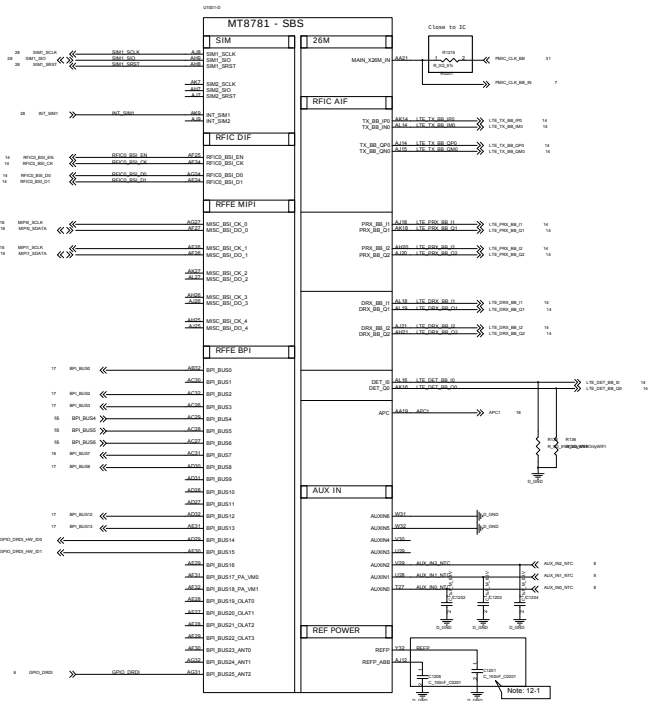
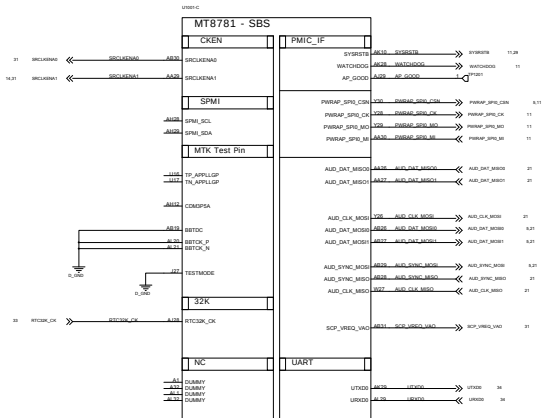


FCC ID: 2AWC3-MG-S04

Date	Version	Page	Change notice
2021/12/xx	V0.1	10 20 44	Modify PDN_cap NC part
2022/01/xx	V0.2	20_POWER_MT6366-Buck	Remove un-used R2002, R2003 R / 0 / ohm / NC
2022/01/xx	V0.2	44.Memory_UFS_LPDDR4X	Remove R4401 & R4402 R / 0 / ohm test RES
2022/01/xx	V0.2	13_BB_2_CONN_CSI	Fixed GPIO100 (HW_ID0), GPIO101 (HW_ID1) txt
2022/01/xx	V0.2	20 21 22	Fixed Title name and Note:21-1 IC naming
2022/01/xx	V0.2	81_SYCLK_Clock-26MHz-TSX	Remove R8107 R / 0 / ohm test RES and Finetune Page81 Schematic design notice
2022/01/xx	V0.2	21_POWER_MT6366-LDO	Remove C2137 C / 4.7 / uF / 6.3V
2022/01/xx	V0.2	13_BB_2_CONN_CSI	Add finger print configure
2022/01/xx	V0.2	78_PERI_SENSORS_FingerPrint	Add finger print configure
2022/01/xx	V0.2	32_RF_MT6186M_RF_TX	Modify C3299 from C / 10 / uF / 6.3V to C / 4.7 / uF / 6.3V
2022/01/xx	V0.2	68_PERI_CTP	Modify VTP_PMU net to VI028_PMU
2022/01/xx	V0.2	77_PERI_SENSORS_MEMS_ALS/PS	Modify VLD028_EXT net to VI028_PMU
2022/01/xx	V0.2	27_POWER_MT6375-Charger + PP	Change R2705 to R / 0.005 / ohm, HFCL0603MW33R005F
2022/01/xx	V0.2	79_POWER_FLASH_DRIVER	Change U7901 to U / LM3643YFFR
2022/01/xx	V0.2	13_BB_2_CONN_CSI	Fixed typo GPIO111 (GPIO_DRDI)
2022/02/xx	V0.2	10_BB_PDN1	Change C1033 to C / 2.2 / uF / 6.3V / NC
2022/02/xx	V0.2	11_BB_IOVDD	Change C1131 to C / 1 / uF / 6.3V / NC
2022/02/xx	V0.2	82_SYCLK_RTC32K	Change R8203 to R / 0 / ohm / NC
2022/02/xx	V0.2	27_POWER_MT6375-Charger + PP	Modify MT6375 gauge notic
2022/02/xx	V0.2	21_POWER_MT6366-LDO	Modify Note 21-1 content
2022/02/xx	V0.2	23_POWER_MainPMIC-Charger	Change R2304 to R / 4.7 / K
2022/02/xx	V0.2	29_POWER_EXT	
			Modify AFVDD/AVDD note
2022/02/xx	V0.2	69_PERI_CAMERA_Rear	Remove R6900 to C6904 and modify CN6000 capacitor tolerance, it
2022/02/xx	V0.2	70_PERI_CAMERA_Front	Remove R7000 to C7012 and modify CN7000 capacitor tolerance, it
2022/02/xx	V0.2	77_PERI_SENSORS_MEMS_ALS/PS	Remove R7700 and modify CN7000 capacitor tolerance, it
2022/02/xx	V0.2	79_POWER_FLASH_DRIVER	Modify Note 77 Interrupt pin of MEMS sensor must be assign to SCP_EINT
2022/02/xx	V0.2	21_POWER_MT6366-LDO	Remove R2100 and modify CN2100 capacitor tolerance, it
2022/02/xx	V0.2	10_BB_PDN1	Remove R1000 and modify CN1000 capacitor tolerance, it
2022/02/xx	V0.2	20_POWER_MT6366-Buck	Remove R2000 and modify CN2000 capacitor tolerance, it

Company: http://www.psengroup.com		
File name: 04_Change_Notice		
Sheet name: 1 1		
Draw by: Jimmy	Page: 2 of 34	
Rev: 00.0	Size:	Date: 1



Schematic design notice of "12_BB_1" page:

Note 12-1: The de-coupling cap. for REFP to be placed as close to BB as possible.

Note 12-2: "PWRAP_SPI0_CSN" and "AUD_DAT_MOSI0" pin features in trapping pin to enable JTAG.

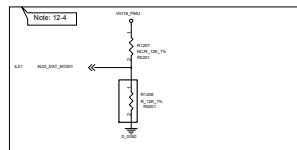
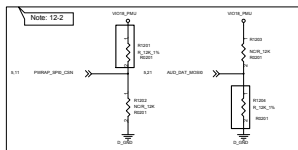
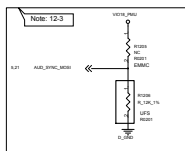
PWRAP_SPI0_CSN	AUD_DAT_MOSI0	AP JTAG Mode	IO JTAG Mode
H (Default)	L (Default)	N/A	N/A
H	H (by external PU)	SP15_CSB, SP15_CLK, SP15_M0, SP15_M1, SP15_T1	N/A
L (by external PD)	L	SP15_CSB, SP15_CLK, SP15_M0, SP15_M1, SP15_T1	SP11_CSB, SP11_CLK, SP11_M0, SP11_M1, SP11_T1
L (by external PD)	H (by external PU)	SP15_CSB, SP15_CLK, SP15_M0, SP15_M1, SP15_T1	SP11_CSB, SP11_CLK, SP11_M0, SP11_M1, SP11_T1

Note 12-3: "AUD_SYNC_MOSI" pin features in trapping pin to booting (UFS/eMMC).

AUD_SYNC_MOSI	Storage Booting Mode
L (Default)	Only UFS boot
H	Only eMMC boot
H (by external PU)	

Note 12-4: "AUD_DAT_MOSI1" pin features in trapping pin for SW co-load.

AUD_DAT_MOSI1	Mode
L (Default)	LP4x-MCP
H	LP4x-Discrete
H (by external PU)	

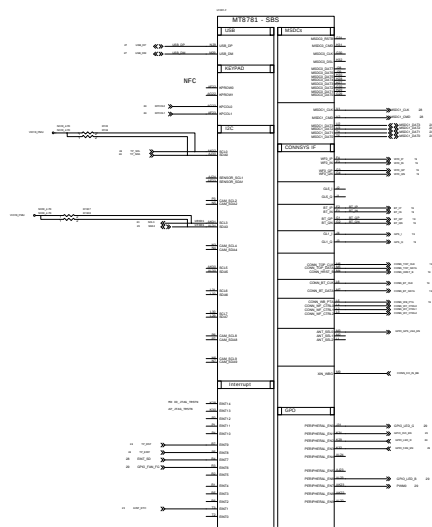


Company: <http://www.singapore.com>

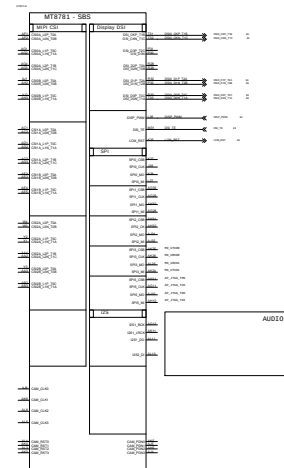
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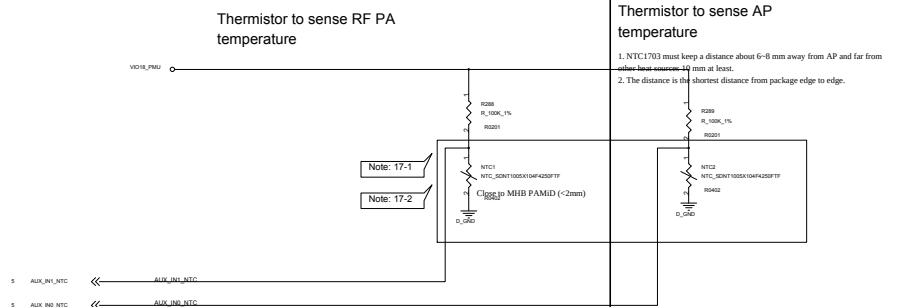
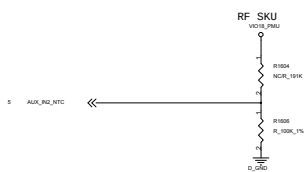
Drawn by: **ammy**

Rev: 1.00 Date: 2011-11-11



GPIO111	GPIO101	GPIO100	PCB ID
GPIO111	GPIO101	GPIO100	Internal phone (Note: DP DTB detected via I2C ID)(MTK) with MT8181 show SKU
Lo	Lo	Hi	
Lo	Hi	Lo	
Lo	Hi	Hi	
Hi	Lo	Lo	EV8 (MTK) - MTK Internal DTBs
Hi	Lo	Hi	EV8 (MTK) - Customer's DTBs





Schematic design notice:

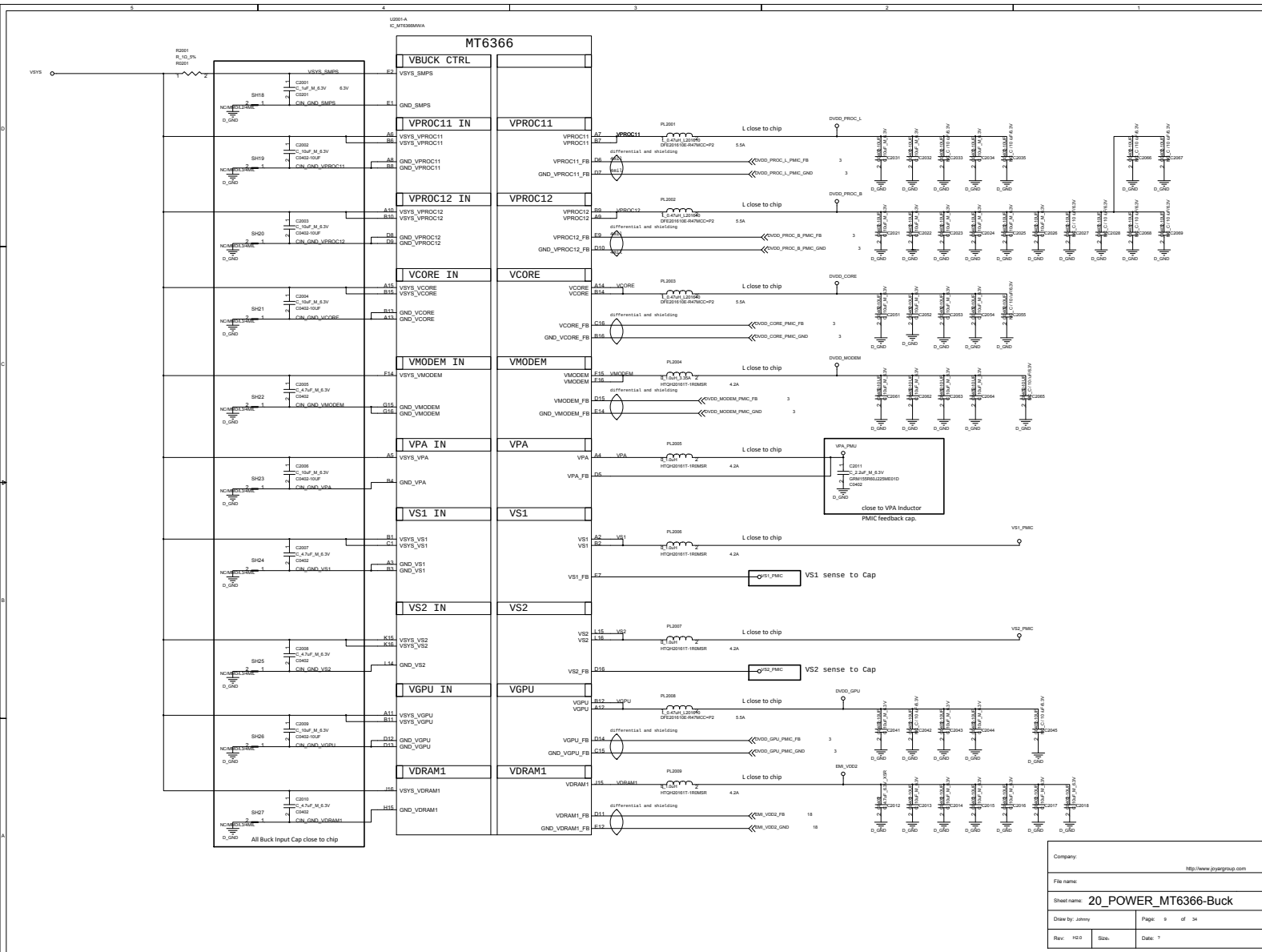
Note 17-1: SW Default Configuration is as followings
AUX_IN0_NTC is for AP Temp.
AUX_IN1_NTC is for MHB PAMiD Temp.

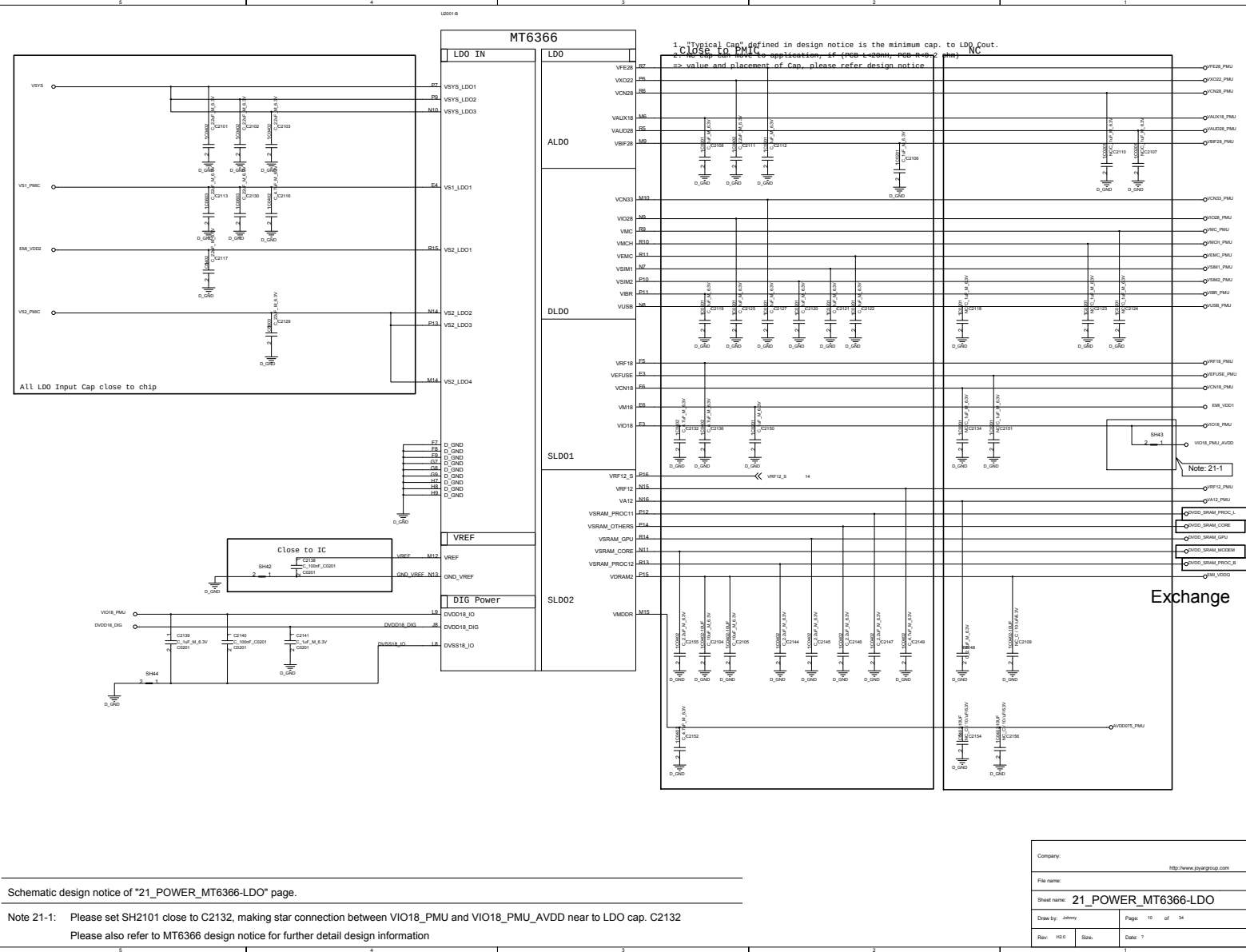
Note 17-2: If your design or placement is different with SW Default Config.
Please refer to "MTXXXX Thermal User Manuel.docx" and modify SW setting.

Schematic design notice of "16_BB_AUXADC" page.

	AUX_IN2 (RF SKU/PCB ID)	
	(ADC range is 0.05~1.45V)	
SKU1 EU+CHN+JPN	0.05V	0V(R1604=NC, R1606=100K)
SKU2 NA	0.21V	0.21V(R1604=750K, R1606=100K)
Reserved	0.42V	0.41V(R1604=330K, R1606=100K)
Reserved	0.62V	0.62V(R1604=191K, R1606=100K)
Reserved	0.82V	0.82V(R1604=120K, R1606=100K)
Reserved	1.04V	0.99V(R1604=100K, R1606=137K)
Reserved	1.24V	1.24V(R1604=100K, R1606=220K)
Reserved	1.45V	1.45V(R1604=100K, R1606=422K)

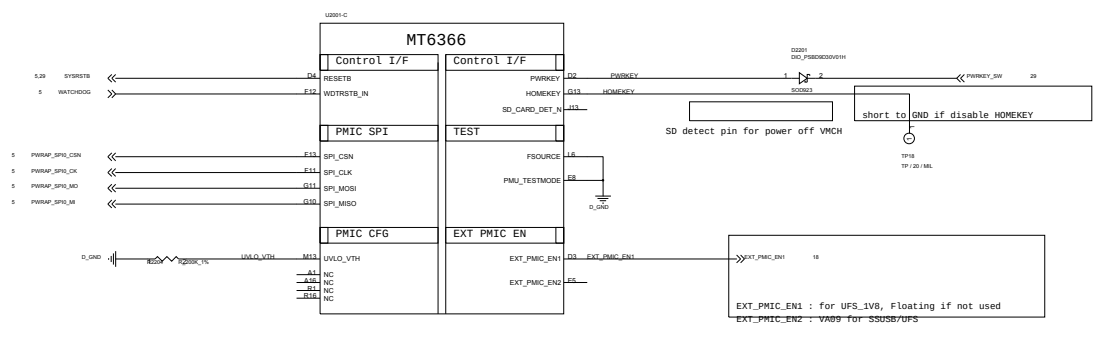
Company:		http://www.psargroup.com	
File name:			
Sheet name: 16_BB_AUXADC			
Draw by: Jimmy		Page: 8 of 34	
Rev: H2.0	Size:		

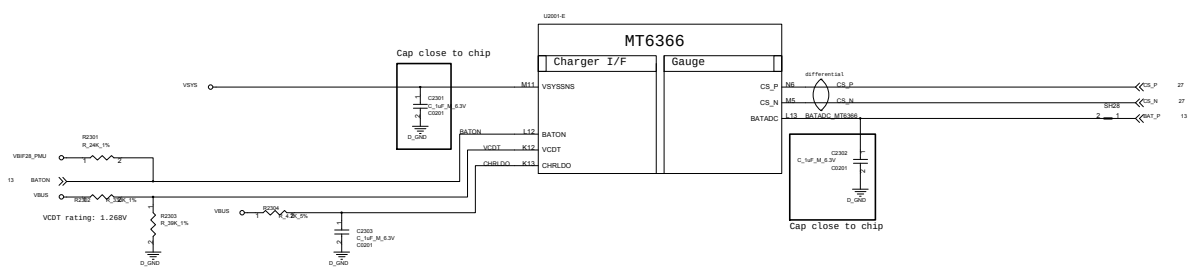




Schematic design notice of "21_POWER_MT6366-LDO" page.

Note Z1-1: Please set SH2101 close to C2132, making star connection between VIO18_PU and VIO18_PU_AVDD near to LDO cap. C2132
Please also refer to MT6366 design notice for further detail design information

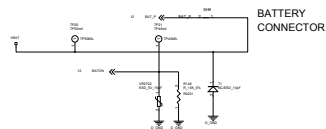
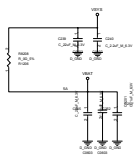


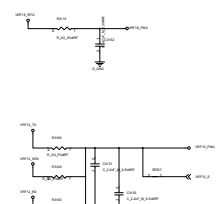
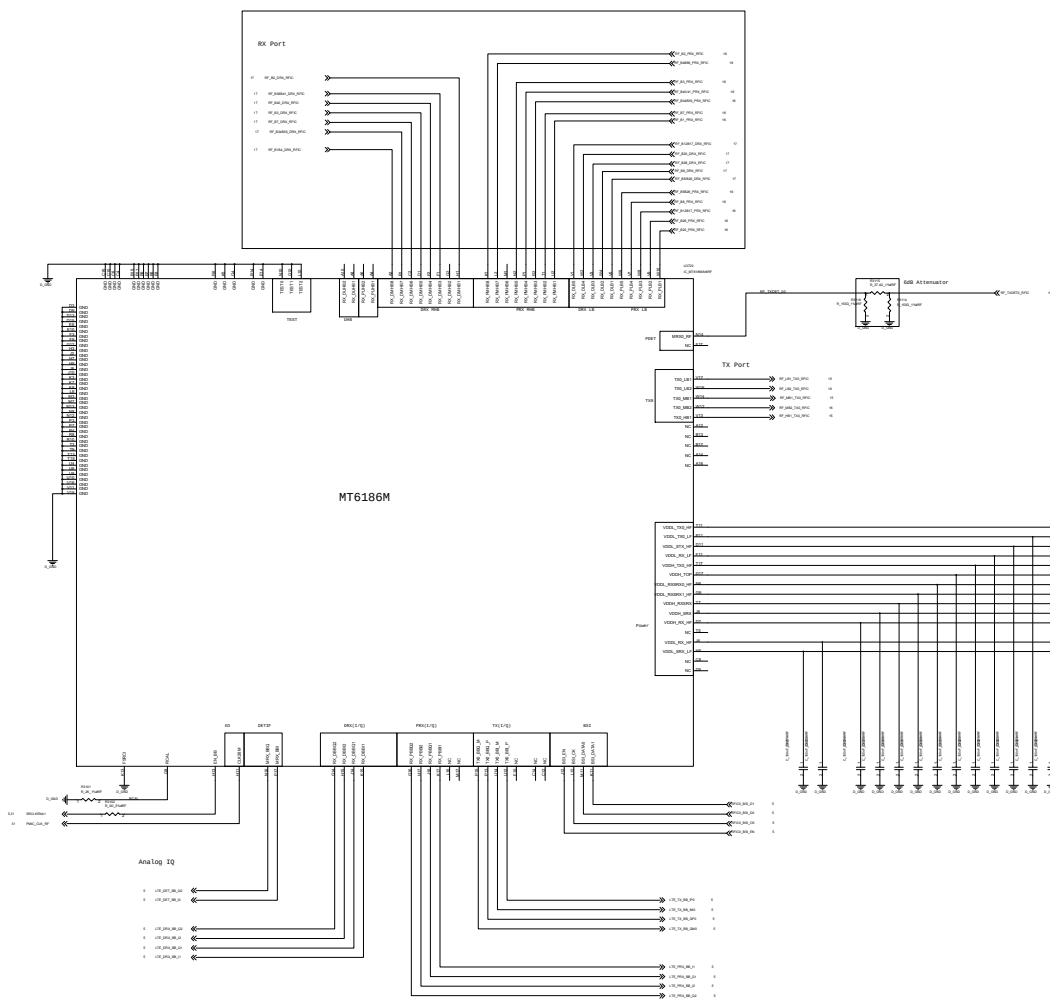


Schematic design notice of "23_POWER_MainPMIC-Charger" page:

Company:		http://www.joygroup.com	
File name:			
Sheet no:		23_POWER_MainPMIC-Charger	
Draw by:	Johnny	Page:	12 of 34
Rev:	H2.0	Size:	Date: 7

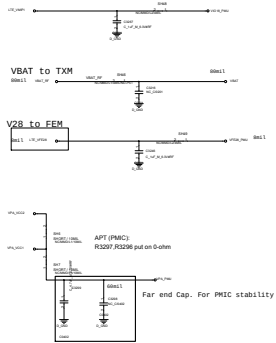
Switching Charger



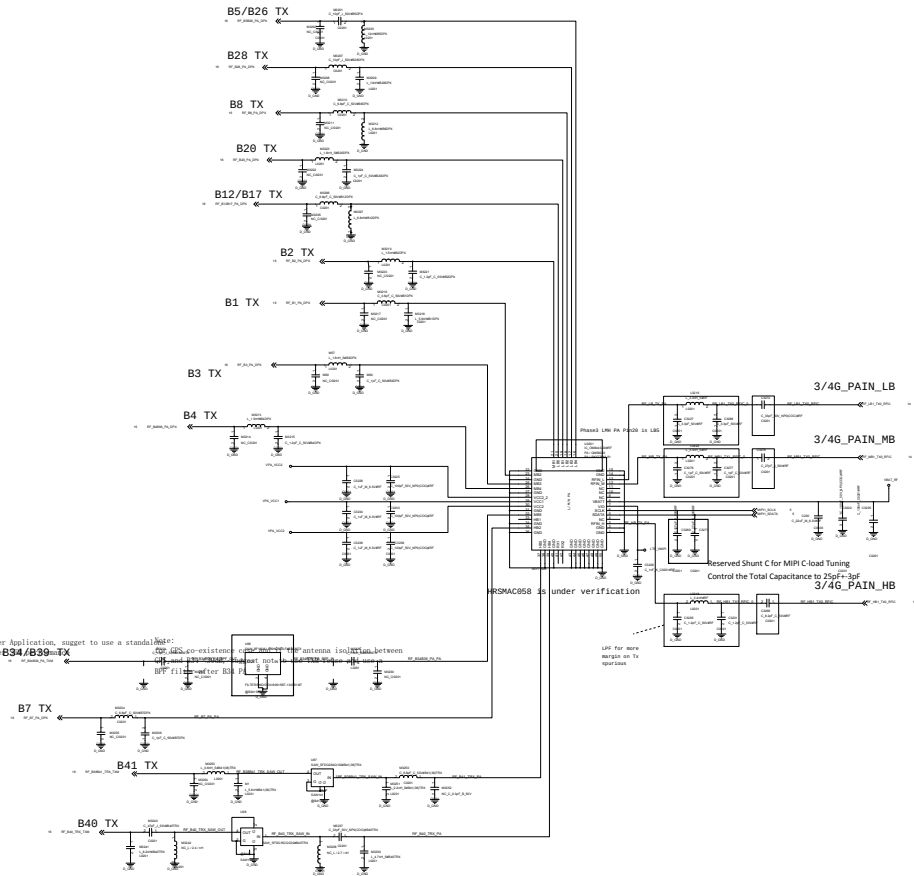


Title	
31_RF_MT6186M_PIN_OUT	
Rev	1.0
Date	2014-10-10

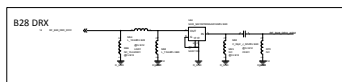
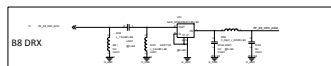
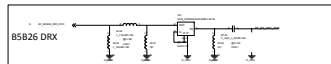
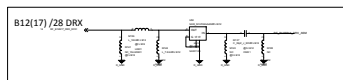
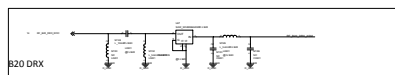
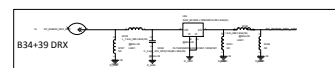
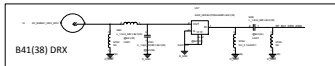
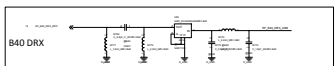
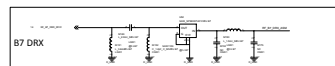
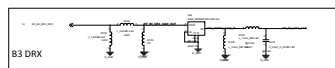
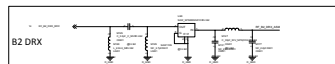
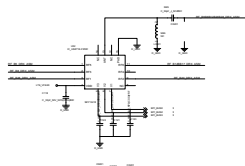
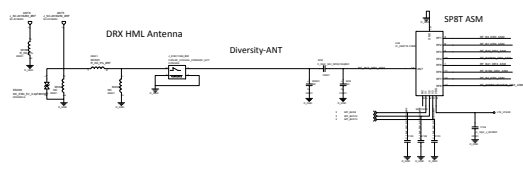
Power Net Connection

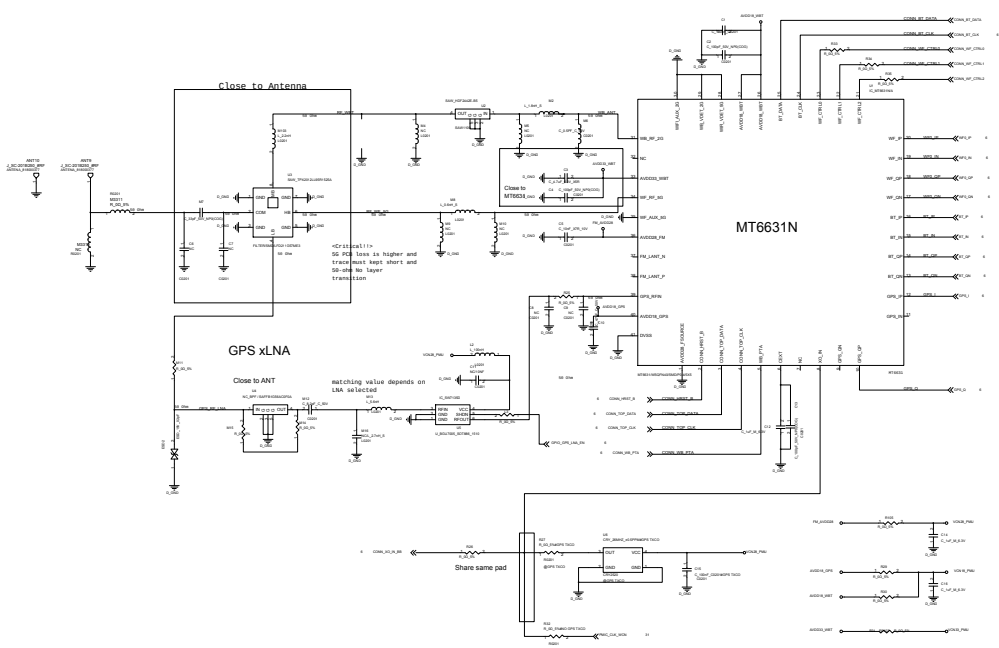


Note:
For B39 Multi-cluster Application, suggest to use a standard 100nF capacitor for B39 TX SW for better B39/B39-TX



Document	32_RF_MT6186M_RF_TX
Revision	1.0
Drawn by	John
Check by	John
Date	2014-01-15





Company:		http://www.jysagroup.com	
File name:			
Sheet name: 61_PERI_AUDIO_PMIC-IF			
Draw by: Jimmy		Page: 20 of 34	
Rev: 102.0	Size:	Date: 7	

Earphone Audio

Earphone EINT

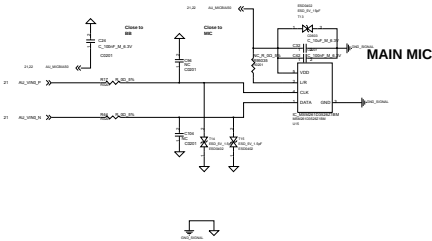
Close to IC

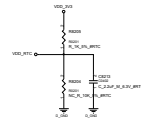
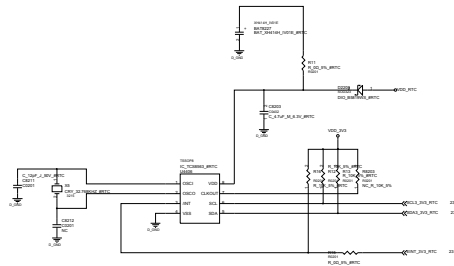
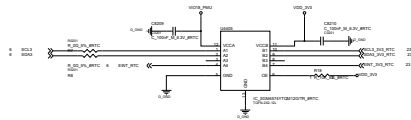
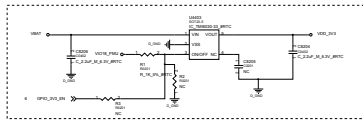
Close to audio jack

Earphone Microphone

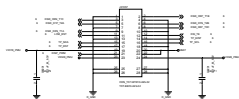
Note 62-4

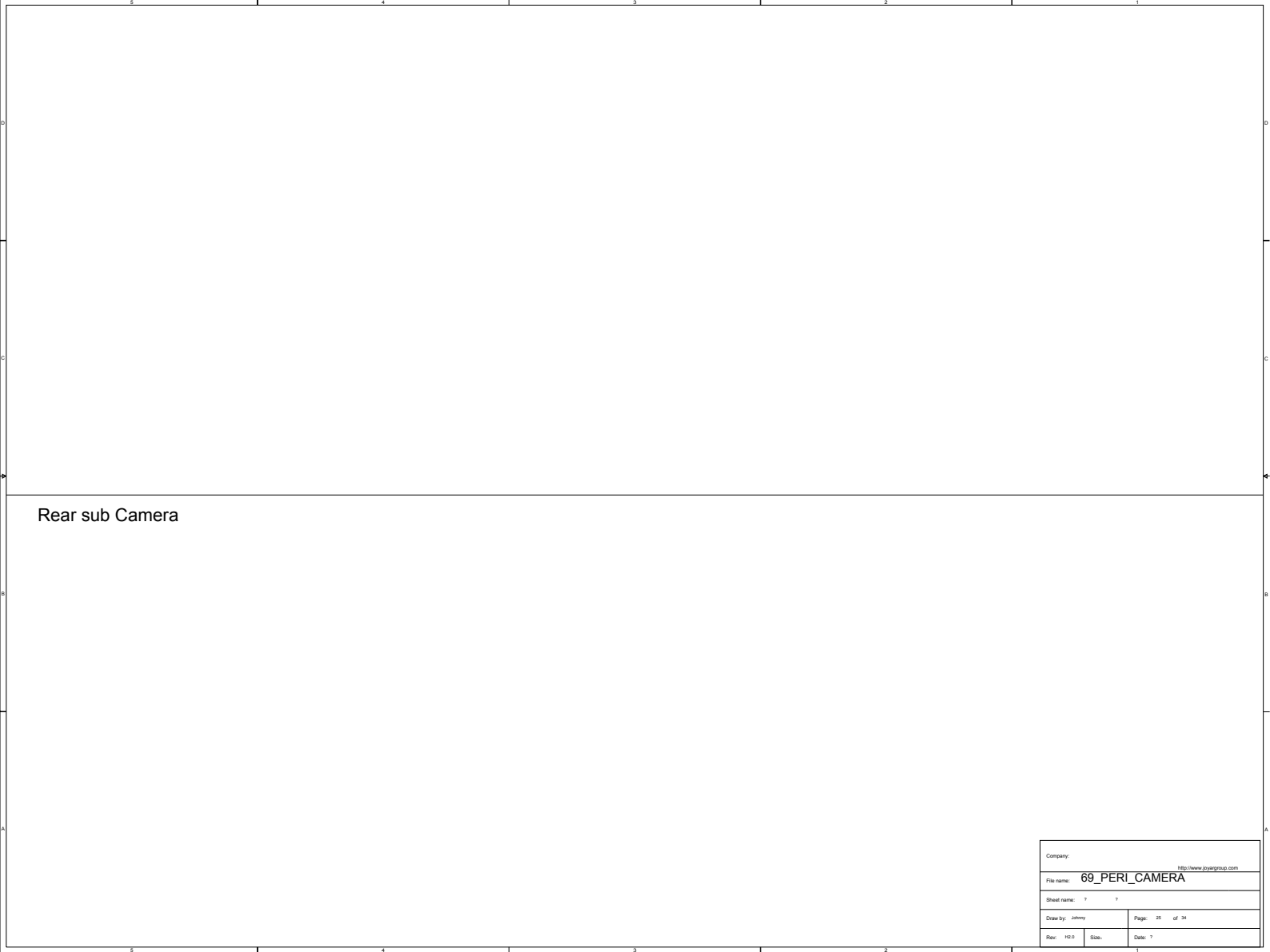
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898	899	900
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904	905	906
907	908	909
910	911	912
913	914	915
916	917	918
919	920	921
922	923	924
925	926	927
928	929	930
931	932	933
934	935	936
937	938	939
940	941	942
943	944	945
946	947	948
949	950	951
952	953	954
955	956	957
958	959	960
961	962	963
964	965	966
967	968	969
970	971	972
973	974	975
976	977	978
979	980	981
982	983	984
985	986	987
988	989	990
991	992	993
994	995	996
997	998	999
1000	1001	1002





65_PERI_SPEAKER_AMP	
Revision	1
Created	2010-10-10
By	10101010
For	10101010

	EMC	LCD_CON
		
LCD_POWER LCM Backlight LED Driver	LCD_BIAS	
Rev. 001 Rev. 002 Rev. 003 Rev. 004 Rev. 005 Rev. 006 Rev. 007 Rev. 008 Rev. 009 Rev. 010 Rev. 011 Rev. 012 Rev. 013 Rev. 014 Rev. 015 Rev. 016 Rev. 017 Rev. 018 Rev. 019 Rev. 020 Rev. 021 Rev. 022 Rev. 023 Rev. 024 Rev. 025 Rev. 026 Rev. 027 Rev. 028 Rev. 029 Rev. 030 Rev. 031 Rev. 032 Rev. 033 Rev. 034 Rev. 035 Rev. 036 Rev. 037 Rev. 038 Rev. 039 Rev. 040 Rev. 041 Rev. 042 Rev. 043 Rev. 044 Rev. 045 Rev. 046 Rev. 047 Rev. 048 Rev. 049 Rev. 050 Rev. 051 Rev. 052 Rev. 053 Rev. 054 Rev. 055 Rev. 056 Rev. 057 Rev. 058 Rev. 059 Rev. 060 Rev. 061 Rev. 062 Rev. 063 Rev. 064 Rev. 065 Rev. 066 Rev. 067 Rev. 068 Rev. 069 Rev. 070 Rev. 071 Rev. 072 Rev. 073 Rev. 074 Rev. 075 Rev. 076 Rev. 077 Rev. 078 Rev. 079 Rev. 080 Rev. 081 Rev. 082 Rev. 083 Rev. 084 Rev. 085 Rev. 086 Rev. 087 Rev. 088 Rev. 089 Rev. 090 Rev. 091 Rev. 092 Rev. 093 Rev. 094 Rev. 095 Rev. 096 Rev. 097 Rev. 098 Rev. 099 Rev. 100		

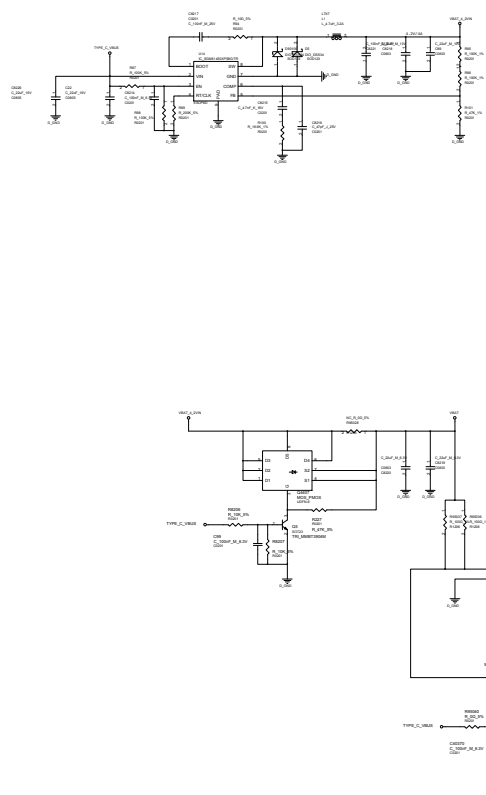


Rear sub Camera

Company: http://www.jysingroup.com		
File name: 69_PERI_CAMERA		
Sheet name: 1 1		
Draw by: Jimmy		Page: 25 of 34
Rev: 10.0	Size:	Date: 1

Company:		http://www.joyargroup.com	
File name:			
Sheet name: 70_PERI_CAMERA_StereoCAM			
Draw by: Jimmy		Page: 26 of 34	
Rev: H2.0	Size:	Date: 7	

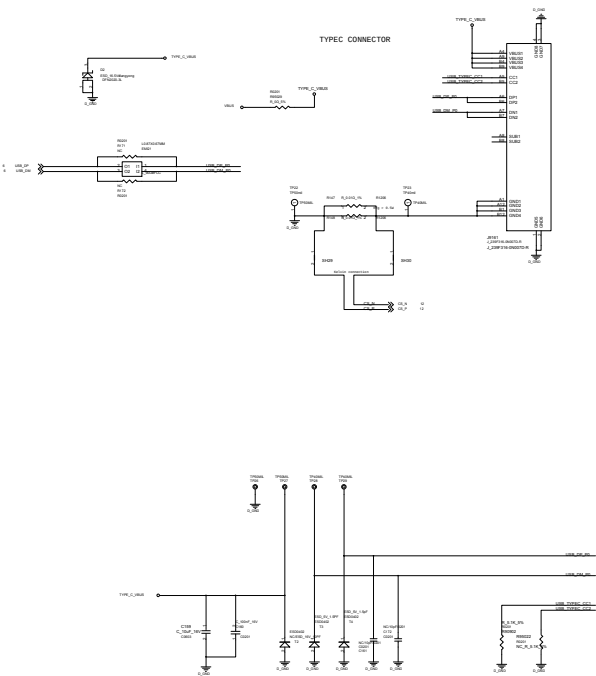
DCDC



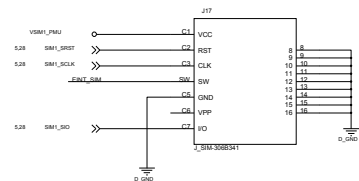
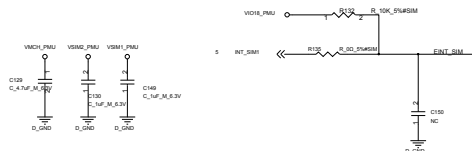
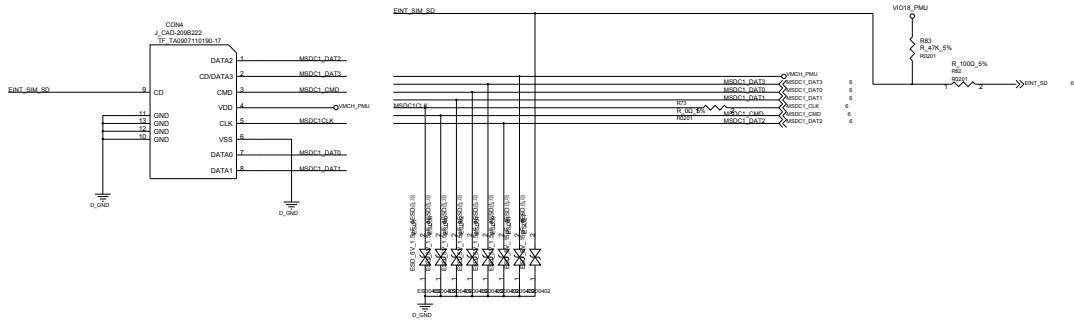
Schematic design notice of "71_PERI_USB_DTB" page.

Note 71-1:
For better ESD & surge performance we need choose suitable device for system protection.
Please refer to the latest version of (surge device selection guide) provided by MTK.

Type_c con



Company	http://www.mtk.com.tw		
File name	71_PERI_USB_DTB		
Drawn by	71_PERI_USB_DTB	Page	1 of 1
Drawn by	71_PERI_USB_DTB	Page	1 of 1



Schematic design notice of "74_PERI_SIM" page.

Note 74-1: Let Vpp pin no connect when SIM function is not supported.

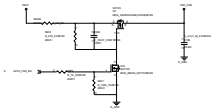
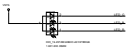
Note 74-2:

For better ESD & surge performance we need choose suitable device for system protection.
Please refer to the latest version of [Surge device selection guide] provided by MTK.

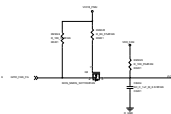
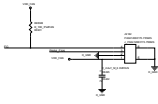
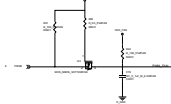
Company:		http://www.jyargroup.com	
File name:		74_PERI_SIM	
Sheet name:		7	
Draw by:		Jimmy	
Rev:		H20	
Size:		Date: 7	
Page:		28 of 34	

USB_SWITCH

USB_HUB

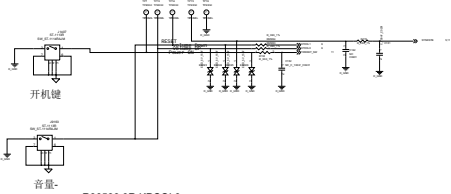


FAN



Power Key / Key Pad

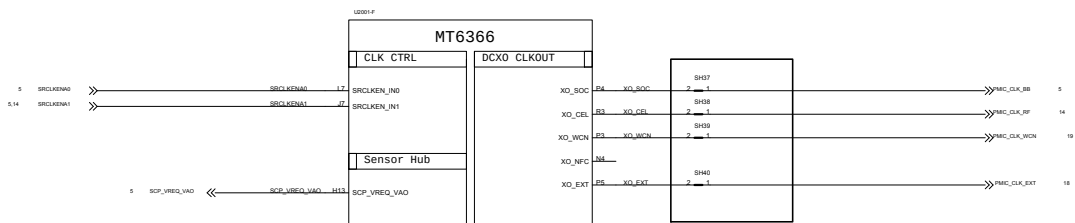
DO NOT put pull-up resistor on PWRKEY



R90533 OR KPCOL0
R90534 OR KPCOL1

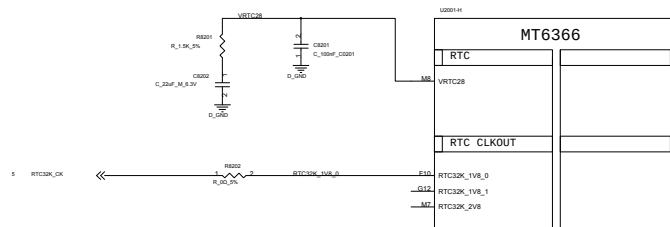
Doc No.	75_PEN_KEYPAD
Rev.	1.0
Date	2023.12.14
Author	Wang, Y.
Checker	Wang, Y.
Approver	Wang, Y.

G-Sensor	HALL	VIBRATOR
Accerometer + Gyro Sensor	ALS & PS Sensor	FingerPrint
Schematic design notice of "77_PERI_SENSORS_MEMs_ALS/PS" page. Note 77-1: [M sensor] Keep a minimum distance of 15mm from power ICs / PCB traces of more than 100mA / magnet component. Check HW design notice for more detail. Note 77-2: [A+G] For optimized GPS performance, please check HW design notice for Sensor selection guide. Note 77-3: [A+G] MUST use SPI for optimized sensor hub performance DO NOT USE I2C Note 77-4: [A+G] Suggest choose sensor support FIFO watermark interrupt otherwise we cannot support H6-sensor, daydream VR. And Sensor-location accuracy will become worse. Note 77-5: [Baro] Reserve Baro sensor for LPFe feature (Must for North America Operator / NA SKU) Note 77-6: DO NOT share Sensor hub I2C to other non-SCP device. Note 77-7: Interrupt pin of MEMS sensor must be assign to SCP_EINT Company 77_PERI_SENSORS_MEMs_ALS/PS Sheet Name: 1 of 1 Drawn by: shen Page: 11 of 11 Rev: 000 Date: 2020.7.1		



Schematic design notice of "80_SYSCLK_CoClock-26MHz" page:

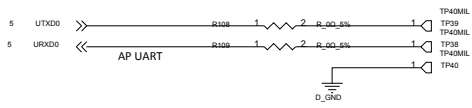
Company: http://www.psagroup.com			
File name: 80_SYSCLK_CoClock-26MHz			
Sheet name: 1 1			
Draw by: Jimmy		Page: 31 of 34	
Rev: 10.0	Size:	Date: 7	



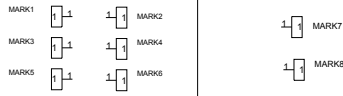
Schematic design notice of "82_SYCLK_RTC32K" page:

Company:		http://www.joygroup.com	
File name:		82_SYCLK_RTC32K	
Sheet name:		1	
Draw by:		Jimmy	
Page:		20 of 24	
Rev:		H2.0	
Date:		1	

串口

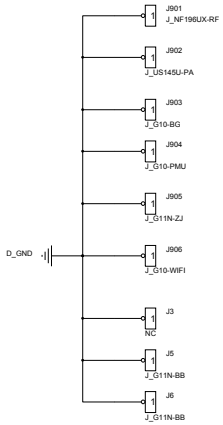


MARK点



BB-SLD 夹子

屏蔽盖



安装孔

Schematic design notice of "90_DEBUG_IO" page.

Note 90-1:

UART Default support : UART0,
JTAG Default support : AP
JTAG/MD_IO_JTAG

Company: http://www.joyargroup.com		
File name: 90_DEBUG_IO		
Sheet name: ?		
Draw by: Johnny	Page: 34 of 34	
Rev: H2.0	Size:	Date: ?