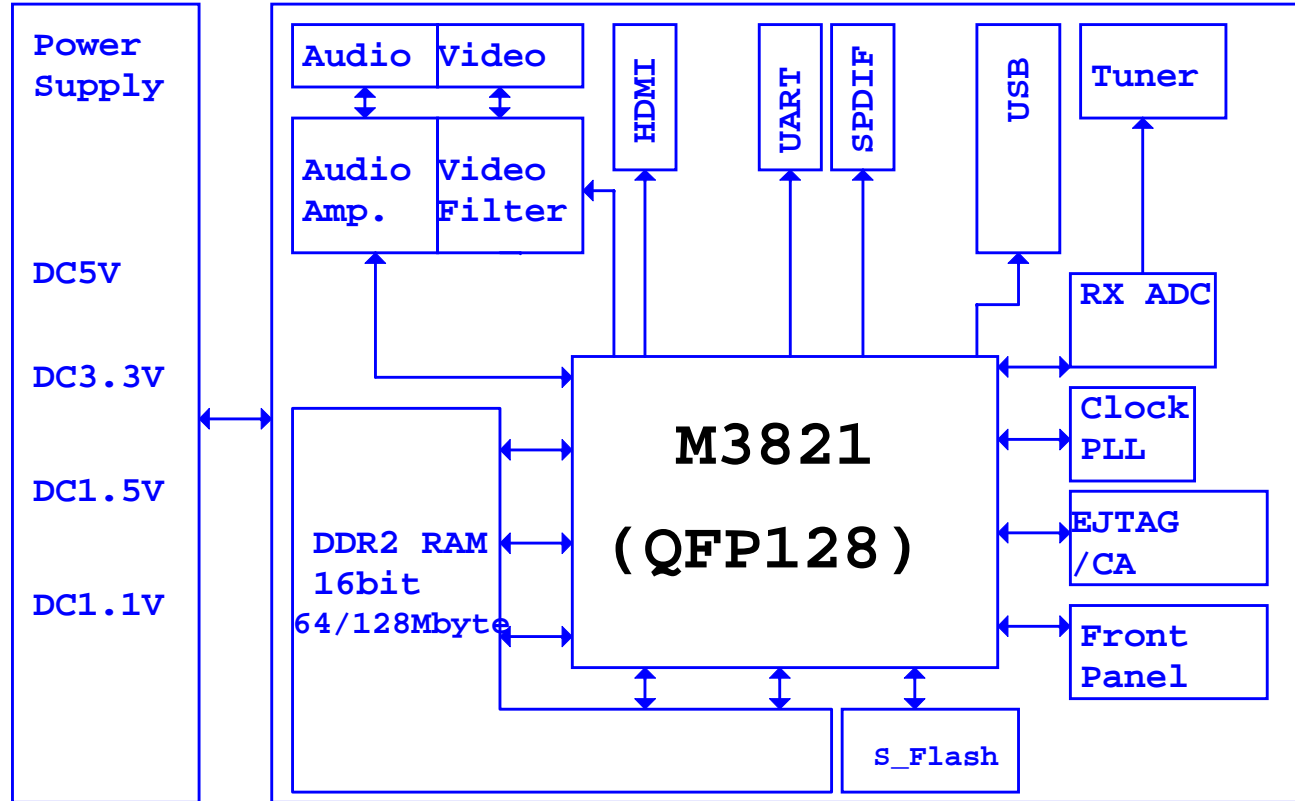


DB-M3821-02V01

LYSM083-BS(S118)

Page	Title
01	Cover and system diagram
02	GPIO_MAP
03	M3821
04	DDR_HDMI_USB_SF_STRAP
05	AV
06	TUNER
07	PANEL
08	POWER ON BOARD
09	POWER MODULE

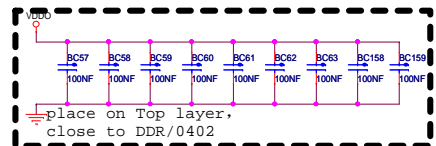
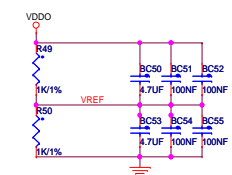
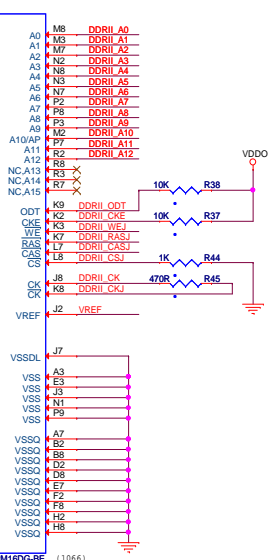
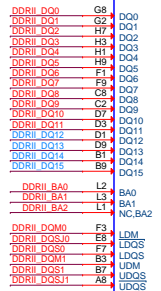
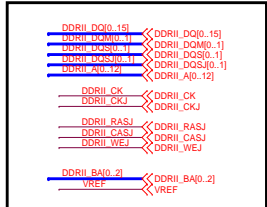
Date	Update History	BY
2014-5-23	Create frist Version	Thomas
2014-9-22	updated	Thomas



GPIO Mapping

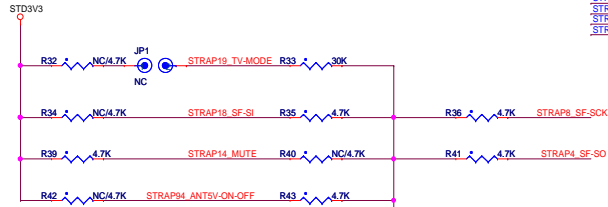
PIN Number	GPIO Number	Usage			Note
		1	2	3	
6	GPIO[14]	XSPDIF_OUT	_____	_____	
7	GPIO[15]	XUART_RX	_____	_____	STRAP PIN
8	GPIO[16]	XUART_TX	_____	_____	STRAP PIN
9	XGPIO[17]	MUTE	_____	_____	STRAP PIN
10	XGPIO[2]	USB_UG	_____	_____	STRAP PIN
11	GPIO[19]	XDFE_TM	16:9_EN	_____	STRAP PIN
12	GPIO[20]	XDFE_SE	TV_MODE	_____	STRAP PIN
14	GPIO[26]	XHDMI_HTPG	_____	_____	
15	GPIO[27]	XI2C_SDA (HDMI)	_____	_____	STRAP PIN
16	GPIO[28]	XI2C_SCL (HDMI)	_____	_____	STRAP PIN
102	GPIO[96]	Reserve	_____	_____	
103	GPIO[99]	SW_5V/3V3	_____	_____	
105	GPIO[108]	XEJ_TRSTJ	XSC_PREJ	_____	
106	GPIO[111]	XEJ_TDI	XSC_RST	_____	
107	GPIO[113]	XEJ_TDO	XSC_DATA	_____	
108	GPIO[115]	XEJ_TMS	XSC_CLK	_____	
110	GPIO[117]	XEJ_TCLK	XSC_POWENJ	_____	
111	GPIO[122]	ANT5V_ON_OFF		_____	STRAP PIN
113	GPIO[128]	XPMU_GPIO_0	F_SCL	_____	
114	GPIO[129]	XPMU_GPIO_1	F_SDA	_____	
115	GPIO[136]	XPMU_DOWN	_____	_____	
116	GPIO[134]	XIR_RX	_____	_____	
117	GPIO[135]	XPMU_GPIO_10	XPMU_CEC	_____	
118	GPIO[130]	XPMU_GPIO_2	XI2C_SDA3 (DVB-T2)	_____	
119	GPIO[131]	XPMU_GPIO_3	XI2C_SCL3 (DVB-T2)	_____	
120	GPIO[132]	XPMU_GPIO_4	XIF_AGC_T2		

DDR



place on Top layer, close to DDR/0402

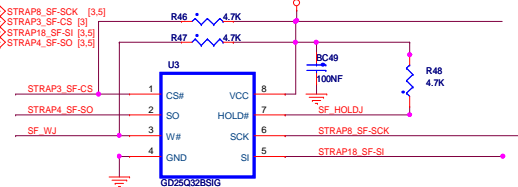
Strap Pin



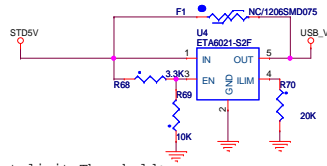
- STRAP19_TV-MODE (3.6)
- STRAP18_SF-SI (3.6)
- STRAP14_MUTE (3.6)
- STRAP4_ANTSV-ON-OFF (3.6)
- STRAP19_SF-SO (3.6)
- STRAP8_SF-SCK (3.6)
- STRAP4_SF-SO (3.6)

- STRAP19_CPU Probe En
- 0: Probe disable(Default)
- 1: Probe enable
- STRAP18_SF_Boot Enable (XSF_MOSI)
- 0: Sflash boot (default)
- STRAP14_EROM_Enable
- 0: EROM_disable
- 1: EROM_Enable (default)
- STRAP8_CPU_CLK_SEL (XSF_SCLK)
- 0,675MHz;(default)
- STRAP4_DRAM clock selection (XSF_MISO)
- 0: 528M(default)
- STRAP194_SF_work mode (XGPIO_8)
- 0:Normal

SFLASH

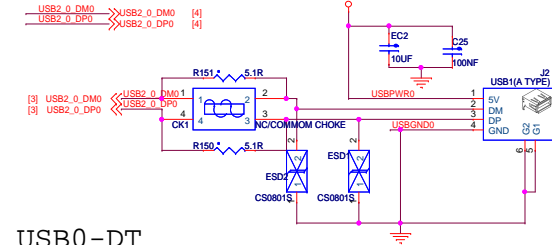


USB POWER



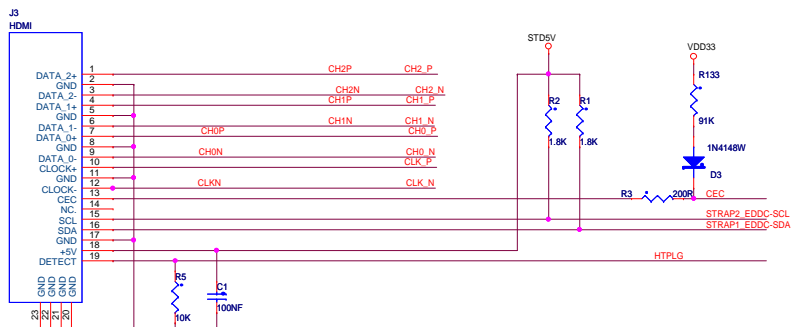
Current limit Threshold:
 Rlim = 15K Ilimit = 1.705A
 Rlim = 20K Ilimit = 1.295A
 Rlim = 49.9K Ilimit = 0.520A

USB 0



USB0-DT

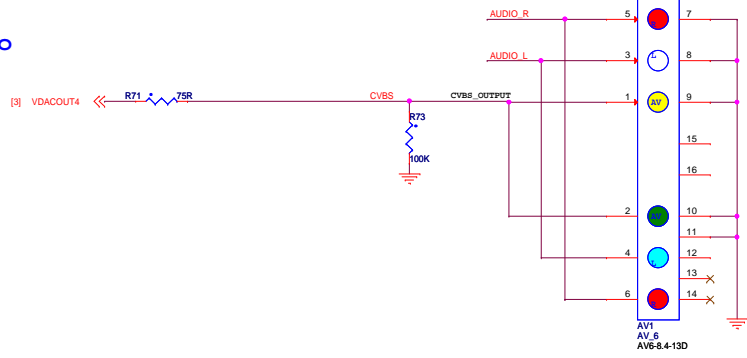
HDMI



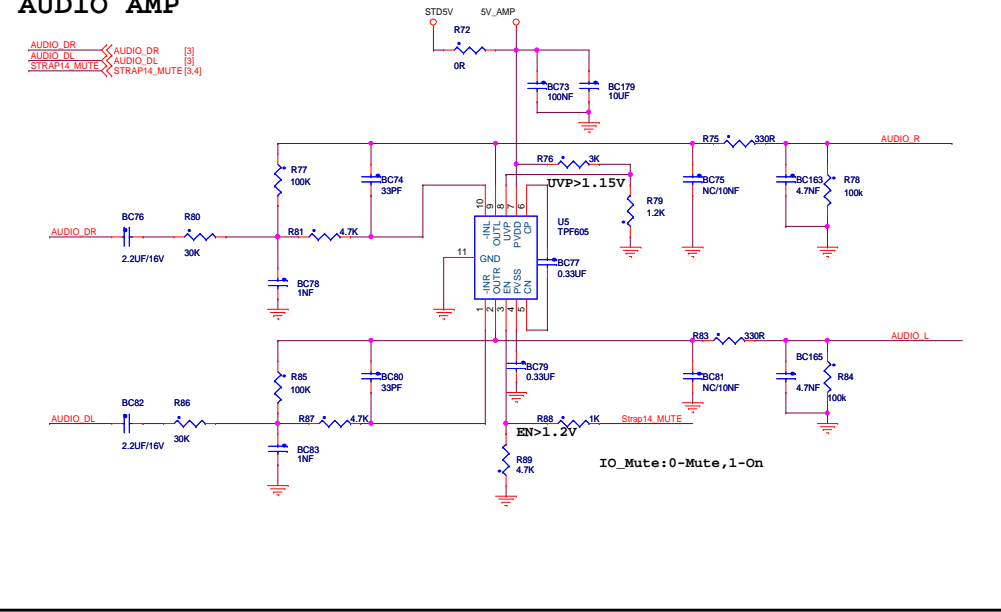
Receptacle



Video

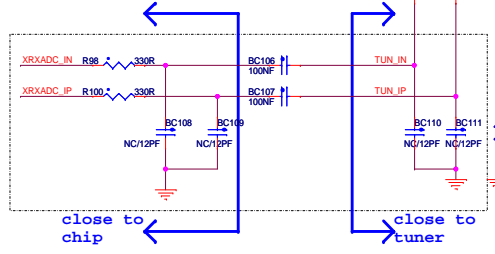
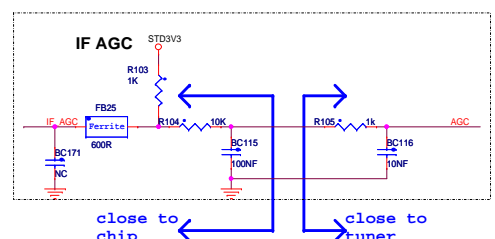
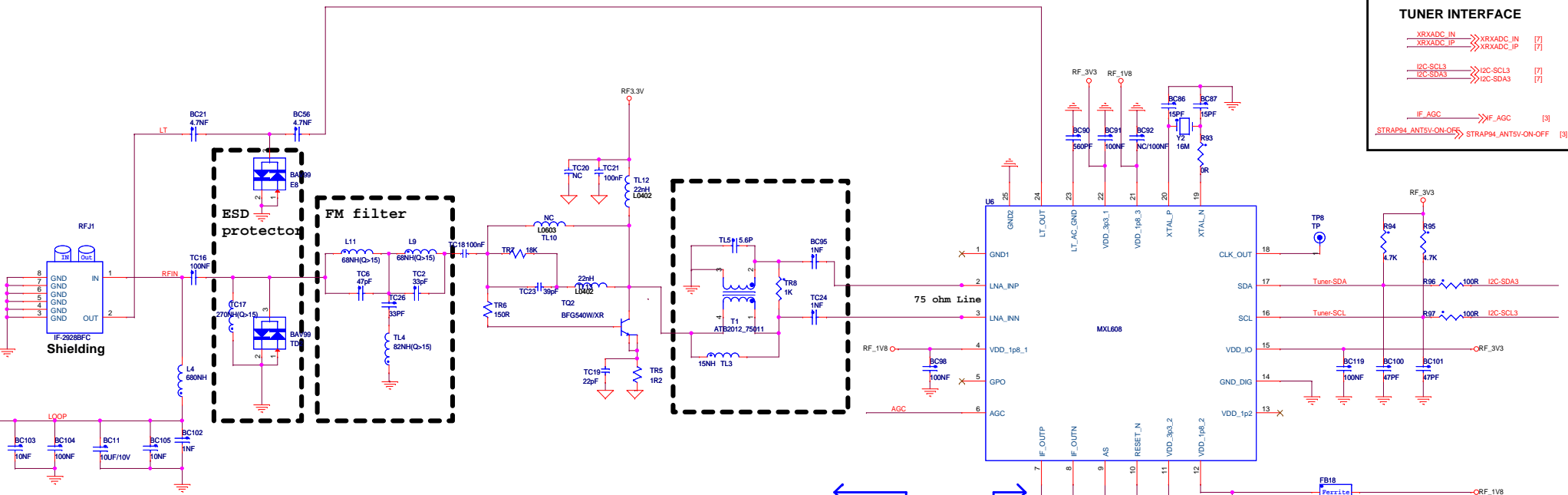
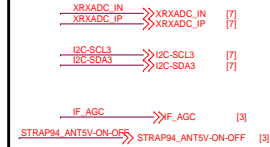


AUDIO AMP



ALI 捌智科技 ALI Corporation	
Title AV	
Size	Document Number LYSM083-BS(S118)
Rev	D2V01
Date	Tuesday, October 13, 2015
Sheet	5 of 9

TUNER INTERFACE

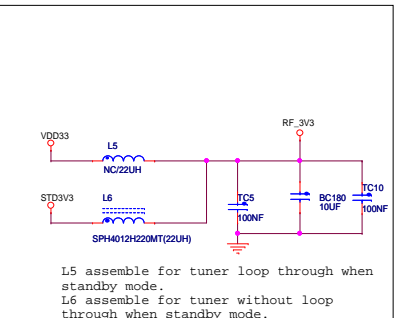
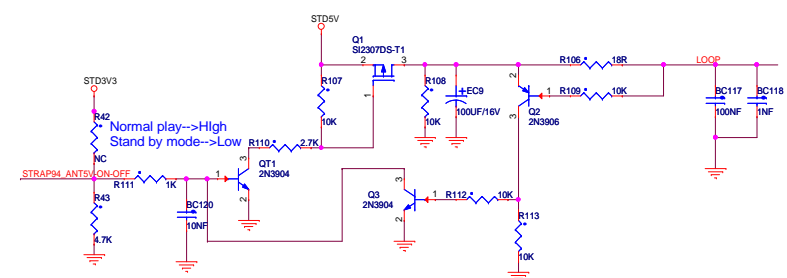


	With Balun (default)	Without Balun
T1	ATB2012_75011	NC
R179	NC	0 ohm
R180	0ohm	NC
BC178	NC	5.6PF
L21	NC	15NH
L20	NC	15NH

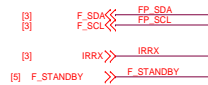
Country	Mxl-608 for DVB-T2			
	External LNA	FM Radio Filter	Balun	Wifi Filter
Russia	X	X	V	V
Thailand	Note	V	V	V

Note: External LNA check with Maxlinear.

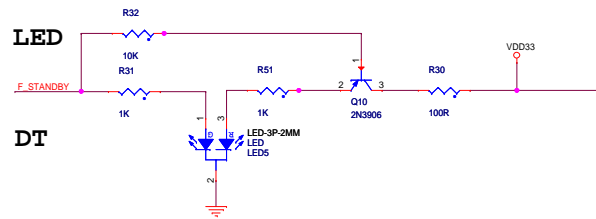
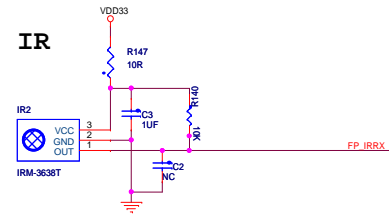
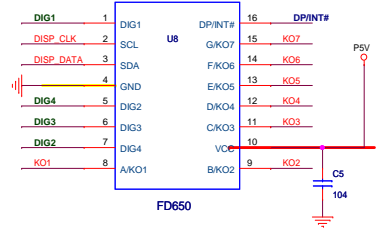
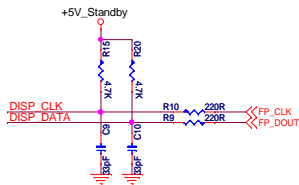
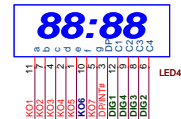
ANT power control



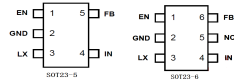
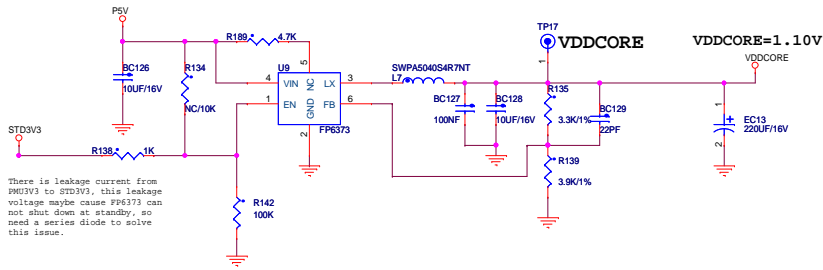
L5 assemble for tuner loop through when standby mode.
L6 assemble for tuner without loop through when standby mode.



LS2841AG 共阴数码管



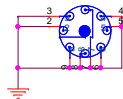
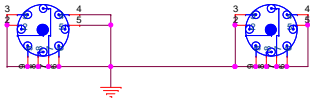
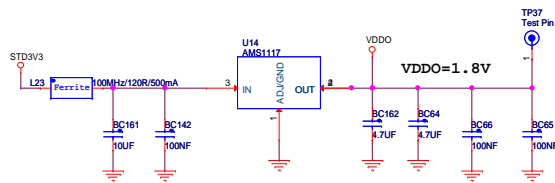
CORE POWER



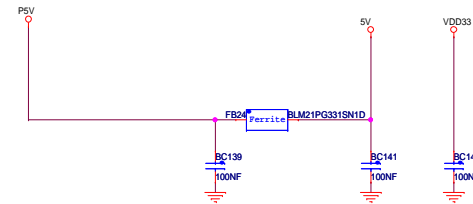
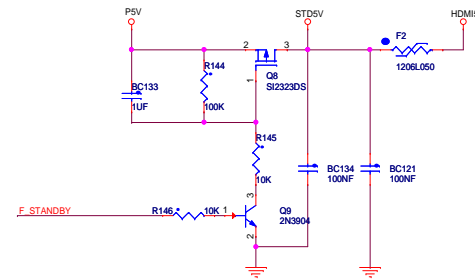
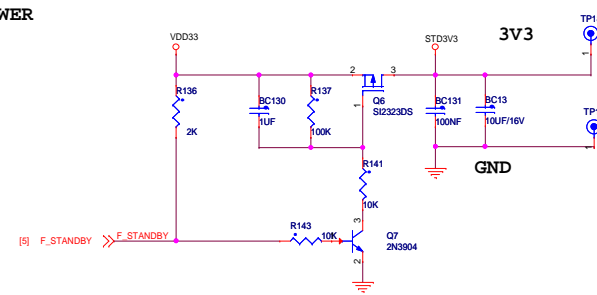
Ali recommend SOT23-5/6 Pin to Pin compatible DC-DC solutions

NO	Vender	Part number	Output current
1	Fitipower	FP6373	2.5A
2	Fitipower	FP6373A	3A
3	Silergy	SY8032	2.5A
4			
5			

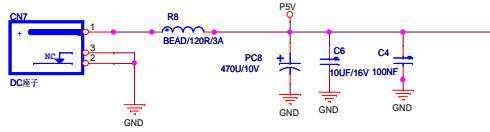
DDR POWER



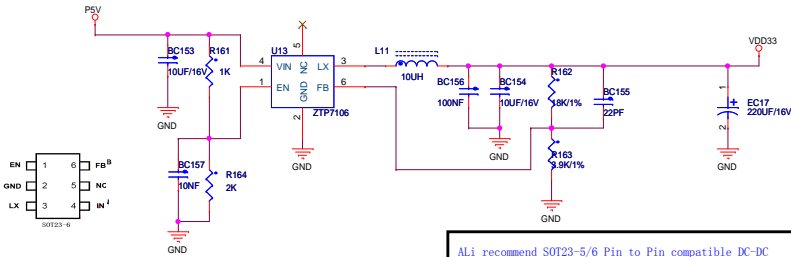
STANDBY POWER



DC 5V/2A IN



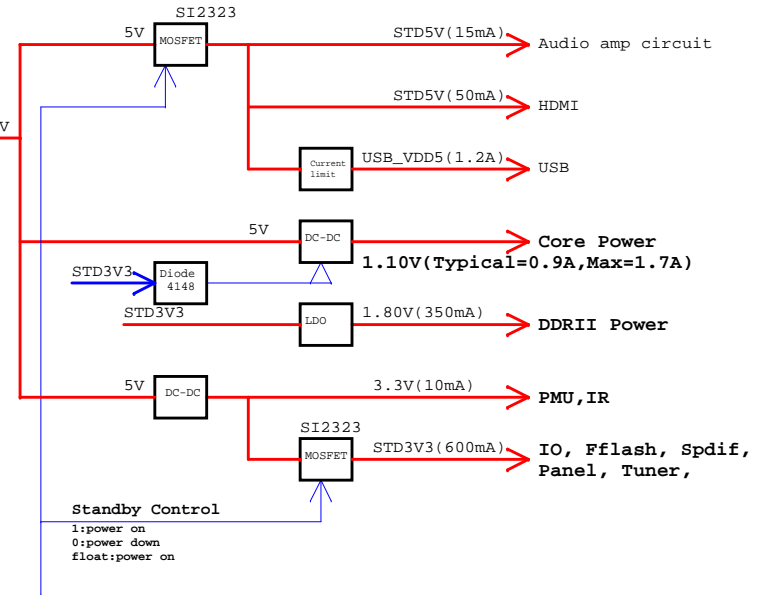
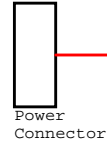
IO POWER



ALI recommend SOT23-5/6 Pin to Pin compatible DC-DC

NO	Vendor	Part number	Output current
1	Zilteck	ZTP7106	1A
2	ETA	ETA3486S2F	1A
3	STI	ASTI3408	1A
4	DIO	DIO6011	1A
5	Fitipower	FP6381A	1.2A
6	ETA	ETA3406	1.2A
7	Silergy	SY8088	1A

5V (2A)



Standby Control
 1: power on
 0: power down
 float: power on

Device
 Power Line
 control line