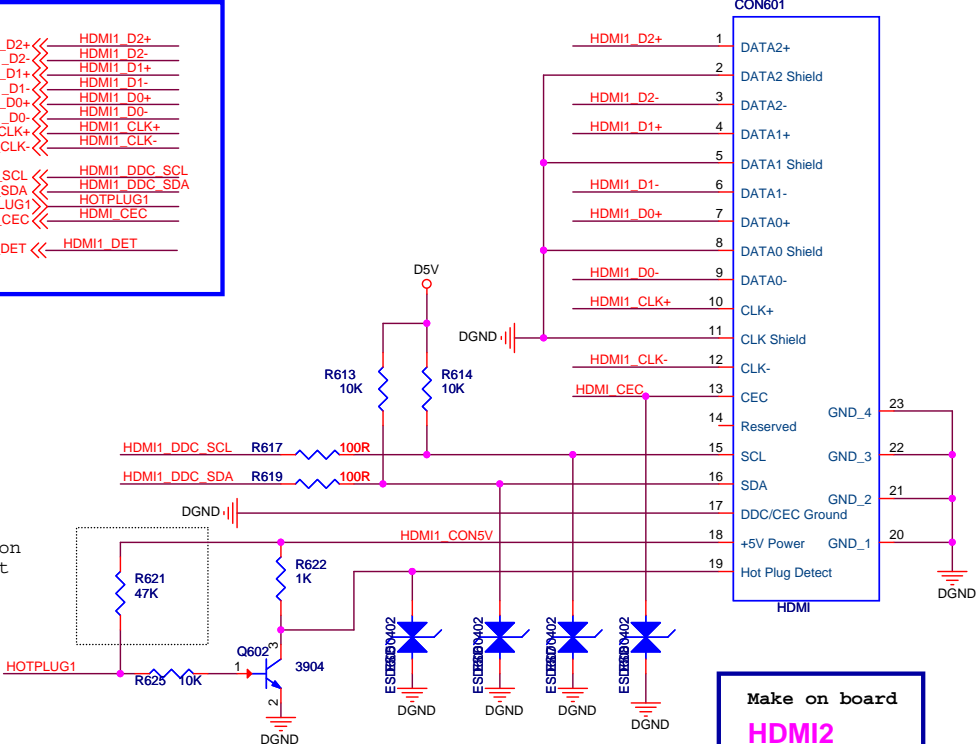
Layout Note:
Divide System Ground and Chassis Ground.
Reserve capacitor for ESD test.

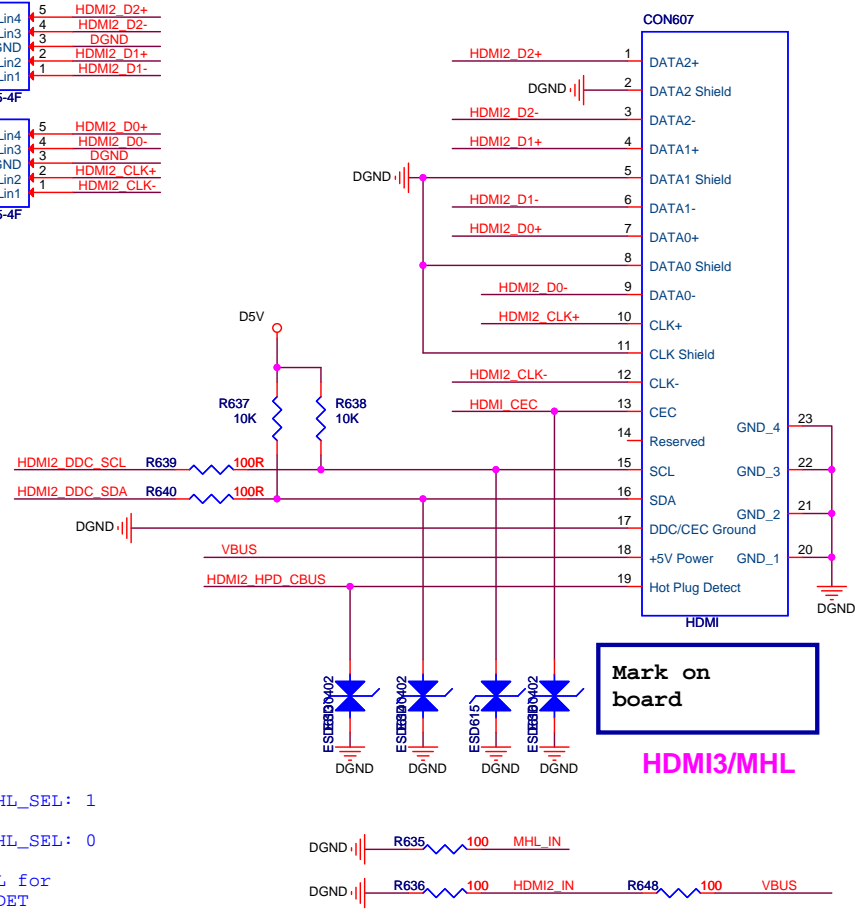
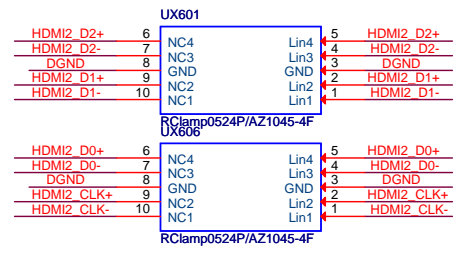
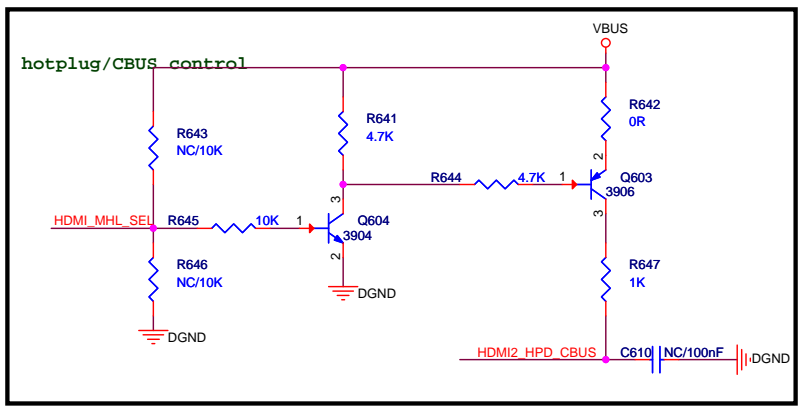
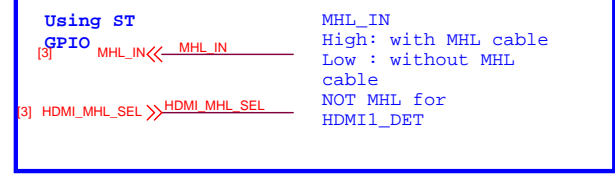
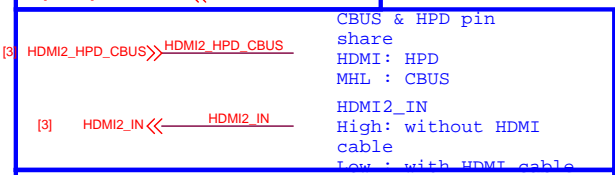
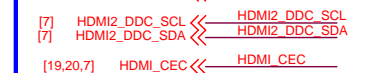
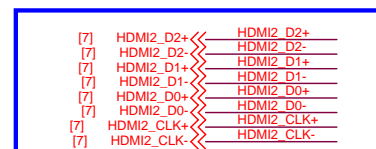




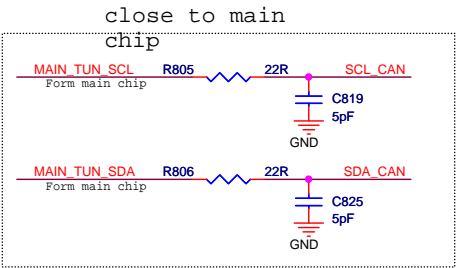
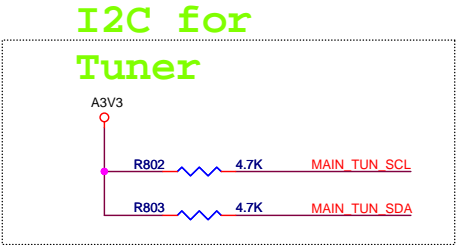
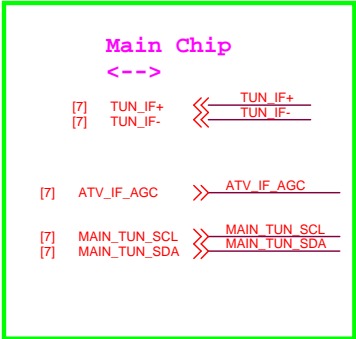
AC off
EDID
solution
without
EEPROM

Make on board
HDMI1

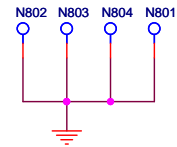
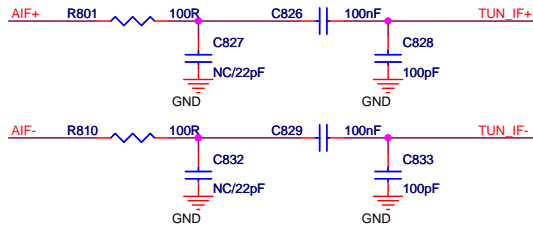
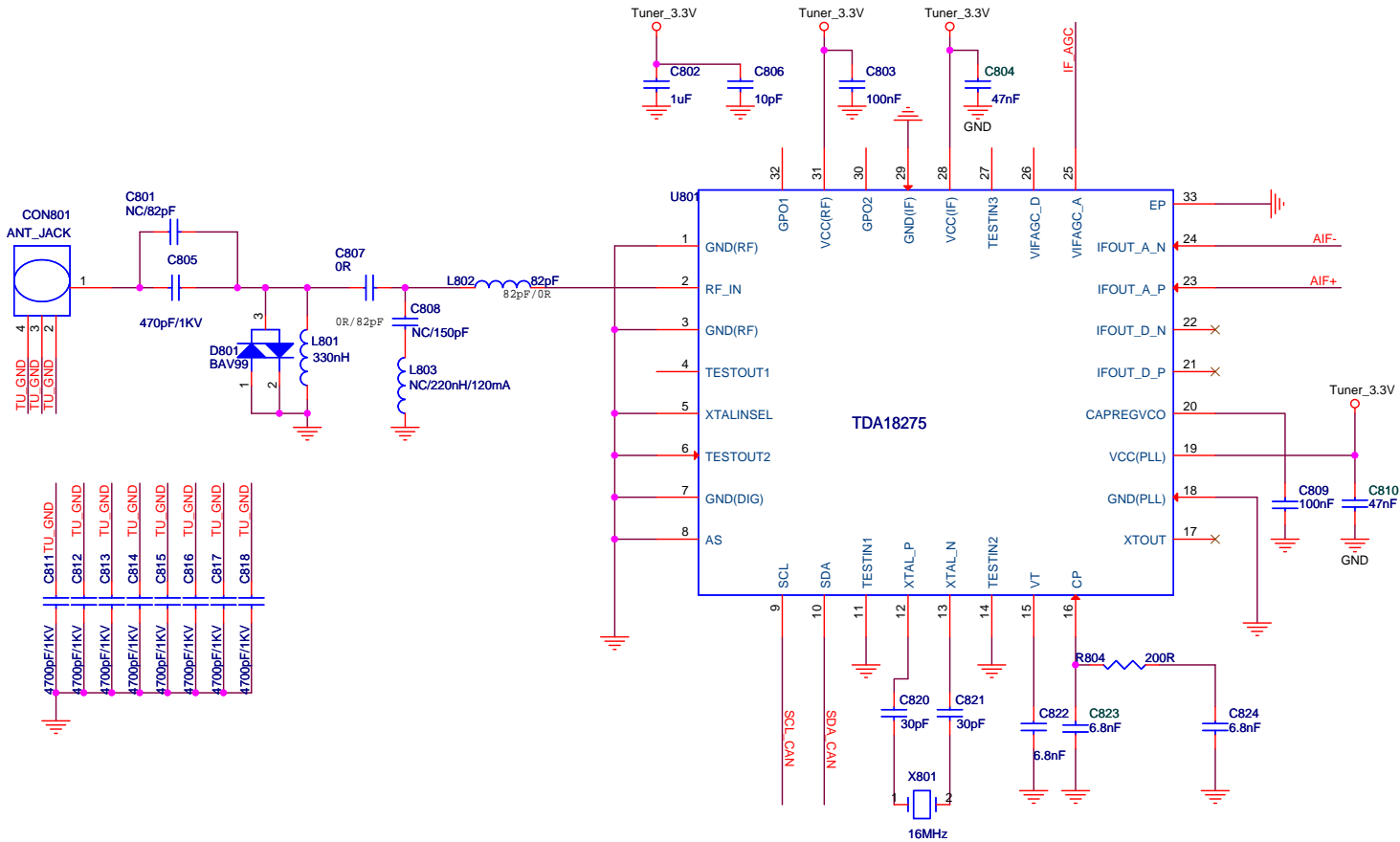
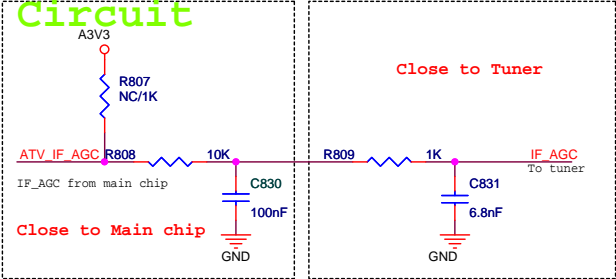




HDMI_MHL_SEL: 1
(HDMI)
HDMI_MHL_SEL: 0
(MHL)
NOT MHL for
HDMI2_DET



IF_AGC Control Circuit



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Title: Tuner

Size: 5

Schematic Name: 3RT82AV-2D

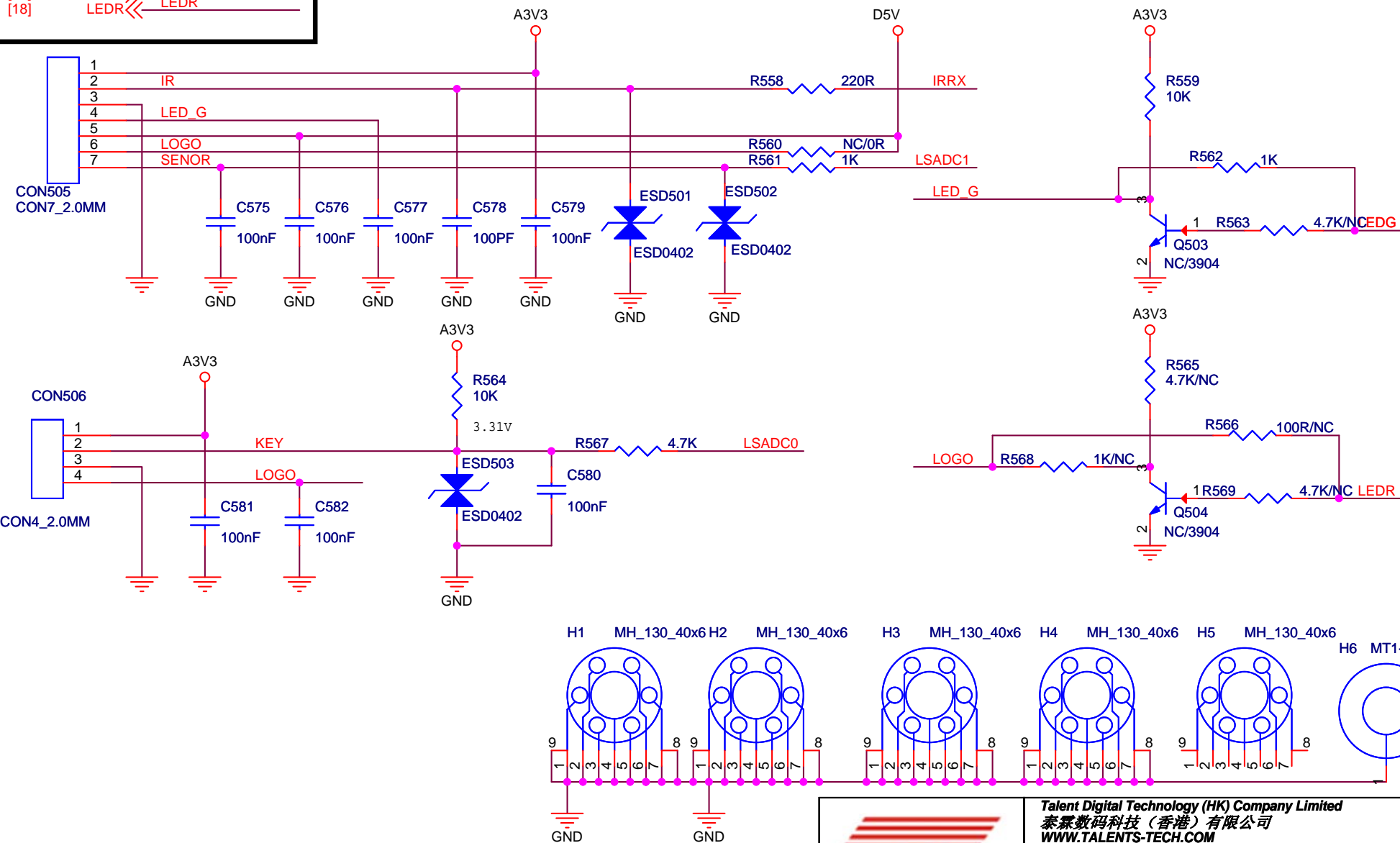
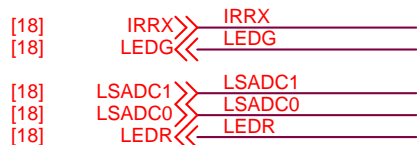
Rev: T1

Date: Thursday, October 30, 2014

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Key/IrDA I/F



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Title Key/LED/IrDA		
Size A	Schematic Name 3RT82AV-2D	Rev T1
Date: Thursday, October 30, 2014		Sheet 15 of 18



CN302

PHK-6AL-GW

trace >200mil

LED电压区域:分为高压和低压:
默认值为: 高压
低压时选择以下值:
1. L53 LCH114-680H
2. Q51 ME15N10
3. ES8 NC
4. ES6 47uF/100V/KF
5. ES7 47uF/100V/KF
6. RS21 100K/603/1%
7. RS24 120K/603/1%
8. DS5 SR5100/ERIS

US2 SMPS区域
OB3350

