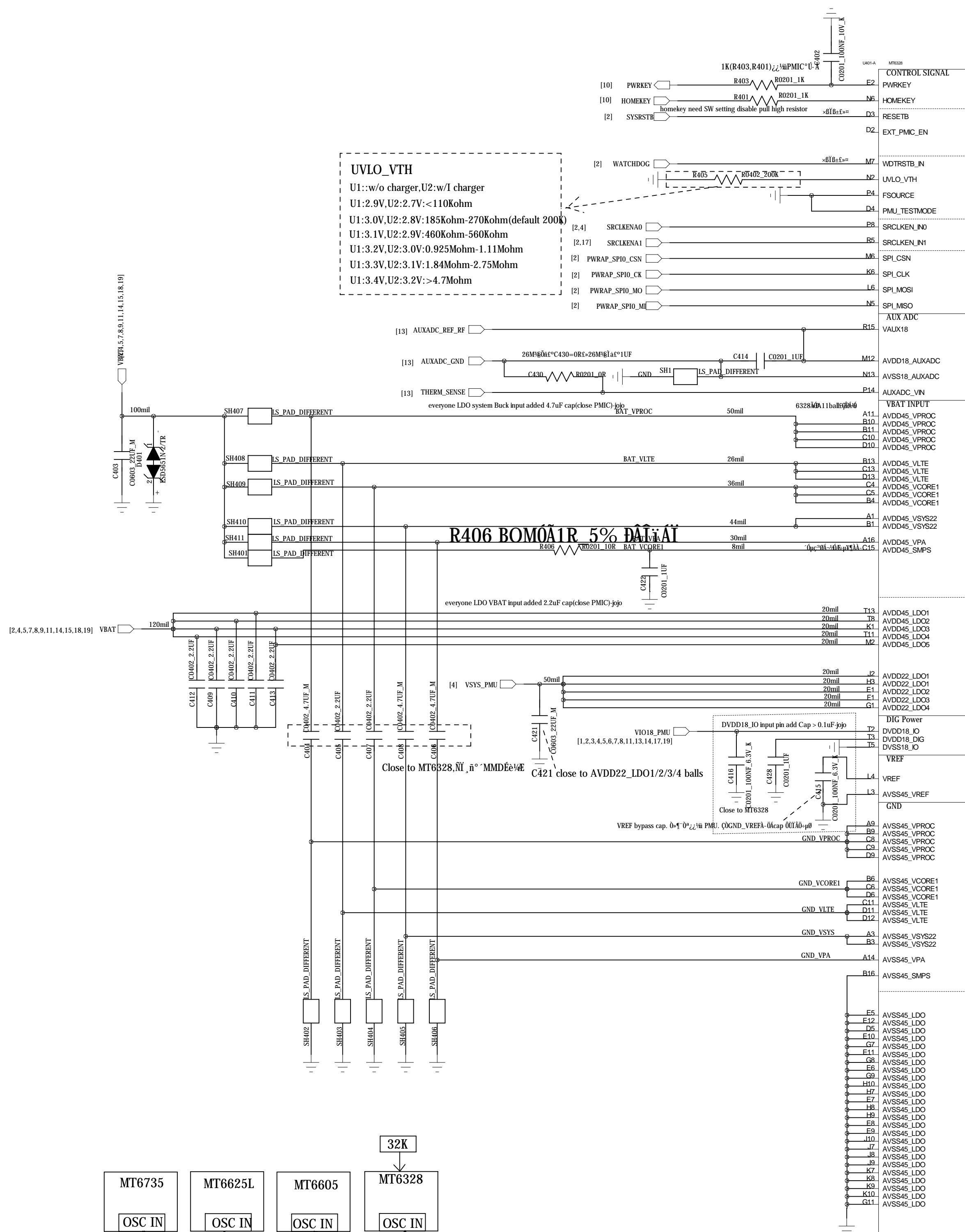






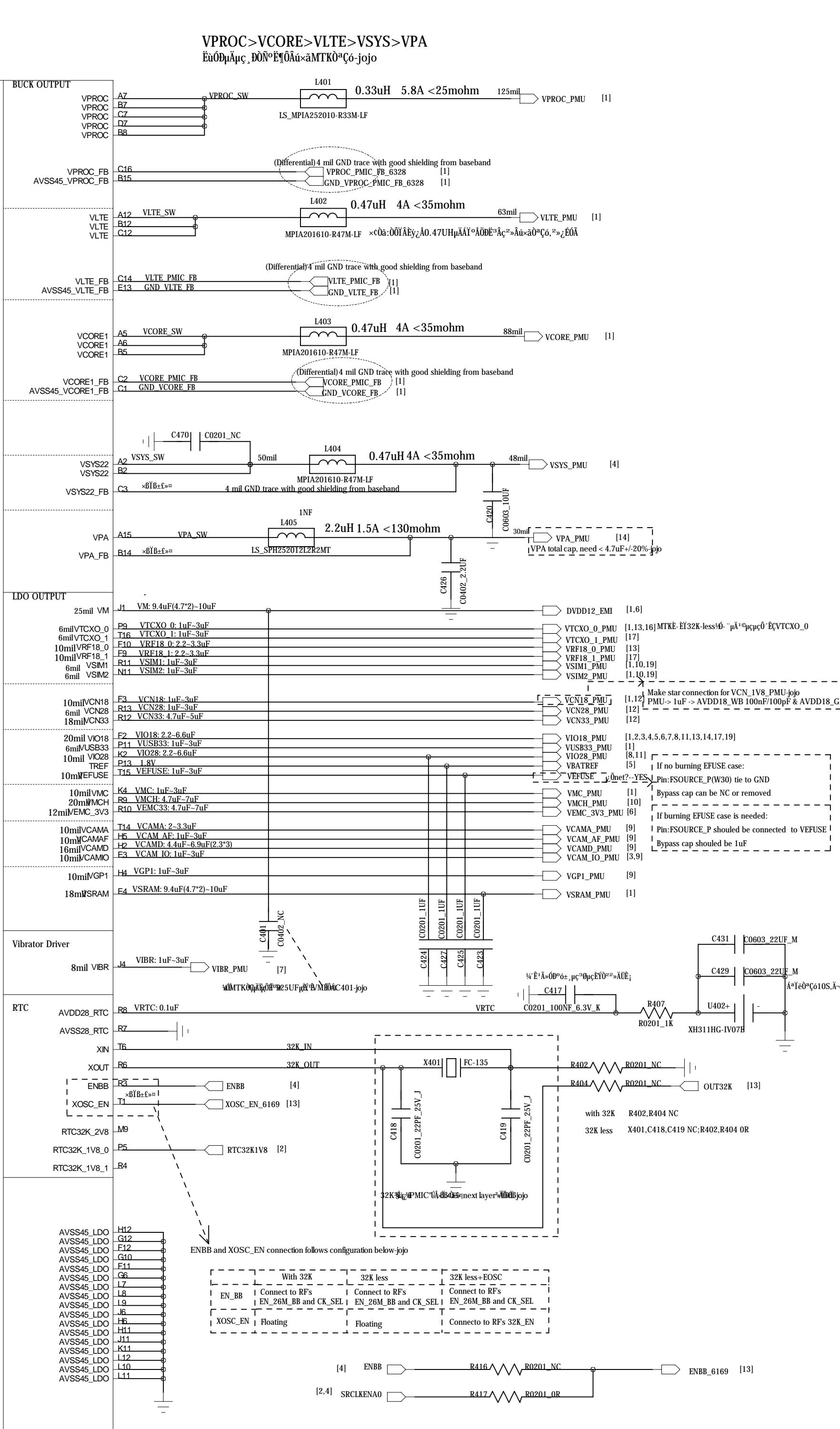


REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



**UVLO\_VTH**  
 U1::w/o charger,U2:w/I charger  
 U1:2.9V,U2:2.7V:<110Kohm  
 U1:3.0V,U2:2.8V:185Kohm-270Kohm(default 200Kohm)  
 U1:3.1V,U2:2.9V:460Kohm-560Kohm  
 U1:3.2V,U2:3.0V:0.925Mohm-1.11Mohm  
 U1:3.3V,U2:3.1V:1.84Mohm-2.75Mohm  
 U1:3.4V,U2:3.2V:>4.7Mohm

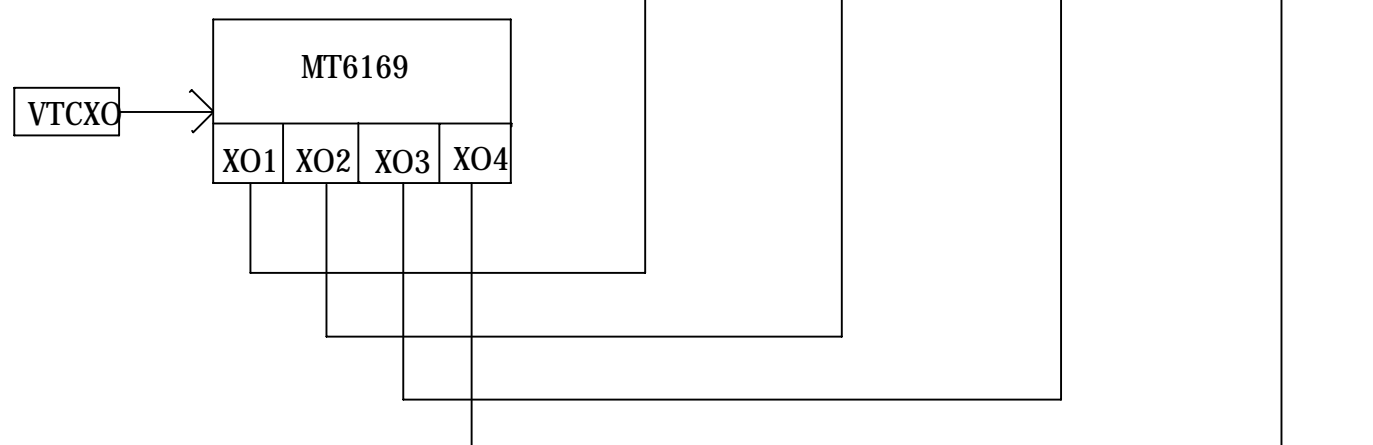
everyone LDO system Buck input added 4.7µF can close PM



MT6735 Core Powers	PMIC Power source	Buck/LDO	Min. Voltage	Max. Voltage
VPROC(DVDD_CPU)	MT6328's VPROC	Buck	0.85	1.265
VCORE(DVDD_CORE)	MT6328's VCORE	Buck	0.85	1.265
VLTE(DVDD_LTE)	MT6328's VLTE	Buck	0.85	1.155
VM(DVDD_EMI)	MT6328's VM	LDO	1.14	1.300
VSRAM(DVDD_SRAM)	MT6328's VSRAM	LDO	0.85	1.310
LTE_VSRAM_EXT(VLTE_SRAM)	External Buck:LTE_VSRAM_EXT	Buck	0.85	1.150

BUCK	Output Voltage(V)	Output Current(mA)	Supply
VPROC	1.15V[0.6V-1.31V]6.25mV	5000	CPU Processor
VCORE	1.15V[0.6V-1.31V]6.25mV	3500	GPU+SoC
VLTE	1.05V[0.6V-1.31V]6.25mV	2800	LTE Core
VSYS	2V	1900	System Power
VPA	3.4V(0.5V-3.4V)	600	MT6169 PA

LDO	Output Voltage(V)	Output Current(mA)	Supply
VTCX00	2.8	40	MT6169 TCXO
VTCX01	2.8	40	MT6158 TCXO
VCN33	3.3	350	MT6625L 3.3V
VCN28	2.8	40	MT6625L 2.8V
VAUX18	1.8V	40	AUXADC 1.8V
VAUD28	2.8(1.5/1.8/2.5/2.8)	40	Audio Power
VCAMA	2.8(1.2/1.3/1.5/1.8/2.0/2.8/3.0/3.3)	200	Camera Analog power
VMCH	2.9(2.9/3.0/3.3)	800	SD 3.0
VCAM_AF	2.8(1.2/1.3/1.5/1.8/2.0/2.8/3.0/3.3)	200	Camera AF power
VGP1	2.8(1.2/1.3/1.5/1.8/2.5/2.8/3.0/3.3)	200	CTP
VIO28	2.8	200	Sensor_IR LED
VIBR	2.8(1.2/1.3/1.5/1.8/2.0/2.8/3.0/3.3)	100	Sensor_IR LED?
VMC	2.9(1.8/2.9/3.0/3.3)	200	SD Card 3.0
VEFUSE	1.8(1.8/1.9/2.0/2.1/2.2)	200	Efuse
VEMC33	3.3(3.0/3.3)	400	EMMC 5.0 power
VUSB	3.3	20	USB 2.0
VSIM1	1.8(1.7/1.8/1.86/2.76/3.0/3.1)	50	SIM CARD 1
VSIM2	1.8(1.7/1.8/1.86/2.76/3.0/3.1)	50	SIM CARD 2
VRTC	2.8	2	RTC
DVDD18_DIG	1.8	20	



DRAWN: GUWEINA		DATED: <Drawn Date>				01_BLOCK_DIAGRAM			
CHECKED: <Checked By>		DATED: <Checked Date>		CODE:	SIZE:	DRAWING NO:		REV:	
QUALITY CONTROL: <QC By>		DATED: <QC Date>		<Code>	D	<Drawing Number>		V1.0	
RELEASED: <Released By>		DATED: 9/22/14		SCALE: <Scale>			SHEET: 4f 20		



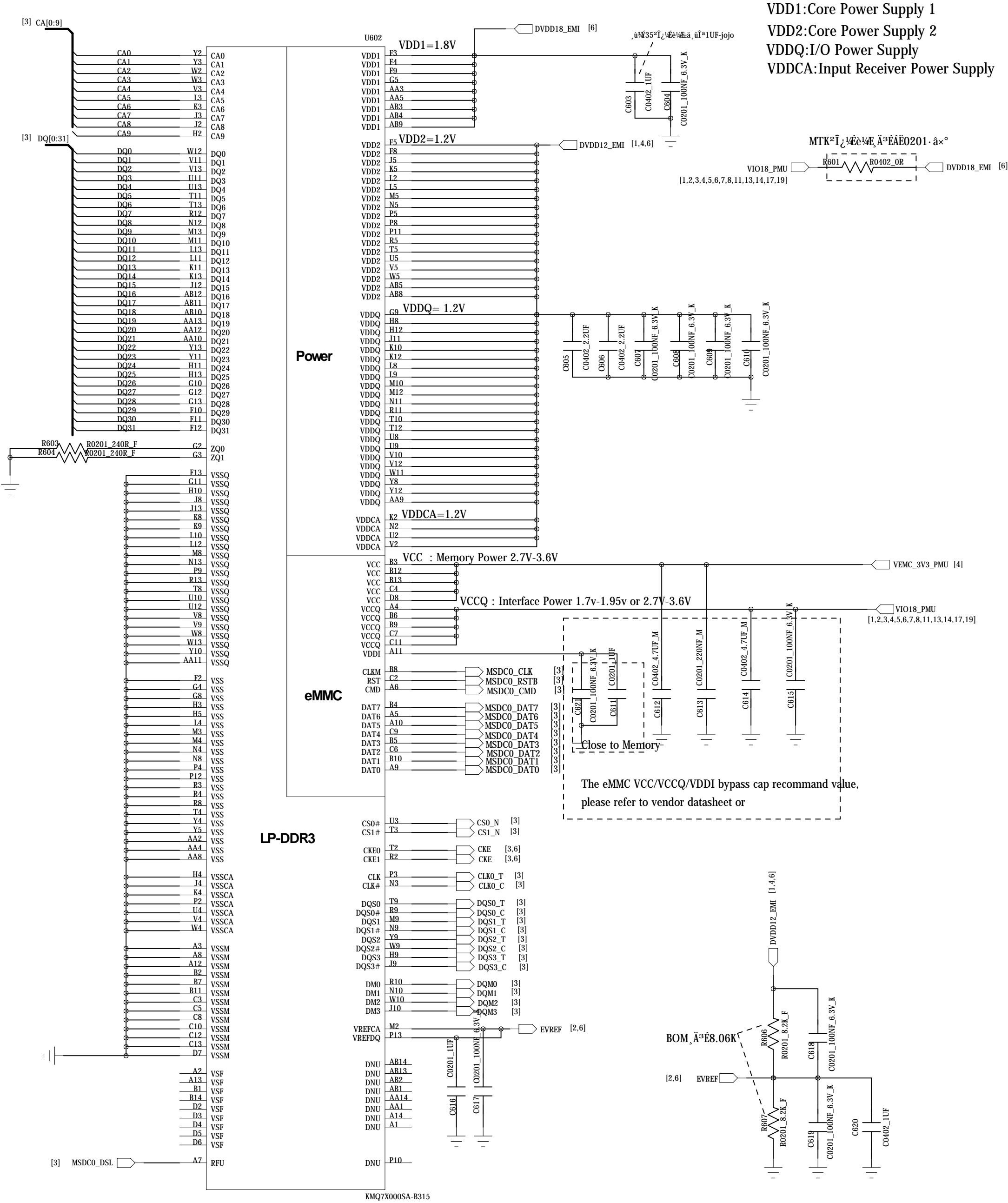


REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

eMMC+LPDDR3

DDR3 Flash

Memory	Part Number	Manufacturer	Size	Ball	Status
8GB+1GB	H9TQ64A8GTCUR-KUM	Hynix	11.5*13*1.0	221	On going
	KMQ72000SM-B316	Kingman	11.5*13*1.0	221	On going



VDD1:Core Power Supply 1  
VDD2:Core Power Supply 2  
VDDQ:I/O Power Supply  
VDDCA:Input Receiver Power Supply

BOM: 1.8V, 0.6K

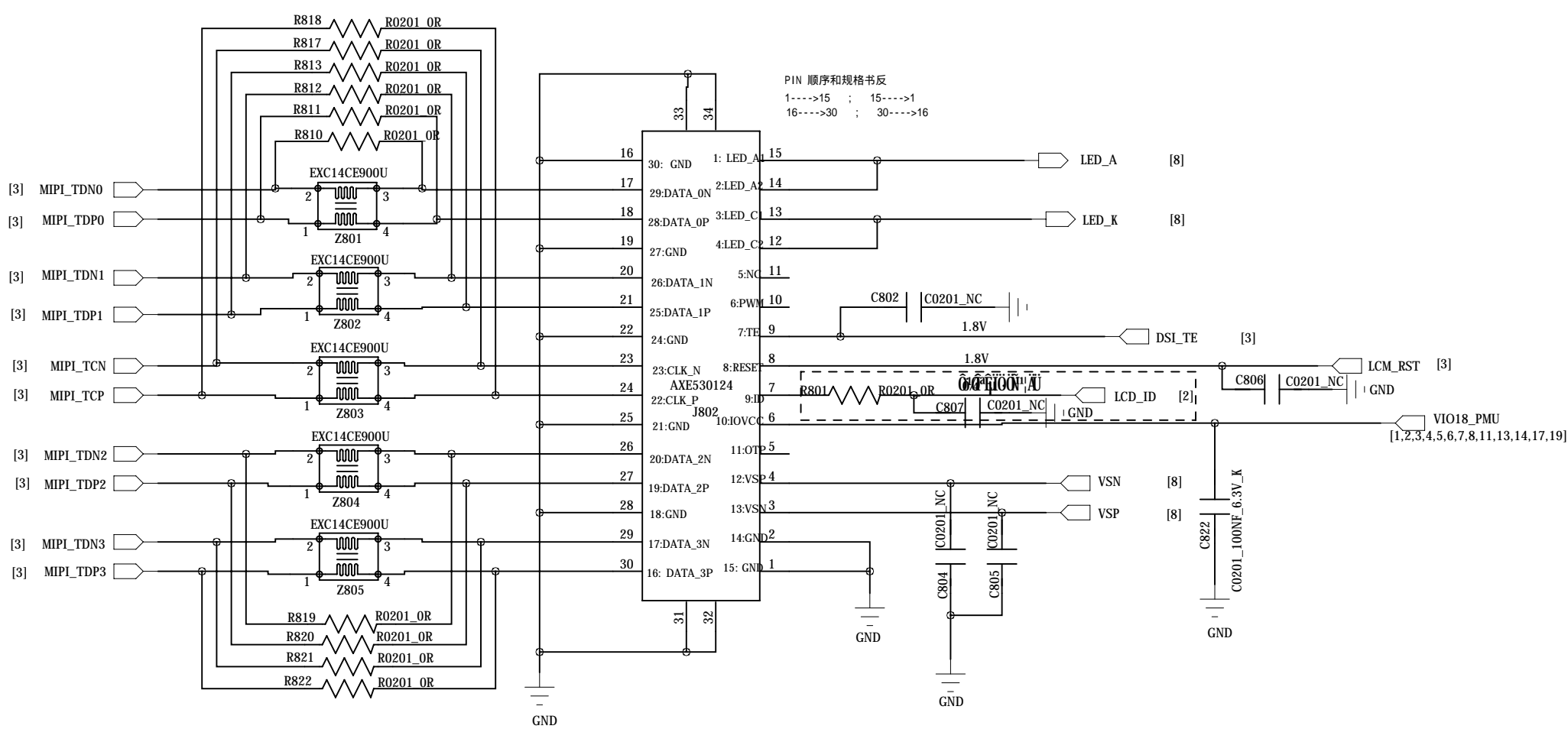
COMPANY: HQ			
TITLE: 01_BLOCK_DIAGRAM			
DRAWN: GUWEINA	DATED: <Drawn Date>	CODE: <Code>	SIZE: D
CHECKED: <Checked By>	DATED: <Checked Date>	DRAWING NO: <Drawing Number>	REV: V1.0
QUALITY CONTROL: <QC By>	DATED: <QC Date>	SCALE: <Scale>	
RELEASED: <Released By>	DATED: 9/22/14	SHEET: 6f 20	



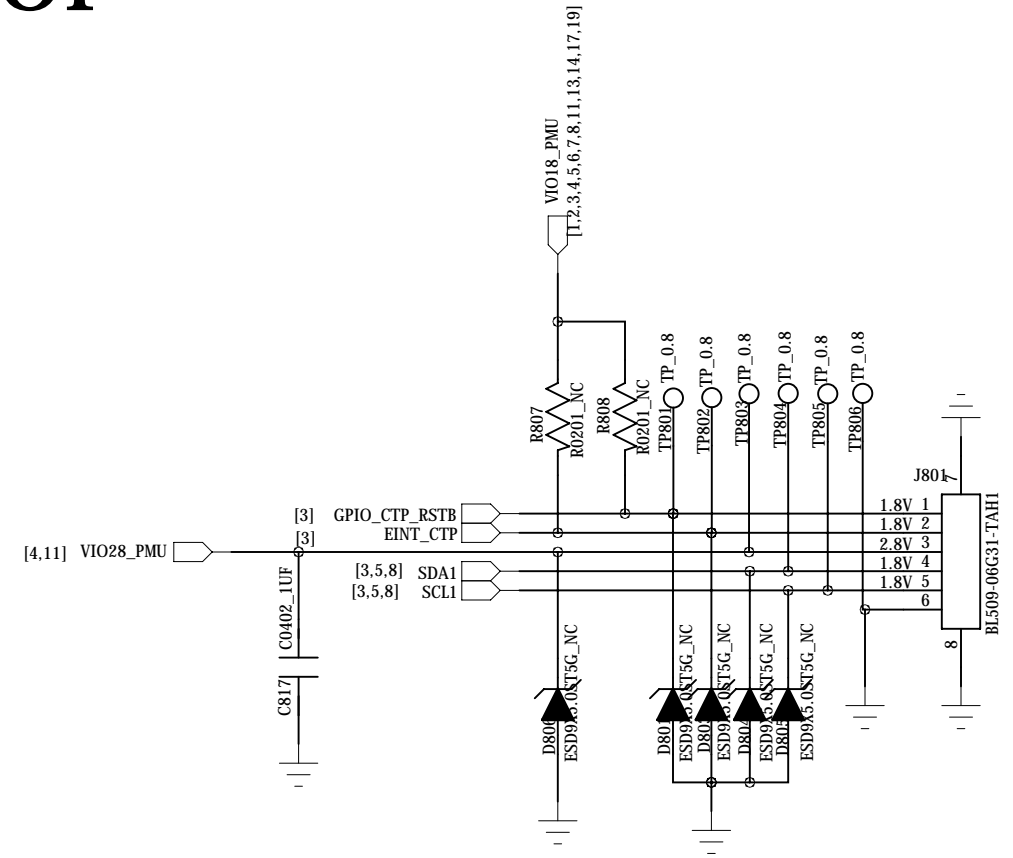
REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

LCD INTERFACE

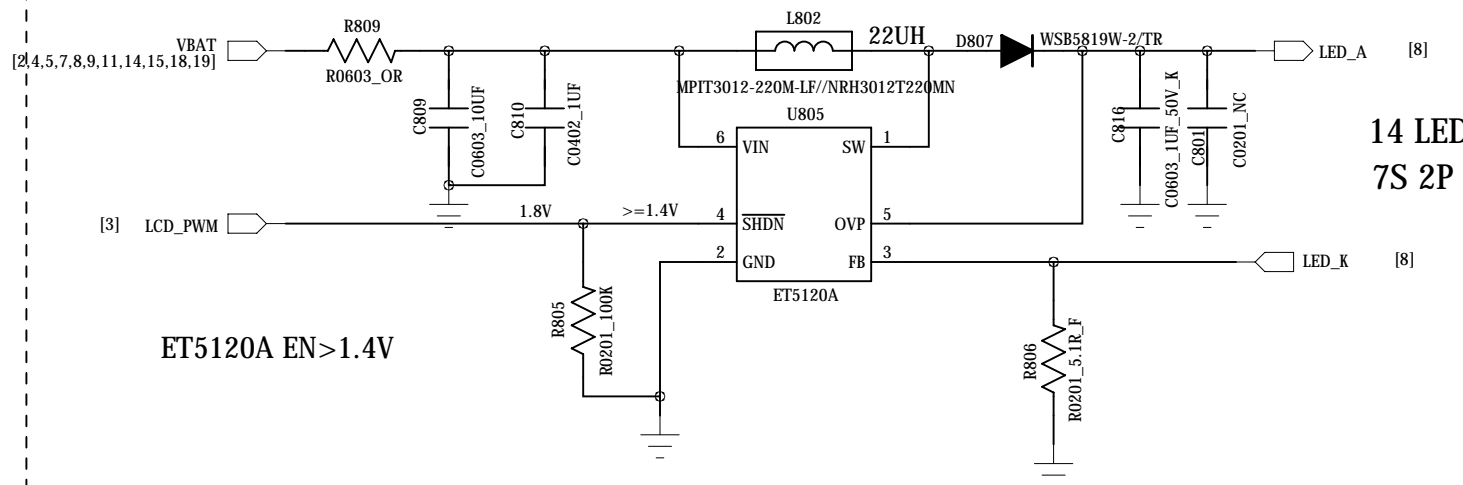
ÁàÏëçÍ¹©ÁÏ 2²ç7´®



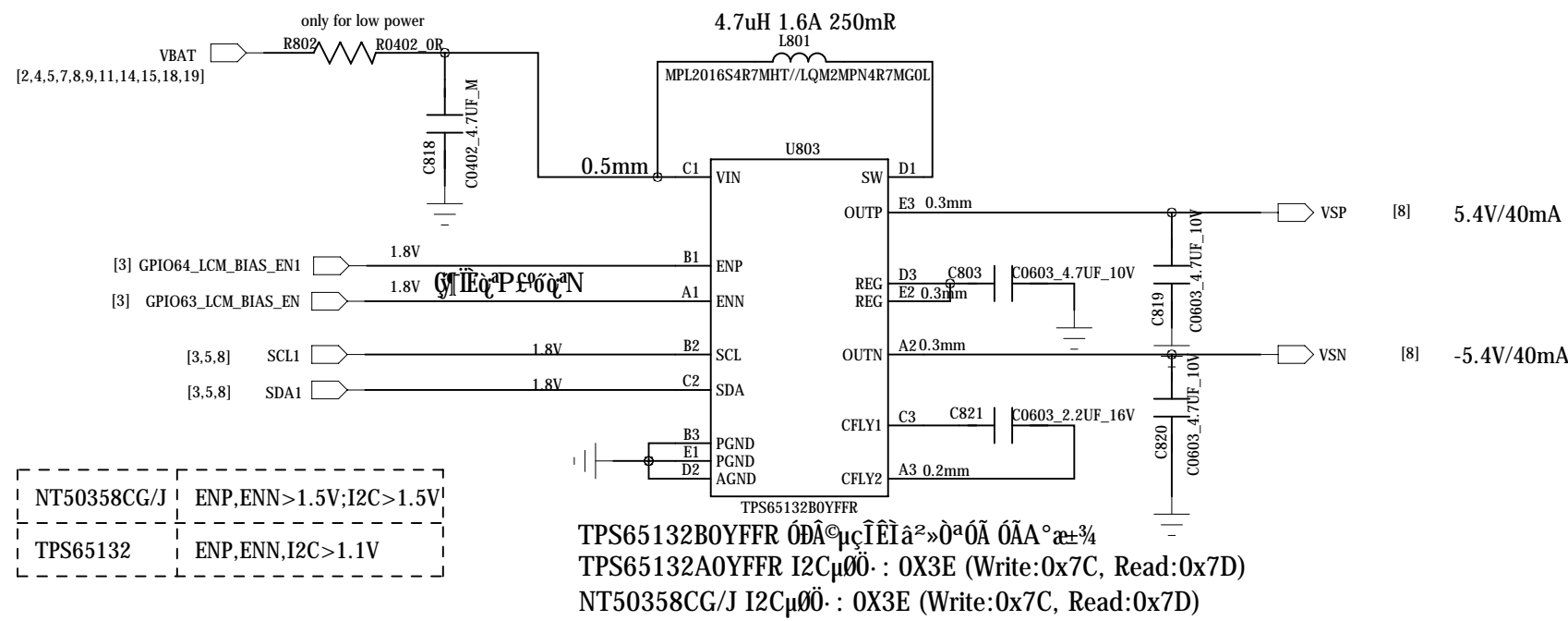
CTP COF



LED Driver



LCD +/-5V Driver



COMPANY: HQ			
TITLE: 01_BLOCK_DIAGRAM			
CODE: <Code>	SIZE: D	DRAWING NO: <Drawing Number>	REV: V1.0
SCALE: <Scale>		SHEET: 8f	20

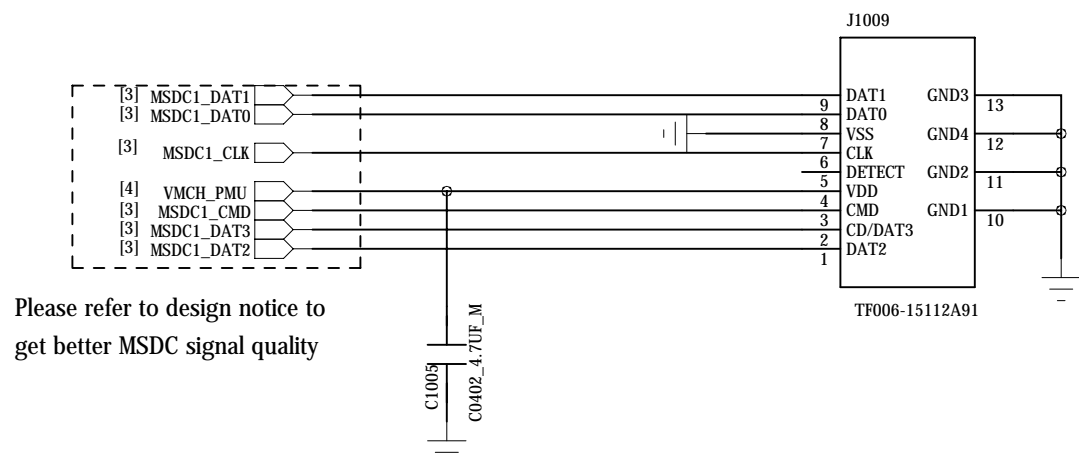
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CHECKED: <Checked By>	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: <Released By>	DATED: 9/22/14





REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

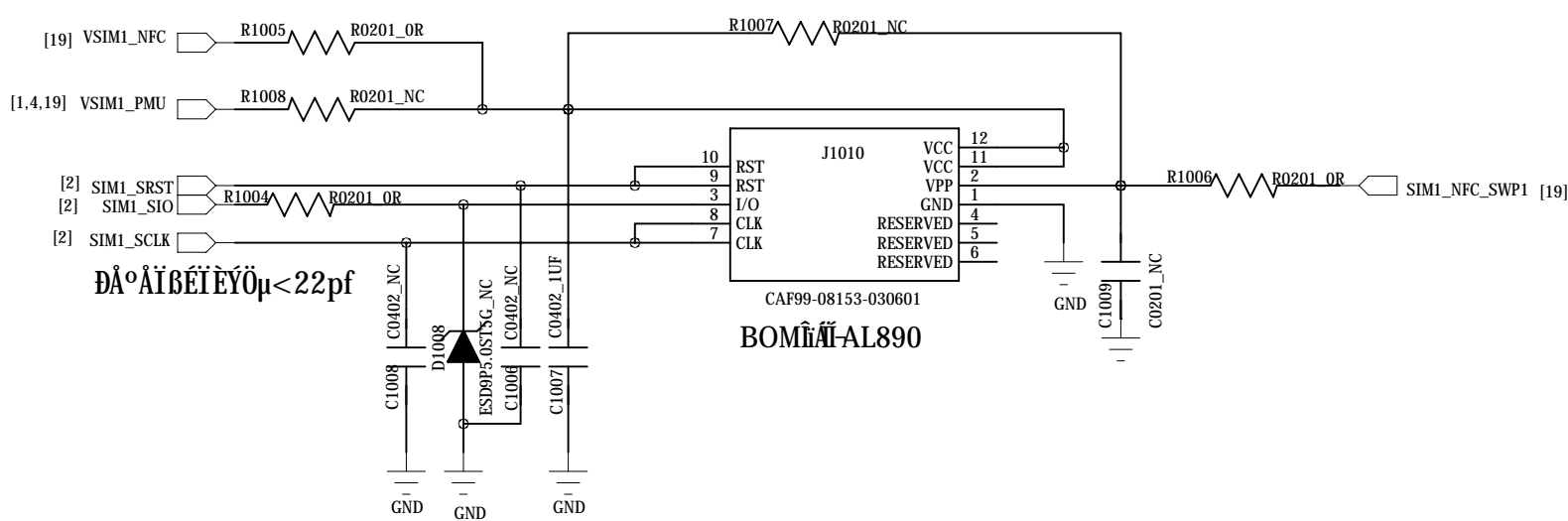
## T\_FLASH



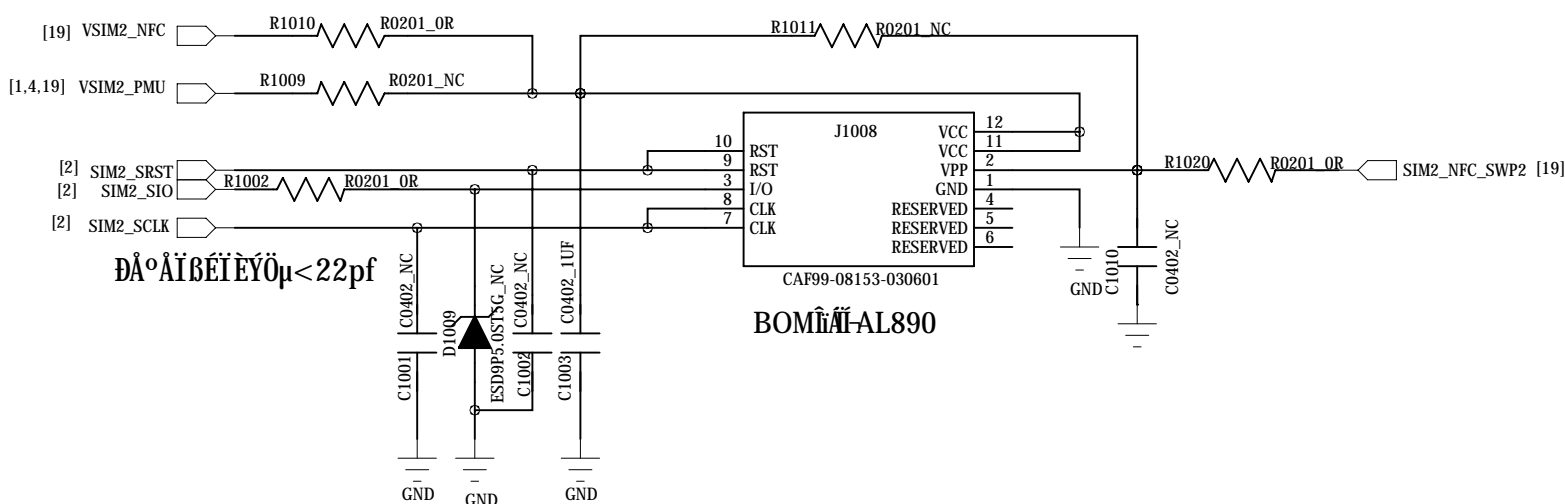
The total equivalent capacitance of MSDC ESD protection device and de-sense bypass CAP must be <=10pF  
But for NFC app. equivalent capacitance of MSDC\_ NFC\_ SWPIO and MSDC\_ NFC\_ VCCSWP should <=0.5pF

## SIM2

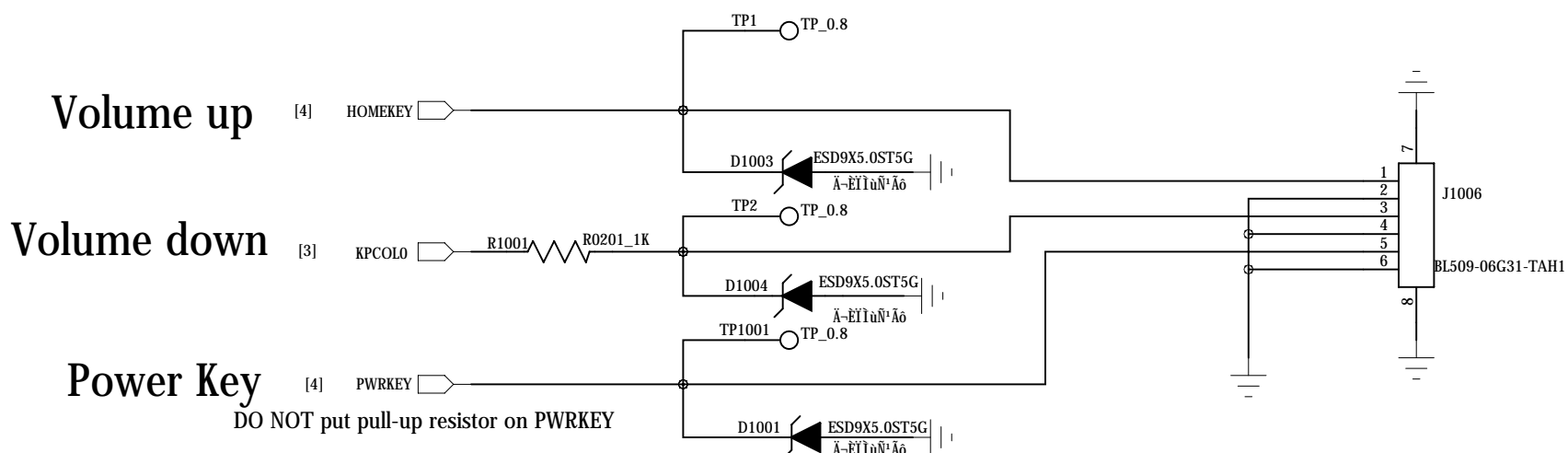
### SIM1



### SIM2



## KEY



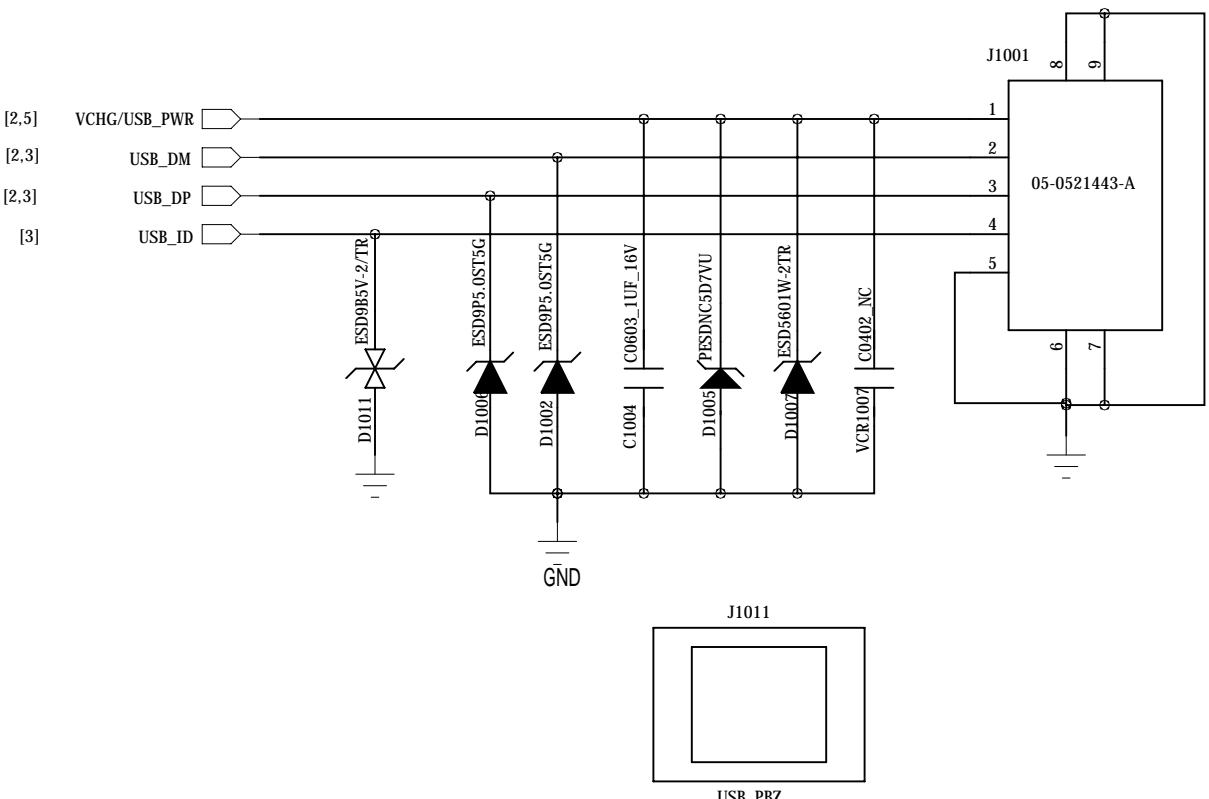
Notice :  
FCHR\_ENB de-bounce time is around 50ms, so it may have quick-press-miss-key issue (ex: miss key during press key 7 times in 1 sec)  
If you have this concern, please change Volume\_Down\_Key design from FCHR\_ENB to KCOLx

Long press to shutdown  
5/8/11/14 s with <1% accuracy  
There are 3 option:  
PWRKEY+HOMEKEY  
PWRKEY only(setting by register)  
HOMEKEY only(setting by register)

Re-start  
1.Phone will re-power on if keep long press PWRKEY after system shutdown  
2.If has SPAR function,Phone will re-power on after system shutdown

During download mode, default = PWRKEY + FCHR\_ENB  
For other case (exclude download mode), default = PWRKEY only

## Micro USB

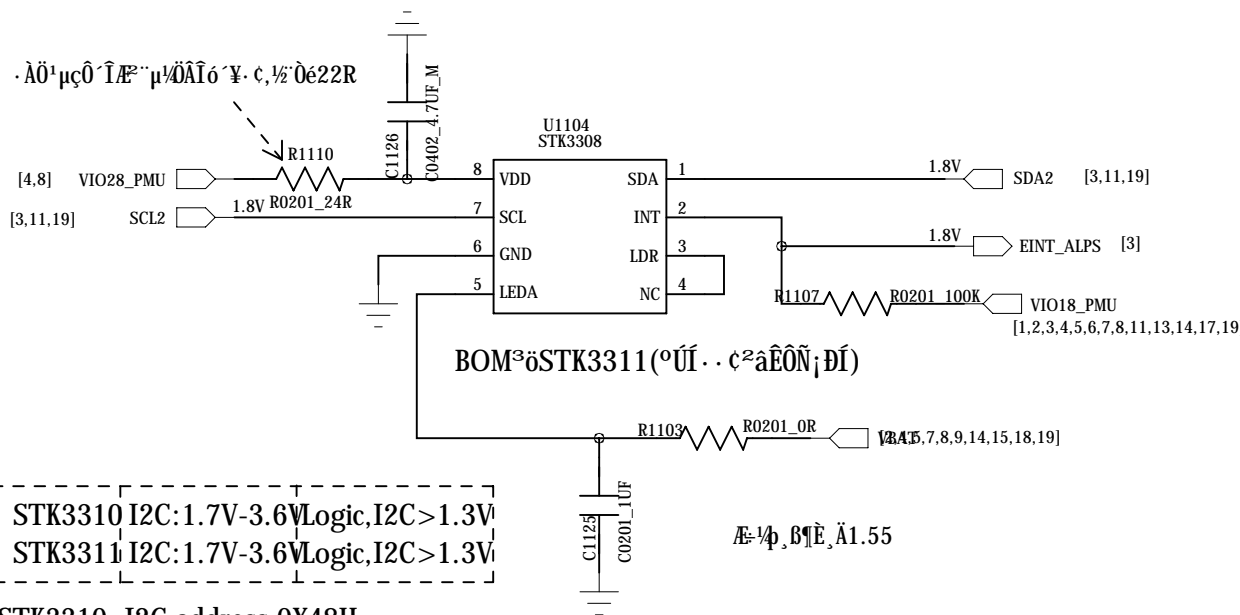


COMPANY: HQ			
TITLE: 01_BLOCK_DIAGRAM			
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SCALE: <Scale>			
SHEET: 40 20			

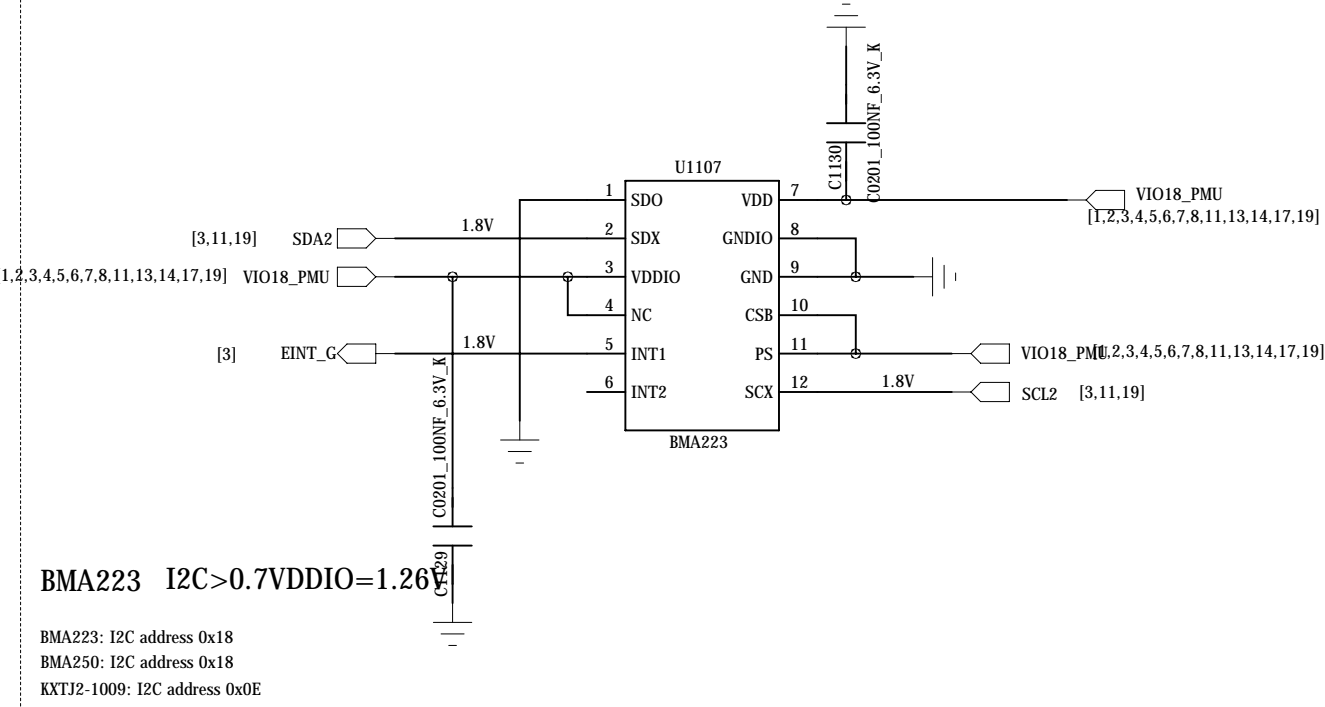
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CHECKED: <Checked By>	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: <Released By>	DATED: 9/22/14

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

ALS&PS



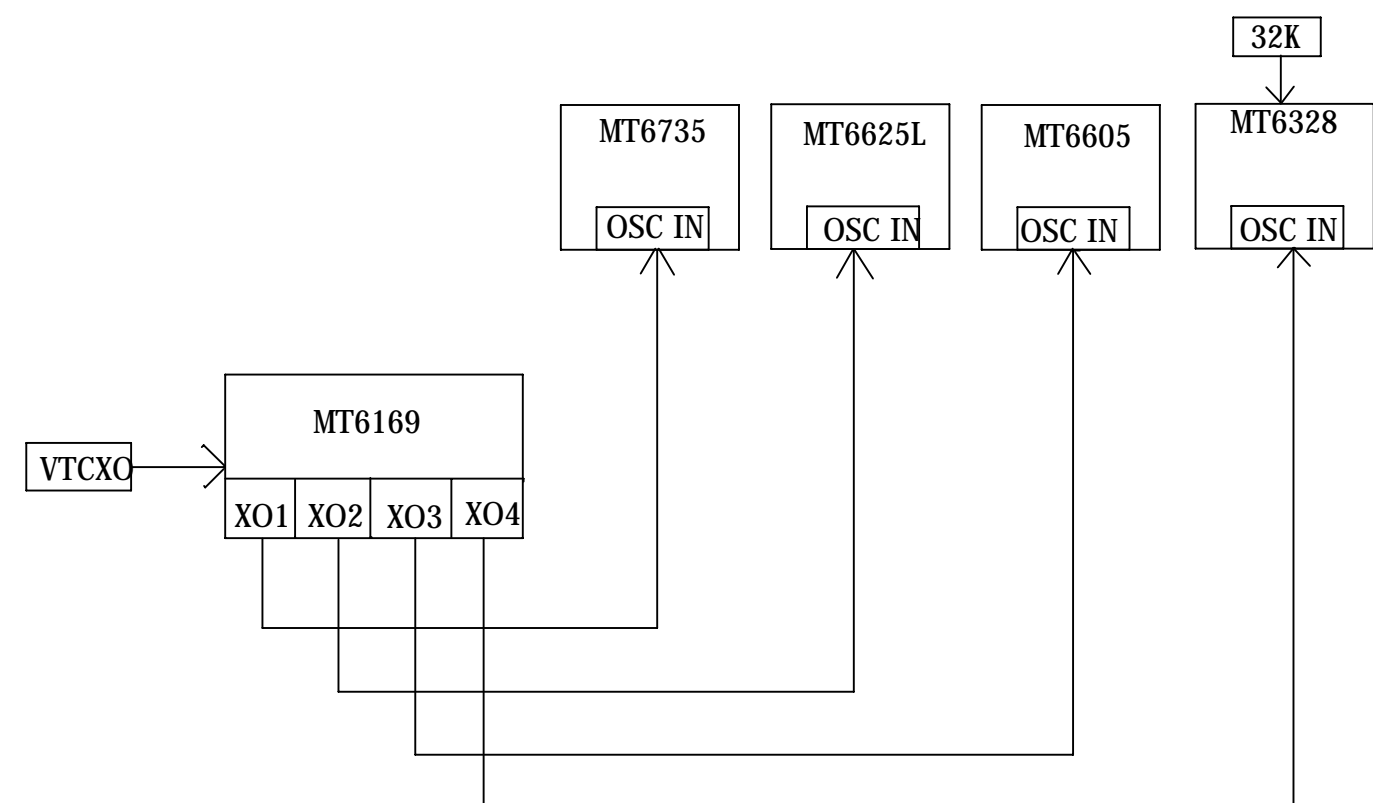
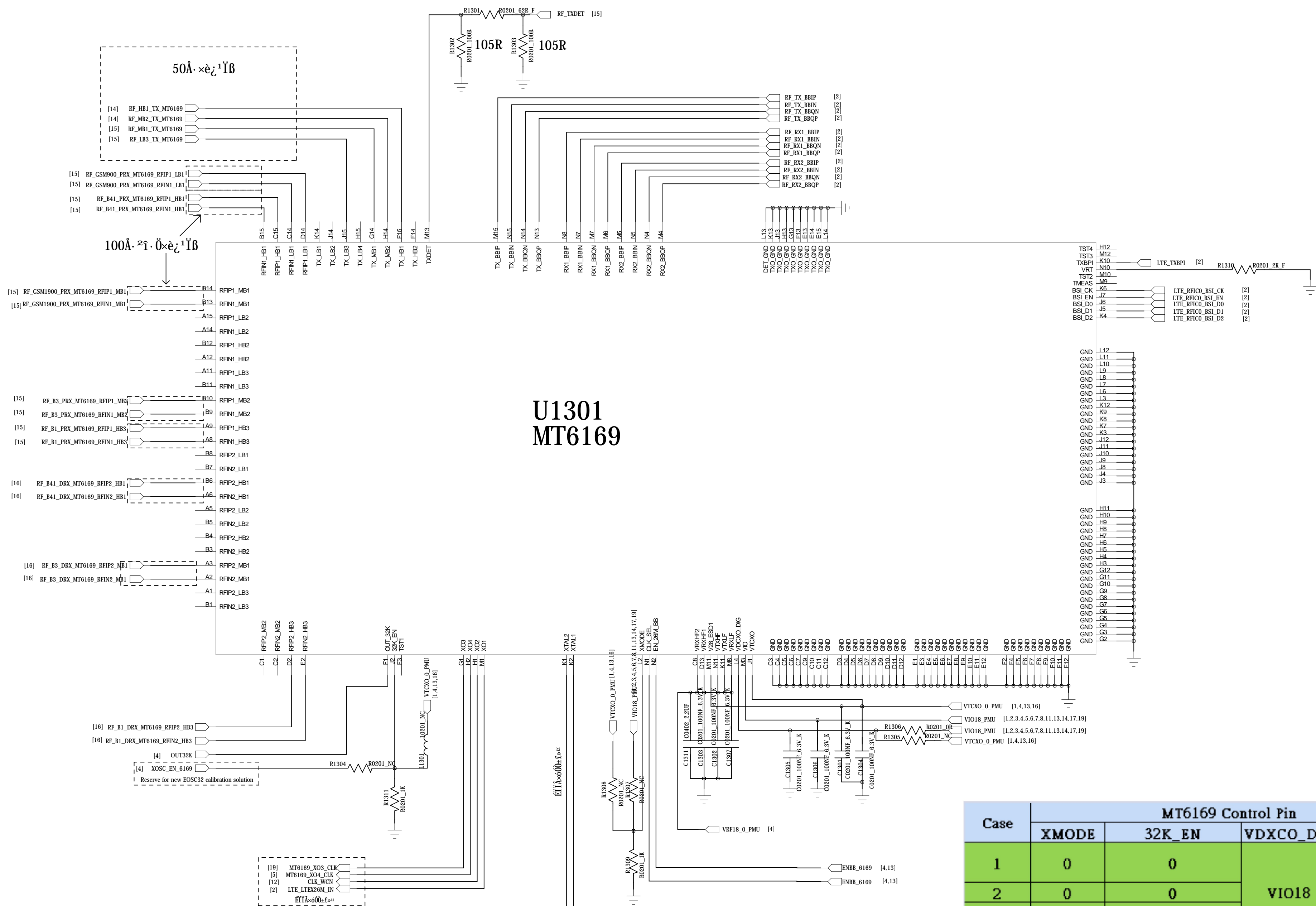
G-sensor



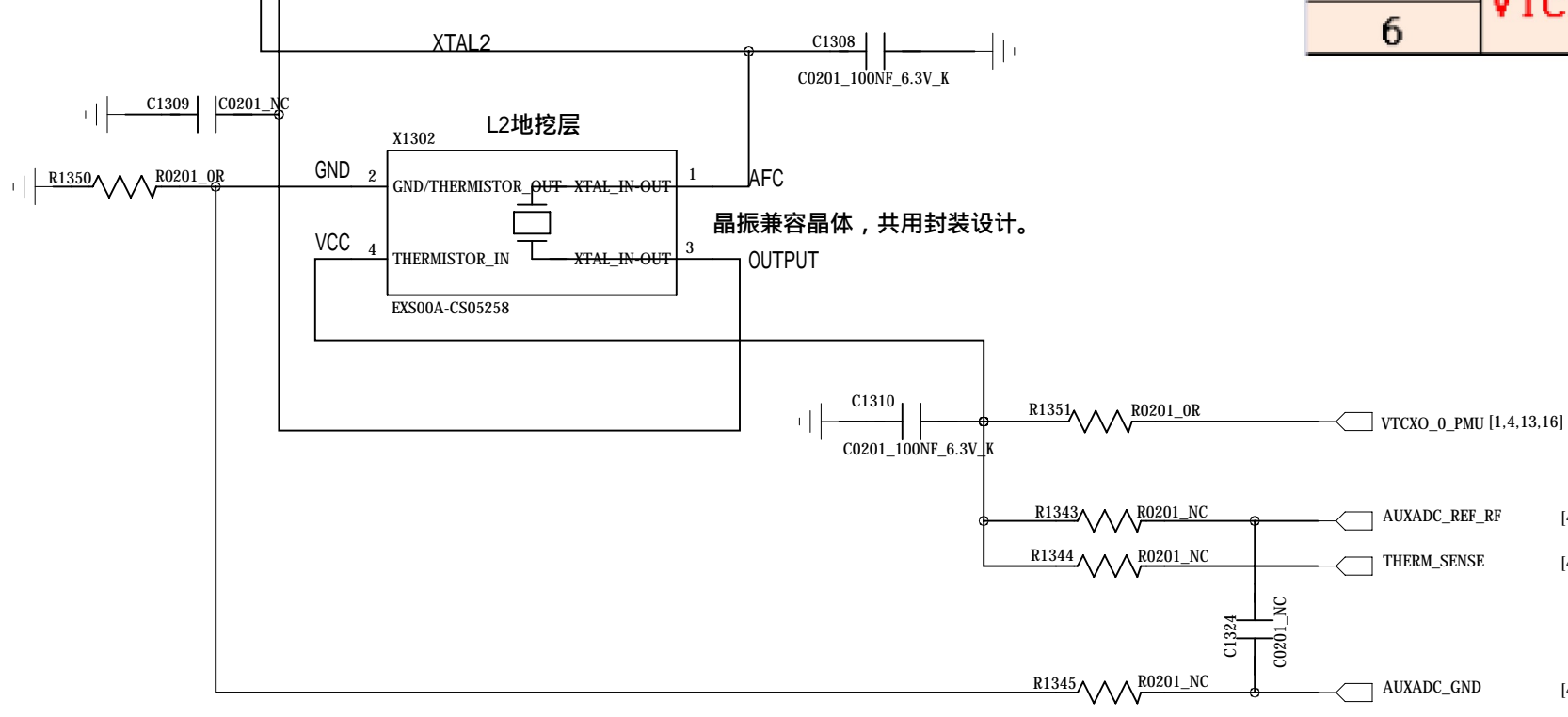
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TITLE: 01_BLOCK_DIAGRAM			
DRAWN: GUWEINA	DATED: <Drawn Date>	CODE: <Code>	SIZE: D
CHECKED: <Checked By>	DATED: <Checked Date>	DRAWING NO: <Drawing Number>	REV: V1.0
QUALITY CONTROL: <QC By>	DATED: <QC Date>	SCALE: <Scale>	
RELEASED: <Released By>	DATED: 9/22/14	SHEET: 44 20	



## MT6169



Case	MT6169 Control Pin				CLK_SEL	MT6169 CLK Output			Clock scheme
	XMODE	32K_EN	VDXCO_DIG	EN_26M_BB		OUT_32K	XO1	XO2~4	
1	0	0	VIO18	0	0	Off	Off	Off	VCTXO 32K XO
2	0	0		1	1	Off	26M Out	26M Out	
3	VIO18	0		0	0	Off	Off	Off	26M XO
4		0		1	1	Off	26M Out	26M Out	32K XO
5	VTCXO28	XOSC_EN_6169	VTCXO28	0	0	On	Off(LPM)	Off	26M XO
6				1	1	On	26M Out	26M Out	32K Less



晶振：7L26002007  
R1350=0R,R1351=0R,R1343=NC,R1344=NC,R1345=NC  
C1310=100NF,C1324=NC,C1308=100NF,C1309=NC

晶体：CT2520DB26000C0FZZA1（MTK建议用参考图上的，暂无验证列表）

R1350=NC, R1351=NC, R1343=100K, R1344=0  
C1310=NC, C1324=1UF, C1308=NC, C1309=NC

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

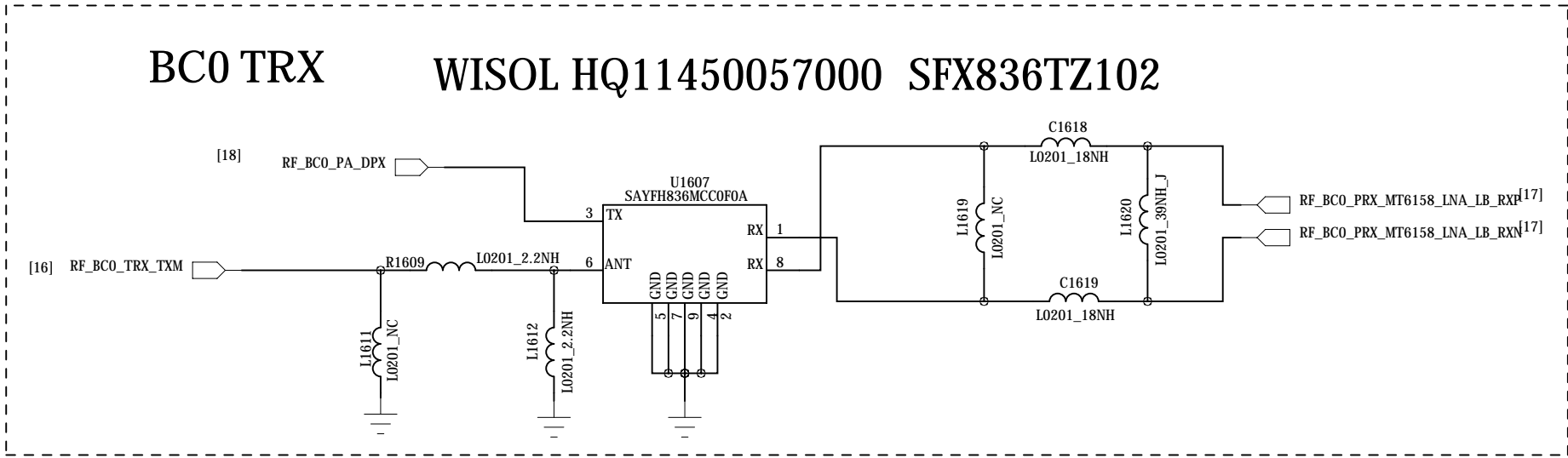
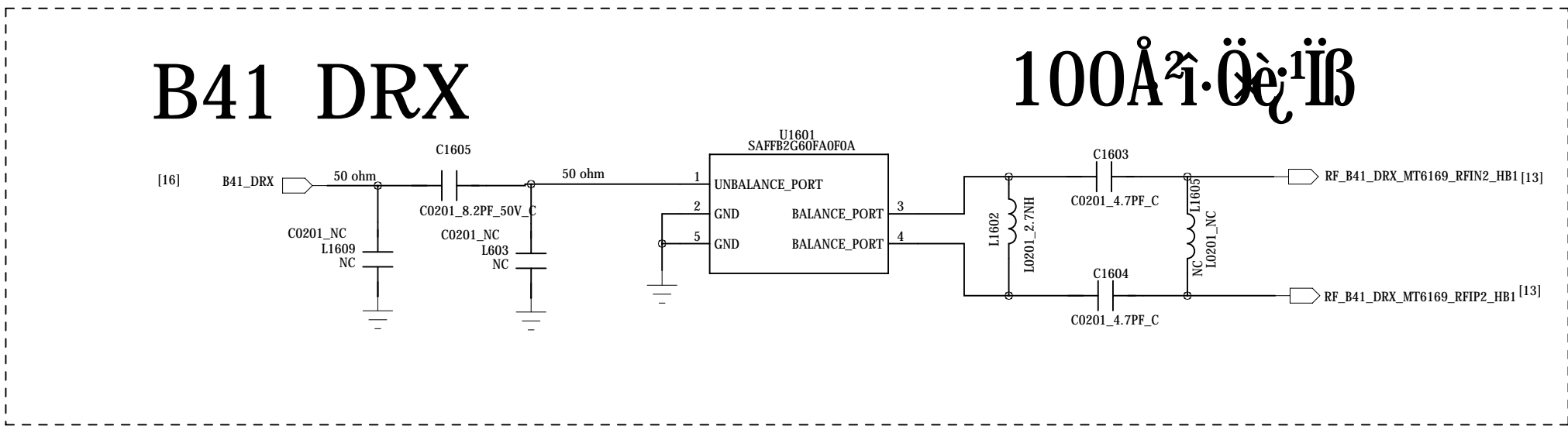
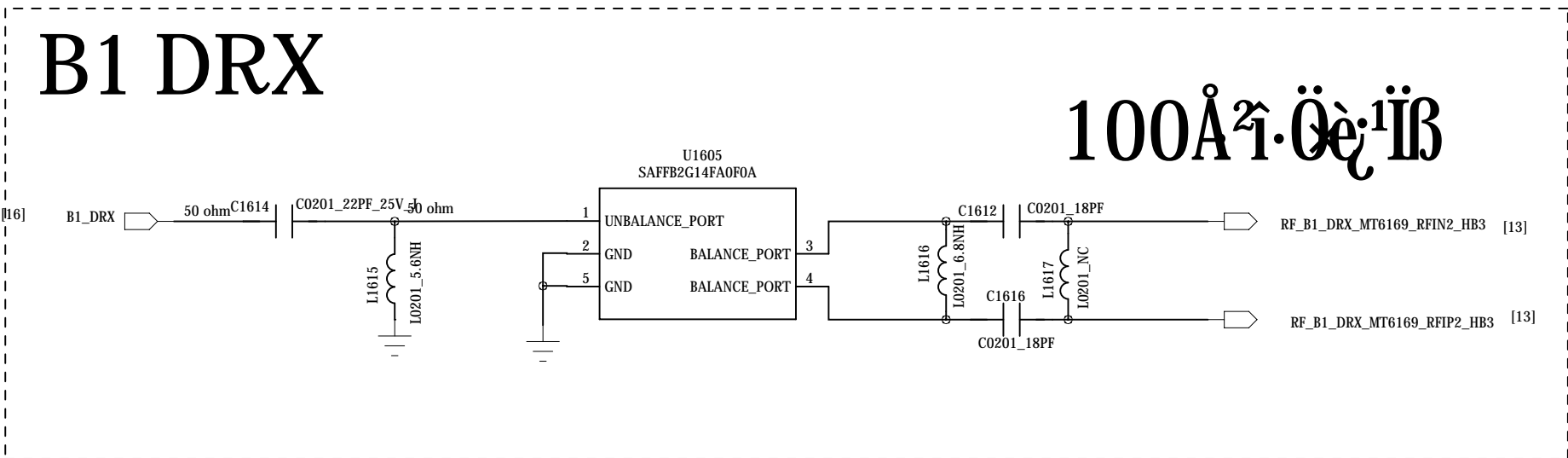
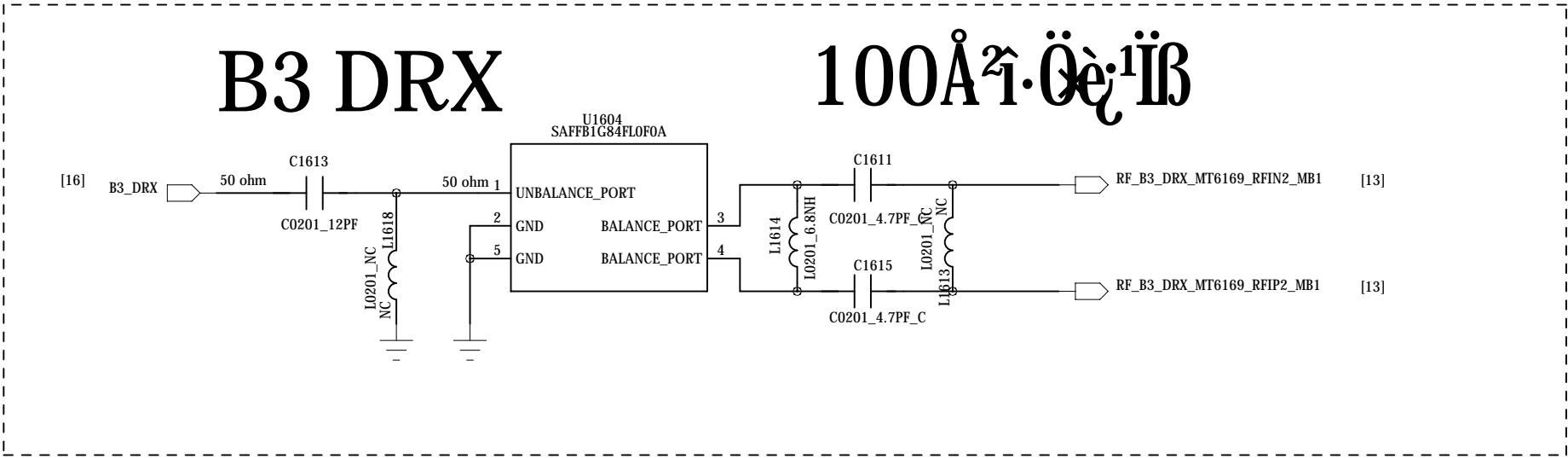
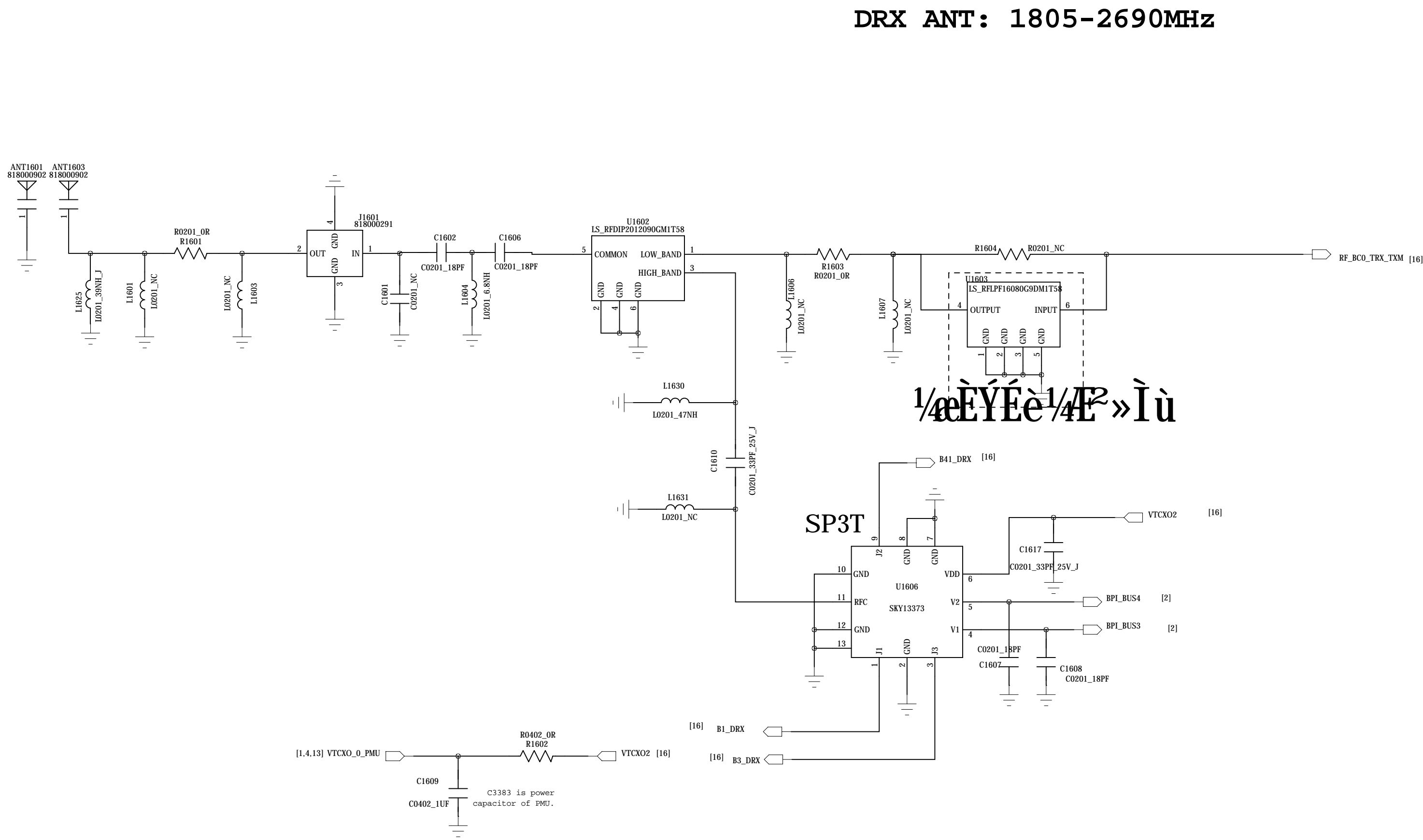
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CHECKED: <Checked By>		DATED: <Checked Date>		CODE: <Code>	SIZE: D	DRAWING NO: <Drawing Number>	REV: V1.0
QUALITY CONTROL: <QC By>		DATED: <QC Date>					
RELEASED: <Released By>		DATED: 9/22/14		SCALE: <Scale>		SHEET: 46 20	







REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

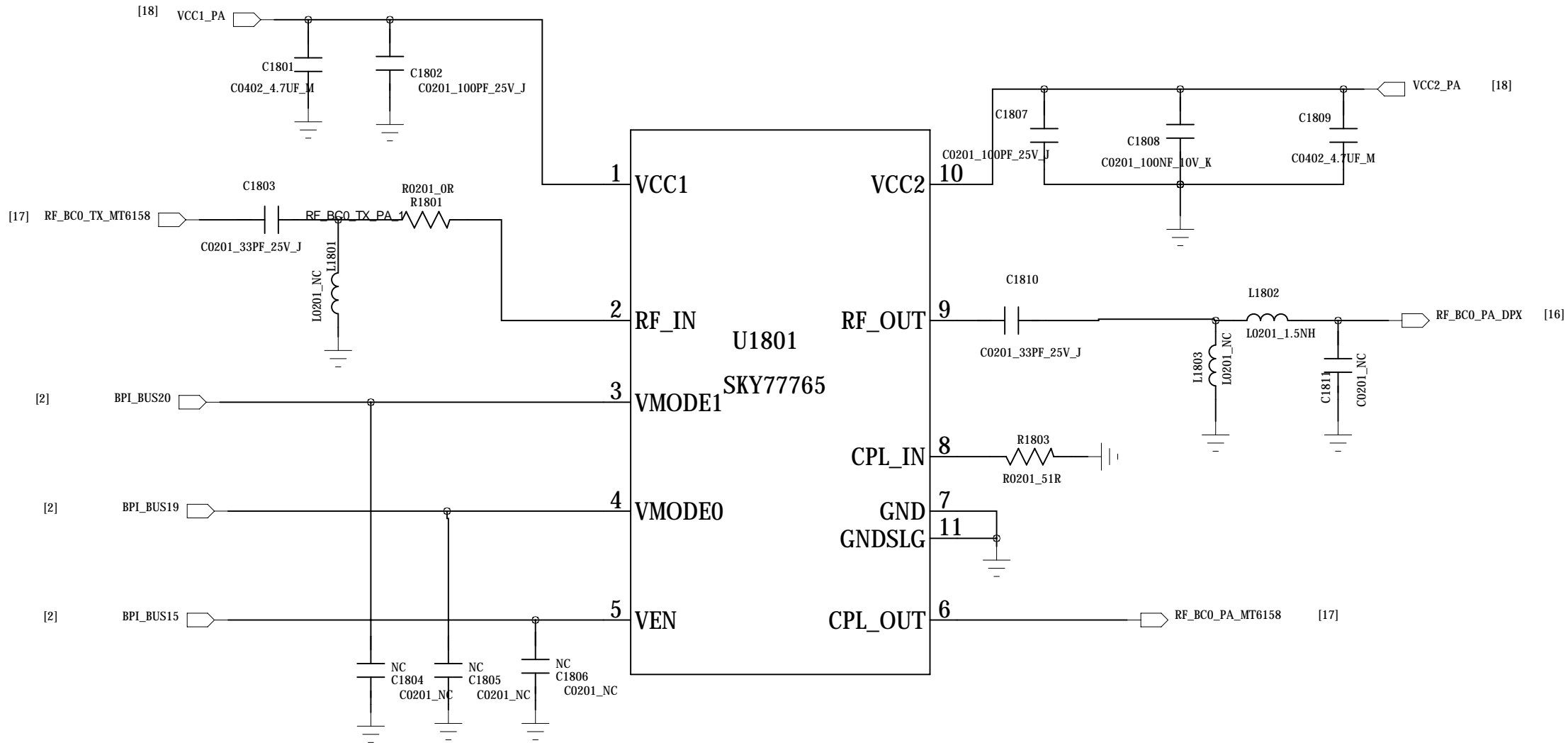


COMPANY: HQ			
TITLE: 01_BLOCK_DIAGRAM			
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RELEASED: <Released By>	DATED: 9/22/14	SCALE: <Scale>	
SHEET: 46		20	

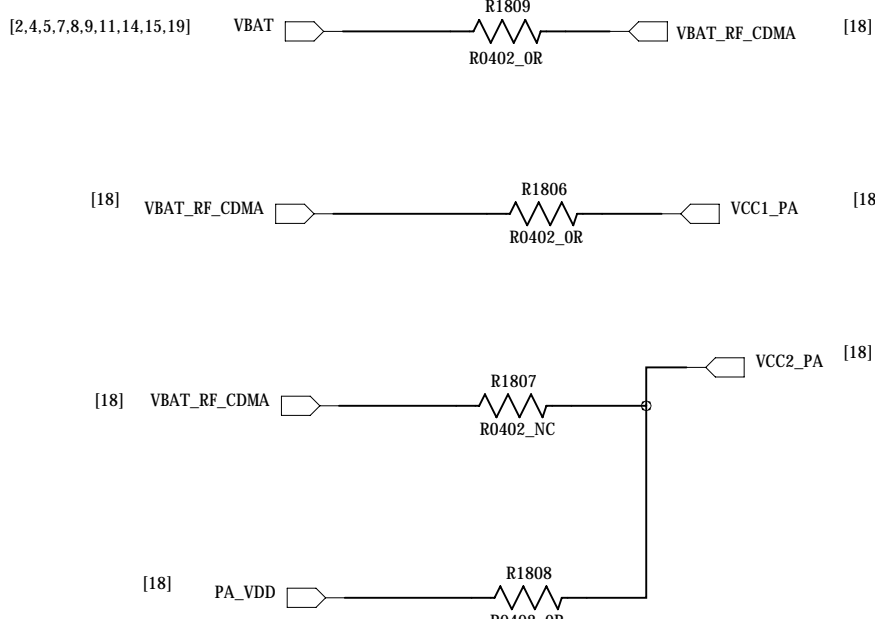
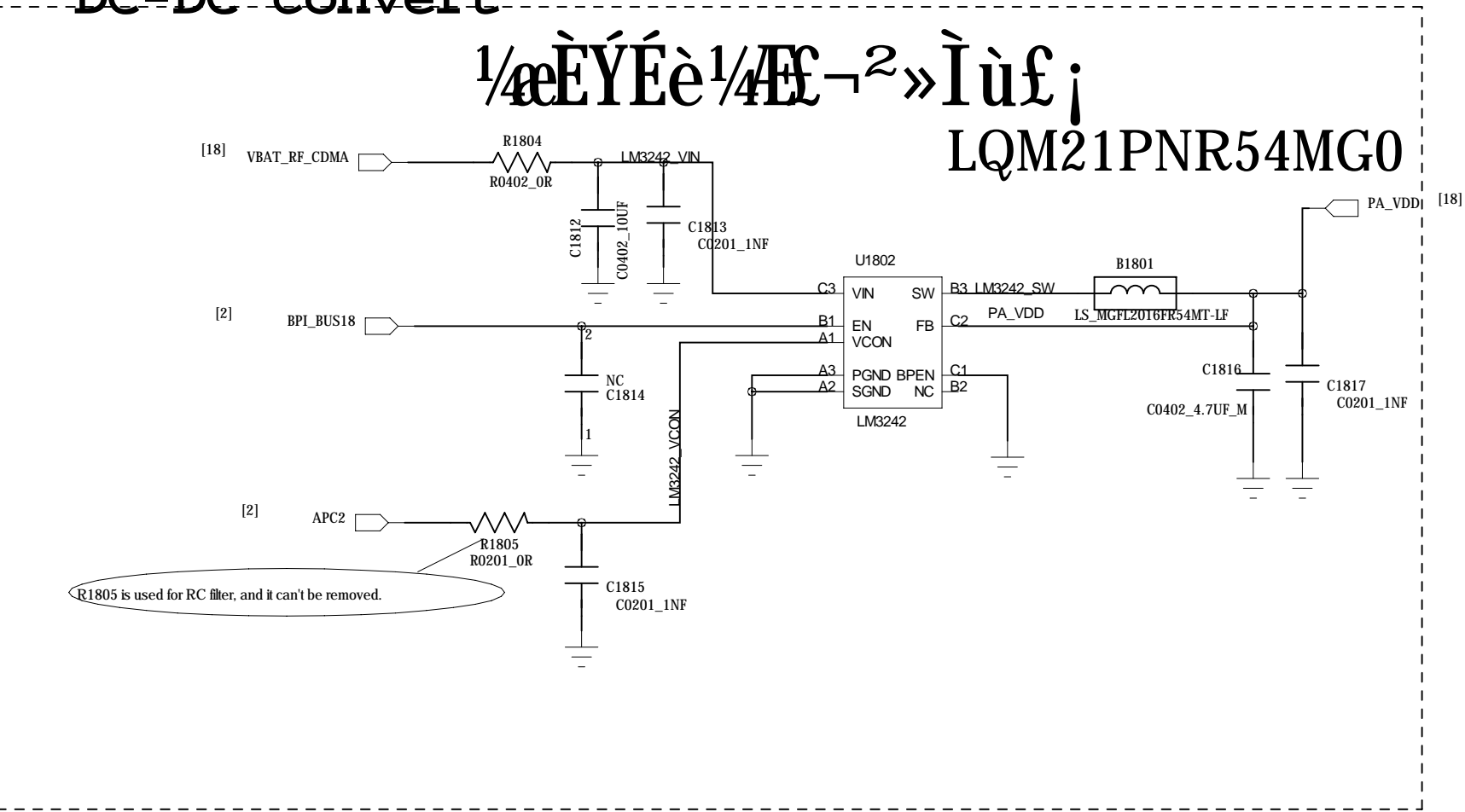


REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

C2K\_TX



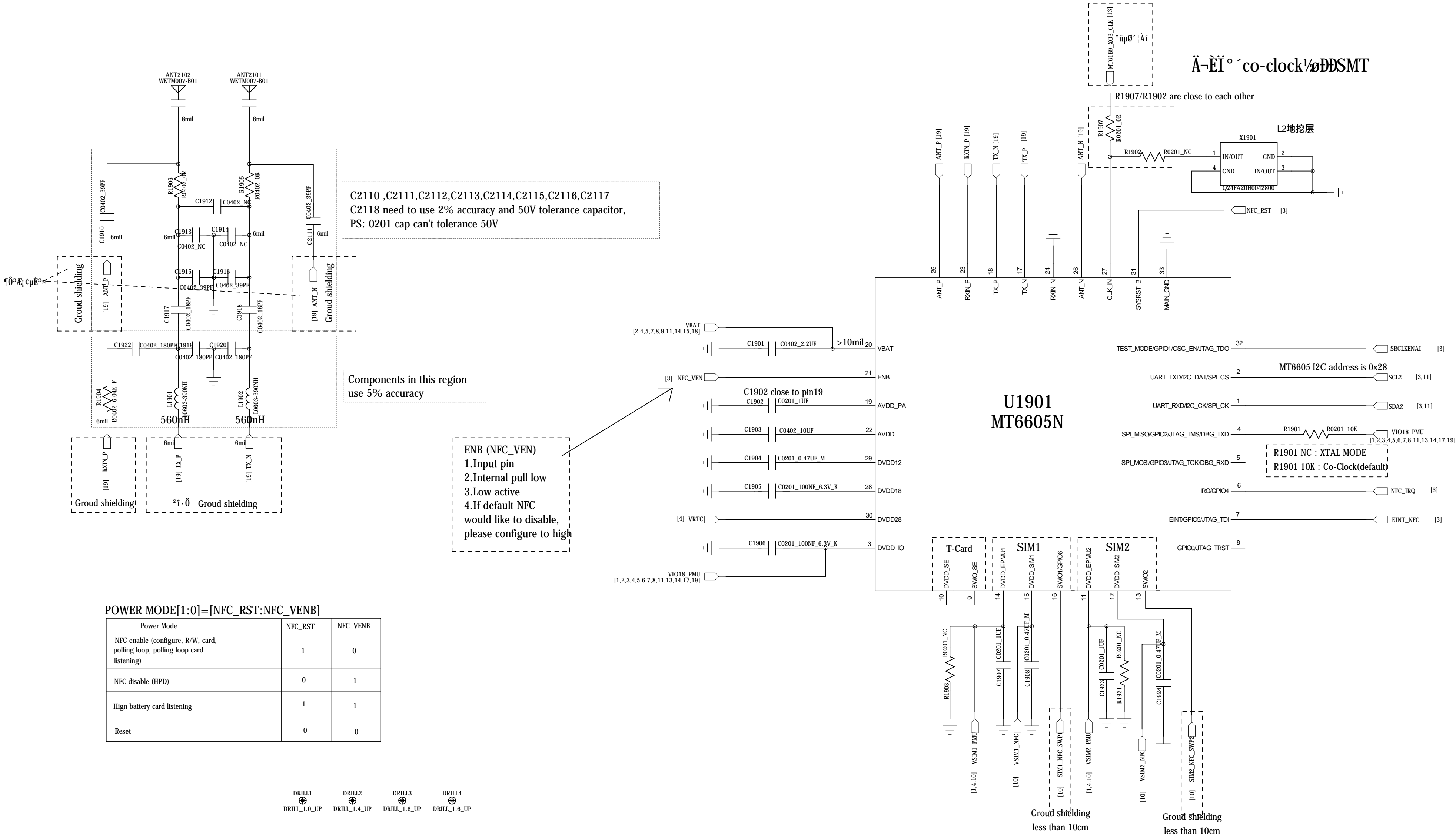
DC-DC convert



COMPANY: HQ			
TITLE: 01_BLOCK_DIAGRAM			
DRAWN: GUWEINA	DATED: <Drawn Date>	CODE: <Code>	SIZE: D
CHECKED: <Checked By>	DATED: <Checked Date>	DRAWING NO: <Drawing Number>	REV: V1.0
QUALITY CONTROL: <QC By>	DATED: <QC Date>	SCALE: <Scale>	
RELEASED: <Released By>	DATED: 9/22/14	SHEET: 48 20	

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

NFC



POWER MODE[1:0]=[NFC_RST:NFC_VENB]		
Power Mode	NFC_RST	NFC_VENB
NFC enable (configure, R/W, card, polling loop, polling loop card listening)	1	0
NFC disable (HPD)	0	1
High battery card listening	1	1
Reset	0	0

DRILL1  
DRILL\_1\_0\_UP

DRILL2  
DRILL\_1\_4\_UP

DRILL3  
DRILL\_1\_6\_UP

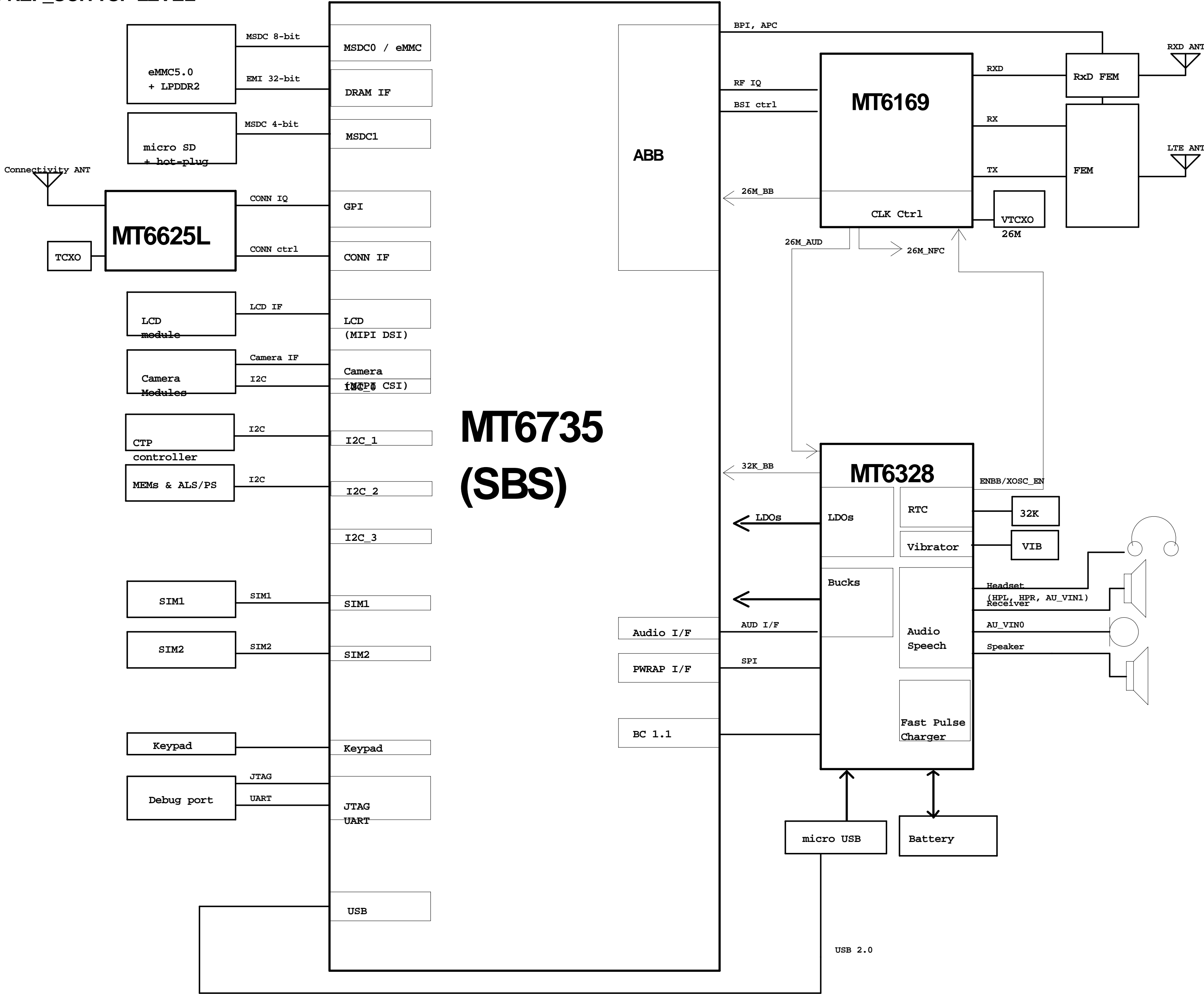
DRILL4  
DRILL\_1\_6\_UP

DRAWN:	GUWEINA	DATED:	<Drawn Date>
CHECKED:	<Checked By>	DATED:	<Checked Date>
QUALITY CONTROL:	<QC By>	DATED:	<QC Date>
RELEASED:	<Released By>	DATED:	9/22/14

COMPANY: HQ			
TITLE: 01_BLOCK_DIAGRAM			
CODE:	SIZE:	DRAWING NO:	REV:
<Code>	D	<Drawing Number>	V1.0
SCALE: <Scale>		SHEET: 40 20	

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

Project : MT6735 REF\_SCH TOP LEVEL



COMPANY: HQ			
TITLE: 01_BLOCK_DIAGRAM			
DRAWN: GUWEINA	DATED: <Drawn Date>	CODE: <Code>	SIZE: D
CHECKED: <Checked By>	DATED: <Checked Date>	DRAWING NO:	REV: V1.0
QUALITY CONTROL: <QC By>	DATED: <QC Date>	SCALE: <Scale>	
RELEASED: <Released By>	DATED: 9/22/14	SHEET: 20	