

dedicate VSS ball, must return to cap then to main GND:  
 1. REFN(G6) => C109  
 2. DVSS18\_MIPIRX(U25) => C107  
 3. DVSS18\_MIPITX(P25) => C101

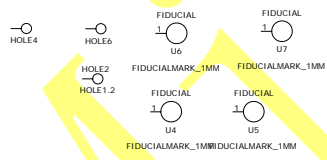
If double-sided SMT, put C405 & C406 below BB.  
 If single-sided SMT, put C405 & C406 around memory.

Close to BB IC, recommend < 150mil

Based on your system level design, if better FM performance is needed on your system, please refer to FM dense performance enhance proposal

Vproc remote sense:  
 differential 4mil with good shielding, from the BB to PMIC

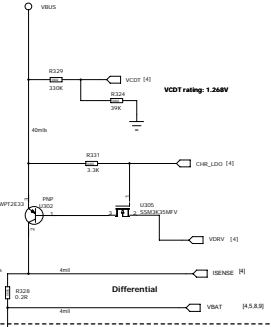
GND\_SIGNAL [3,4,5,6,7,8,9,10,11,12]  
 VPROC\_FB [4]



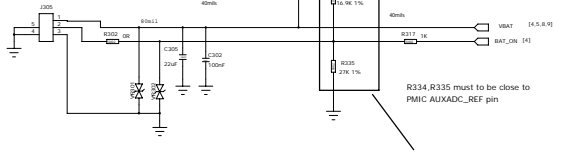


### Charger

1. Close to Battery Connector.  
(Reverse (R328) < 10mm)
2. Main path should be 40mm  
(VBUS -> U303's E -> U303's C -> R328 -> VBAT)
3. Star connection from R328 to BAT Connector



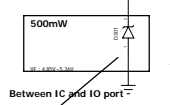
### BATTERY CONNECTOR



R334, R335 must be close to PMIC AUXADC\_REF pin

if battery NTC is 10kOhm, R334=39K, R335=90K  
if battery NTC is 47kOhm, R334=190K, R335=390K  
Refer to MT6323 HW design notice

Based on your system level design, if better ESD performance is needed on your system, please refer to ESD performance enhance proposal



Refer to MT6323 design notice for Zener selection

Based on your system level design, if better EDS performance is needed on your system, please refer to EDS performance enhance proposal

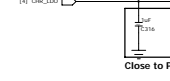
Refer to MT6323 design notice for Buck GND layout rule

Refer to GPS co-clock layout rule

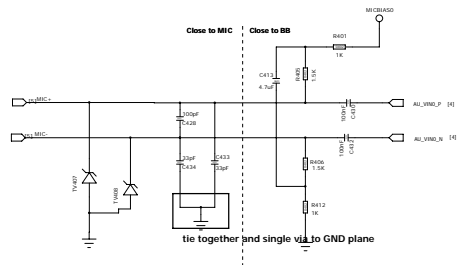
refer to system analog LDO performance improve proposal

Connect TSX/XTAL GND to AUXADC\_GND first than connect to main GND

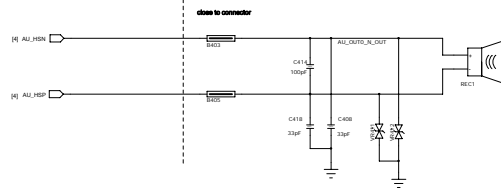
C322 must be close to PMIC AUXADC\_TSX pin



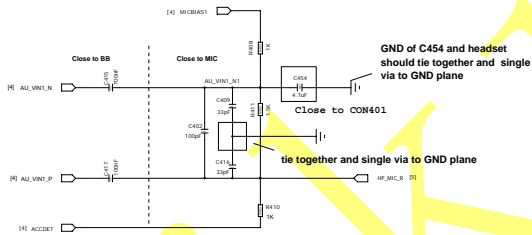
### Handset Microphone 1



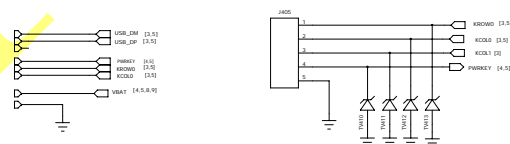
### HANDSET RECEIVER



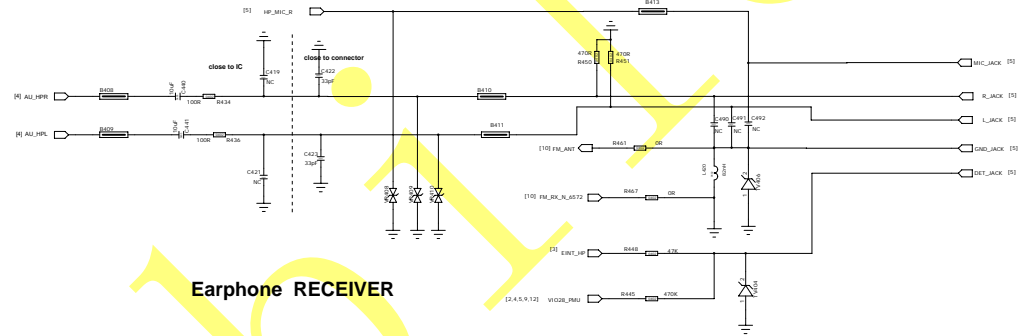
### Earphone MICPHONE



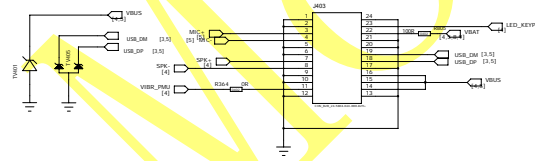
### Side key and Power key

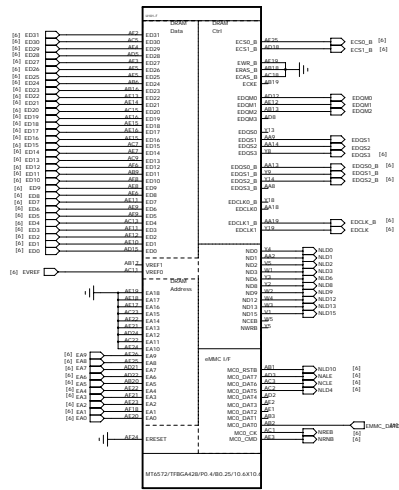


### Earphone RECEIVER

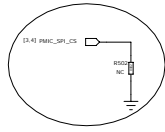


### B2B



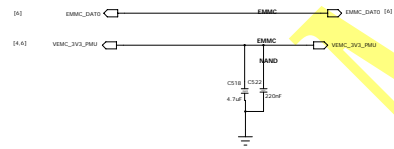


Please make sure the ball map is match to the MCP type you selected

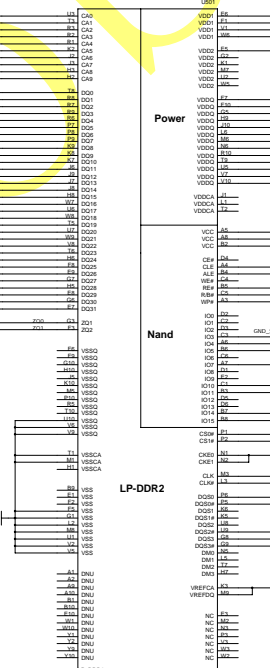
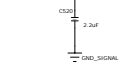


HW trapping PIN  
20K: VM=1.8V  
NC: VM=1.2V

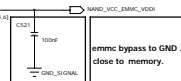
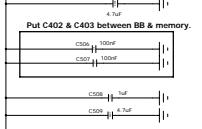
VM\_PU1 ← R501 0R → VM\_PU1



EMMC\_VCC\_PU1 [2.3.4.6.7.9.12] VM18\_PU1



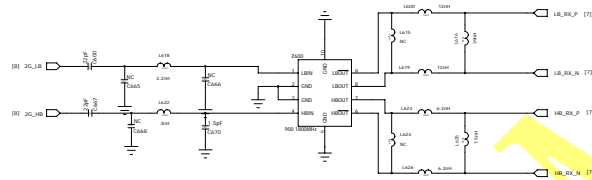
Memory MCP



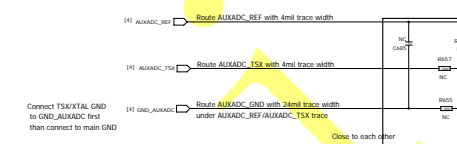
SKY77590 control logic table

Enable VctC VctB VctA				
MODE	LCM	DCXO	XMODE	VDDI/O
LB_GMSK_TX	H	L	L	H
HB_GMSK_TX	H	L	L	H
LB_EDGE_TX	H	H	L	H
HB_EDGE_TX	H	H	H	H
TRX1	L	H	L	L
TRX2	L	H	L	L
TRX3	L	H	L	H
TRX4	L	H	H	H
TRX5	L	L	L	L
TRX6	L	L	L	H

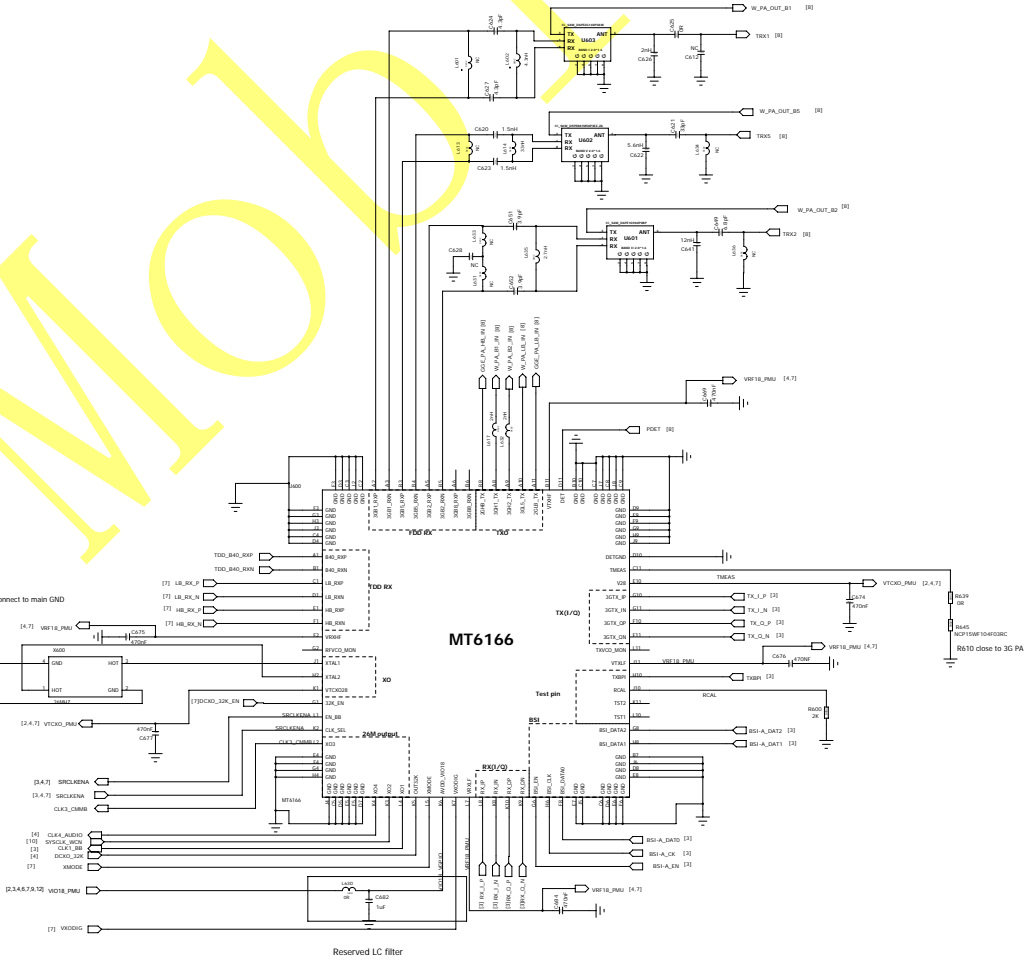
MODE	LCM	DCXO	XMODE	VDDI/O
DCXO + 32K_XO	0	DCXO	1	0
DCXO + 32K-Less	1	10T0K000	1	10T0K000



Two Application Circuit Conditions,  
 1.TSX Circuit : X600=TSX, R653=R656=NC, R654=100K+-1%, R655=R657=0ohm  
 2.XTAL Circuit :X600=Mobile XTAL, R653=R656=0ohm, R654=R655=R657=NC

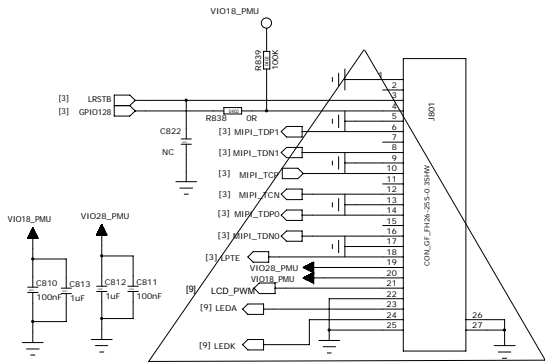


Route AUXADC\_REF/AUXADC\_TSX as differential trace with well GND shielding and route AUXADC\_GND with 24mil trace width under AUXADC\_TSX/AUXADC\_REF trace to provide return current path.



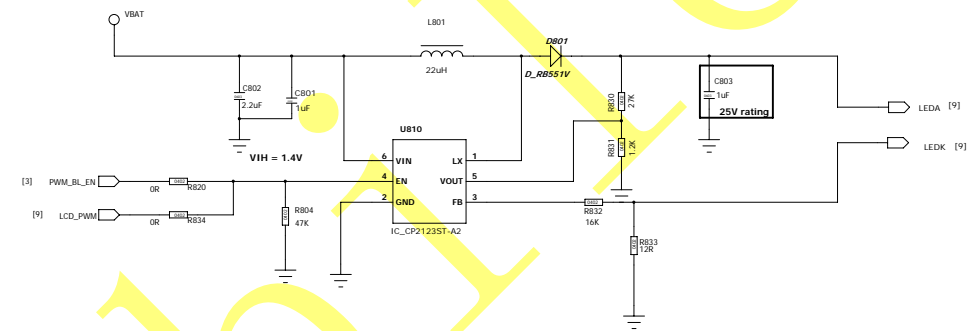


### LCD

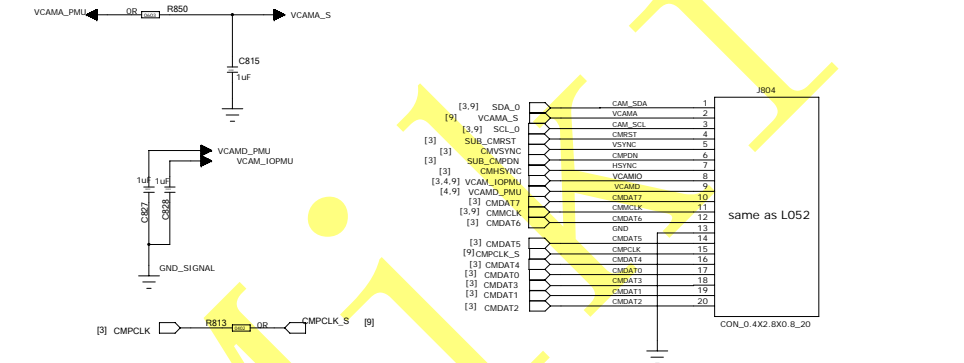
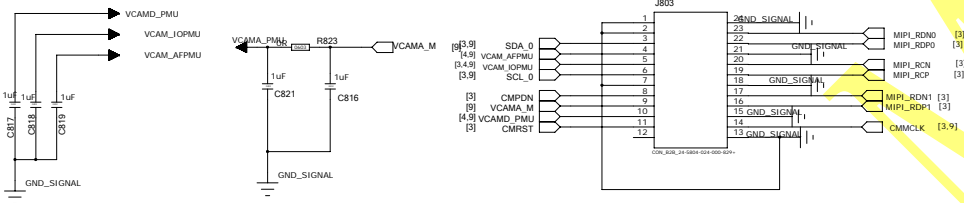


9 LED series

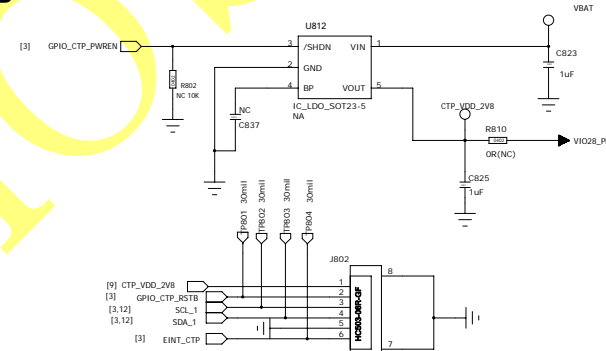
### BACKLIGHT DRIVER



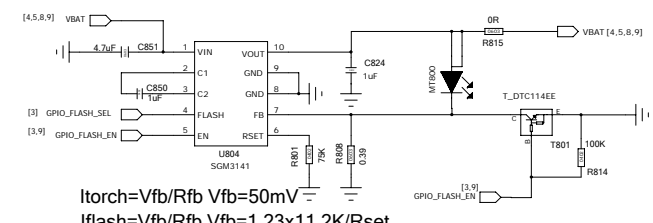
### Camera



### CTP



### FLASH LED

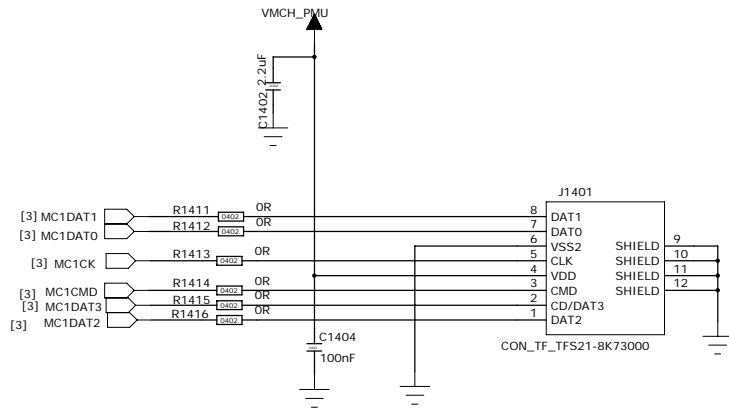


$I_{torch} = V_{fb}/R_{fb}$   $V_{fb} = 50mV$   
 $I_{flash} = V_{fb}/R_{fb}$   $V_{fb} = 1.23x11.2K/R_{set}$

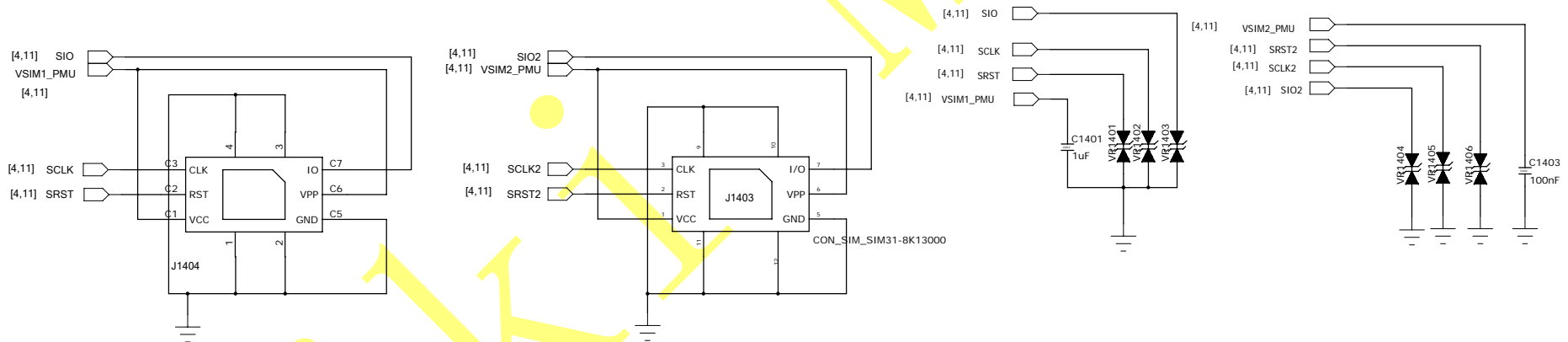




# SD CARD

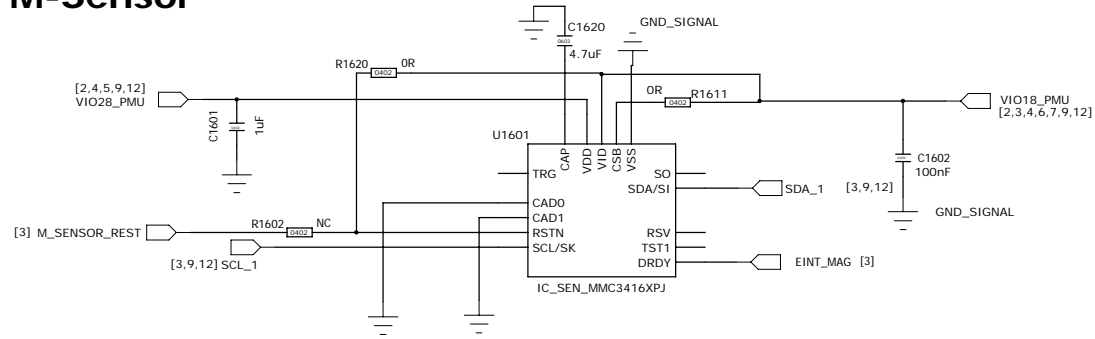


# SIM CARD

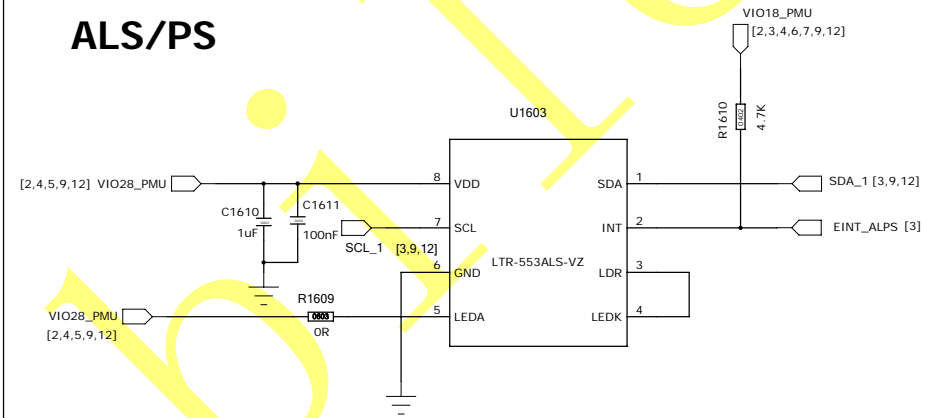


Title			<b>Memory CARD</b>		
Size	Document Number				Rev
F	<b>AX705 Mobile PHONE</b>				V1.0
Date:	Friday, June 24, 2016			Sheet	11 of 13

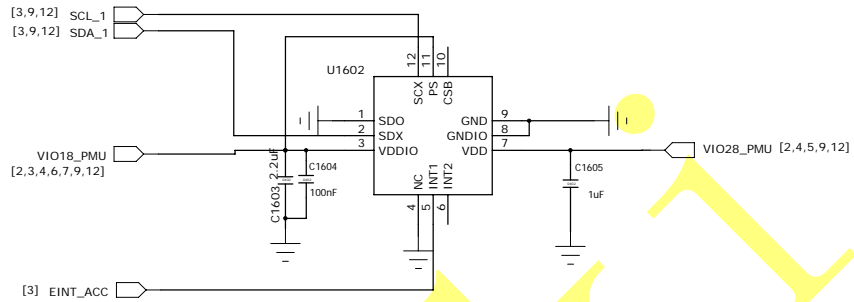
## M-Sensor



## ALS/PS



## G-Sensor



Title

**Memory CARD**

Size  
F

Document Number

**AX705 Mobile PHONE**

Rev  
V1.0

Date:

Friday, June 24, 2016

Sheet 12 of 13