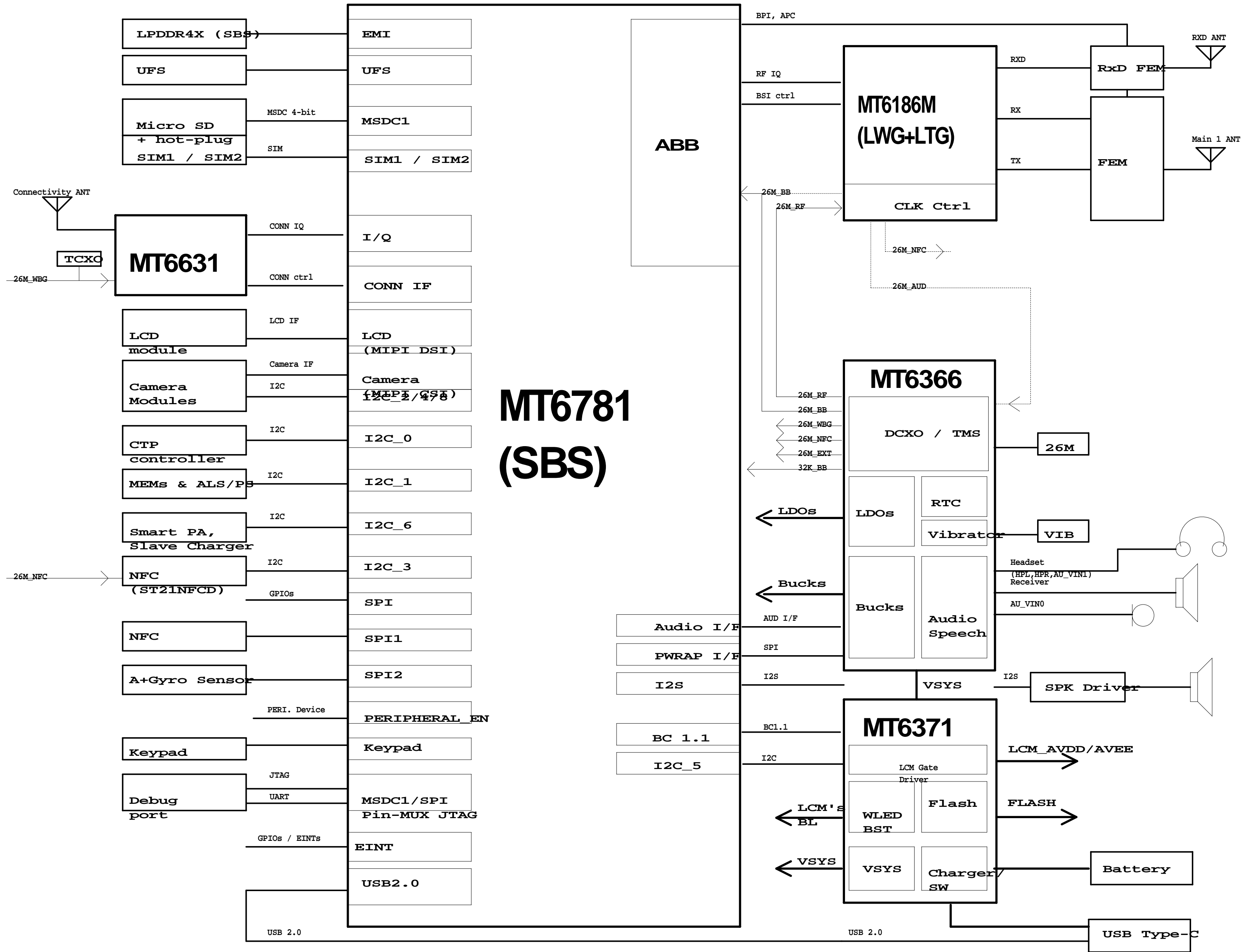


BLOCK_DIAGRAM

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

Project : MT6781, LPDDR4X (SBS)



COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 00_BLOCK_DIAGRAM		VERSION: V1.0	SHEET: 1 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

I2C_ID_OVERVIEW

REVISION RECORD

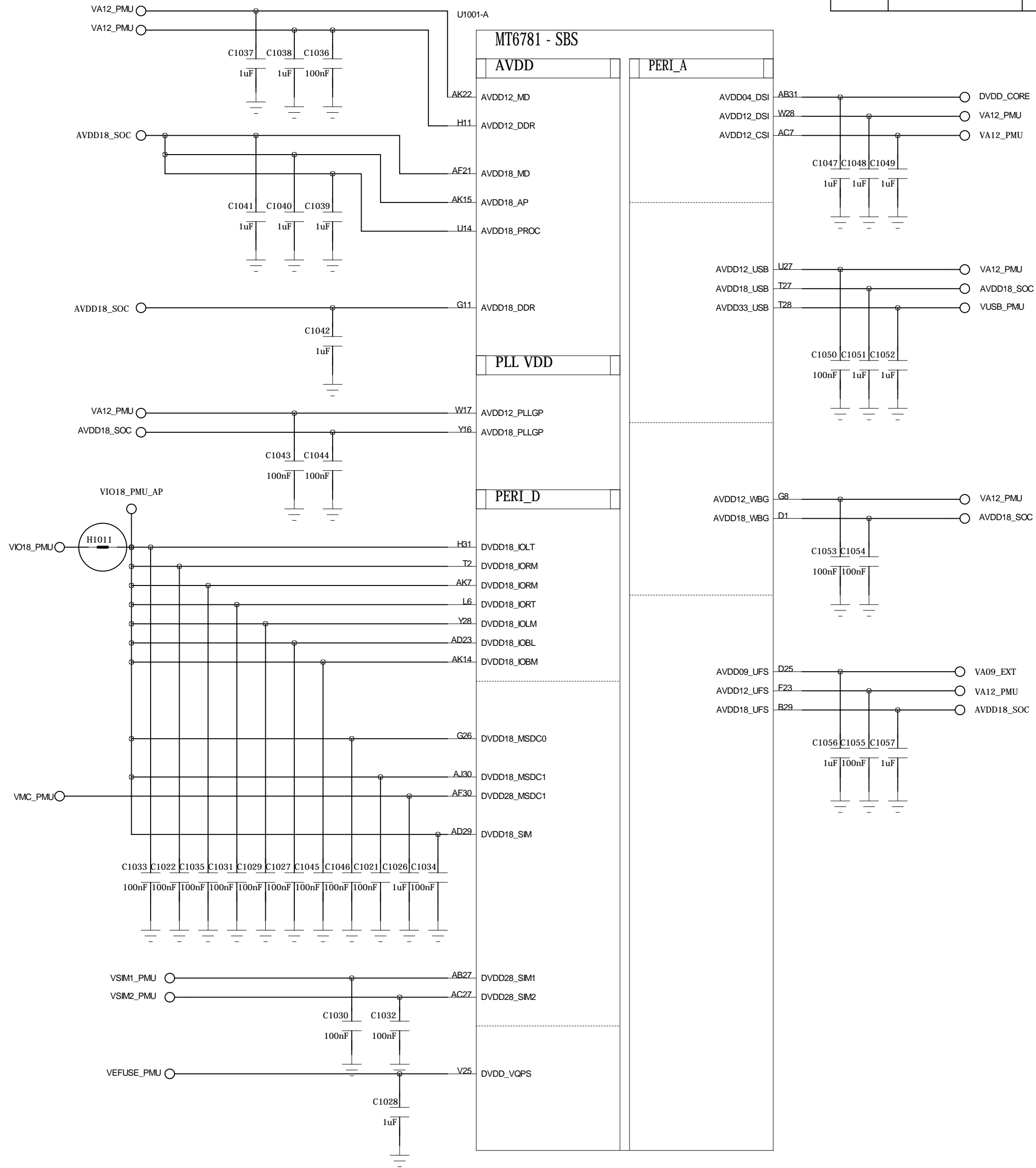
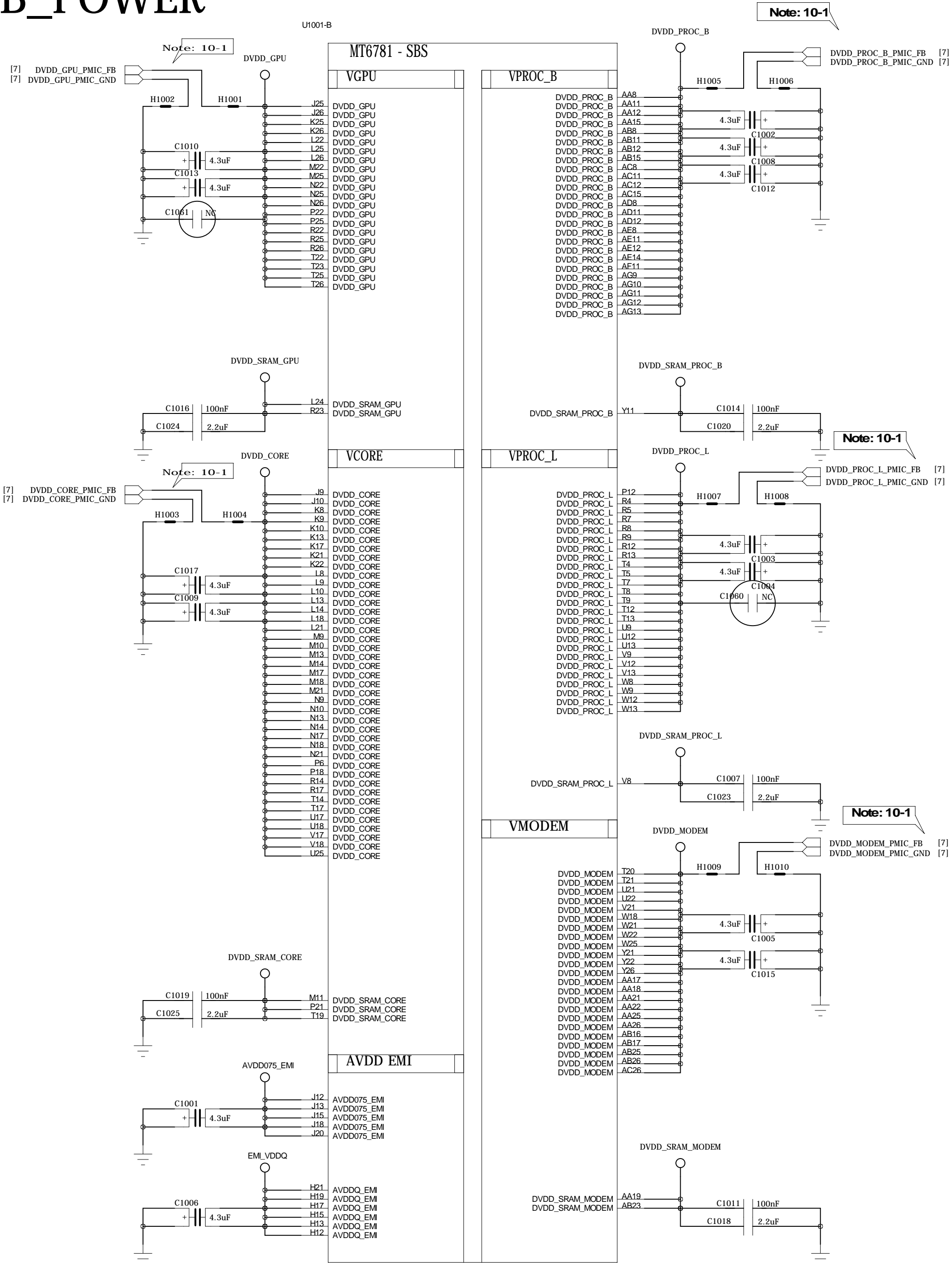
LTR	ECO NO:	APPROVED:	DATE:

I2C	AP, SCP, SSPM	Function	I2C/I3C Spec.	I2C Slave Address (7-bit mode)
I2C-0 (I3C)	AP	CTP	I3C	COF GT9886 I2C address: 0X5D (Write:0xBA, Read:0xBB)
I2C-1 (SCP I3C)	SCP	RGB / PS Sensor	I3C	VCNL36658M / PS + Color Sensor with IR, I2C address: 7h'60 (Write:0xC0, Read:0xC1)
		A+Gyro Sensor		
		M Sensor		AK09918C / M-Sensor I2C Address 0x0C (Write: 0x18, Read: 0x19)
		Barometer		Baro(BMP380) I2C address : 7h'76 (Write: 0xEC, Read: 0xED)
I2C-2 (I3C)	AP	Rear Camera - 1	I3C	Dual-CAM: 2LQ+4H7 camera, 4H7 I2C address: 0x10 (Write:0x20, Read:0x21) EEPROM I2C address: 0x51 (Write:0xA2, Read:0xA3) Tri-CAM: IMX481 / UW camera, I2C address: 0x10 (Write:0x20, Read:0x21) EEPROM I2C address: 0x51 (Write:0xA2, Read:0xA3) AF driver (TVC-820) I2C address: 0X0C (Write:0x18, Read:0x19)
I2C-3	AP	NFC	I2C	NFC I2C address: 0X08 (Write:0x10, Read:0x11)
		ADC		LP ADC1 I2C Address : 0X10 (write: 20, read: 21) LP ADC2 I2C Address : 0X1F (write: 3E, read: 3F) Front camera: 3P9, I2C address: 0x10 (Write:0x20, Read:0x21) EEPROM I2C address: 0x50 (Write:0xA0, Read:0xA1) AF driver (TBD) I2C address: TBD (Write:TBD, Read:TBD)
I2C-4 (I3C)	AP	Front Camera	I3C	
I2C-5	AP	MT6371	I2C	MT6371 PD's I2C address: 0X4E (Write:0X9C, Read:0X9D) MT6371 PMU's I2C address: 0X34 (Write:0X68, Read:0X69)
		RT5133		MT5133 I2C address: 0X18 (Write:0X30, Read:0X31)
I2C-6	AP	Smart PA	I2C	MT6660 Speaker AMP I2C Address: 0x34 (Write:0x68, Read:0x69) when ADS1 = GND; ADS2 = GND.
I2C-7 (I3C)	AP	Reserved	I3C	Reserved for 2nd front camera
I2C-8 (I3C)	AP	Rear Camera - 2	I3C	Single -CAM: OV48B, I2C address: 0X36(Write:0x6C, Read:0x6D) EEPROM I2C address: 0X50 (Write:0xA0, Read:0xA1) AF driver (DW9800W) I2C address: 0X0C (Write:0x18, Read:0x19)
				Dual-CAM: 2LQ+4H7 camera, 2LQ I2C address: 0x10 (Write:0x20, Read:0x21) EEPROM I2C address: 0x50 (Write:0xA0, Read:0xA1) AF driver (TVC-820) I2C address: 0x0C (Write:0x18, Read:0x19)
				Tri-CAM: IMX586 / Wide camera, I2C address: 0x1A (Write:0x34, Read:0x35) EEPROM I2C address: 0x50 (Write:0xA0, Read:0xA1) AF driver (TBD) I2C address: 0X0E (Write:0x1C, Read:0x1D)
I2C-9 (I3C)	AP	Rear Camera - 3	I3C	Tri-CAM: 3M5 / Tele camera, I2C address: 0x10 (Write:0x20D, Read:0x21) EEPROM I2C address: 0x51 (Write:0xA2, Read:0xA3) AF driver (TVC-820) I2C address: 0x0C (Write:0x18, Read:0x19)
Note : I2C Spec. : Standard mode (100 kbps) and Fast mode (400 kbps), Fast mode Plus (1 Mbps) and High-speed mode (3.4 Mbps)				

COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 01_I2C_ID_OVERVIEW		VERSION: V1.0	SHEET: 2 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

BB_POWER

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



SHIELDING&LOGO&SN&MARK

SH-BB SH-CHG SH-WCN SH-4GPA SH-LCM SH-SIM SH-CAM1

SH-POWER-OTHERS SH-RF SH-PMU SH-NFC SH-MSENSOR SH-CAM SN1

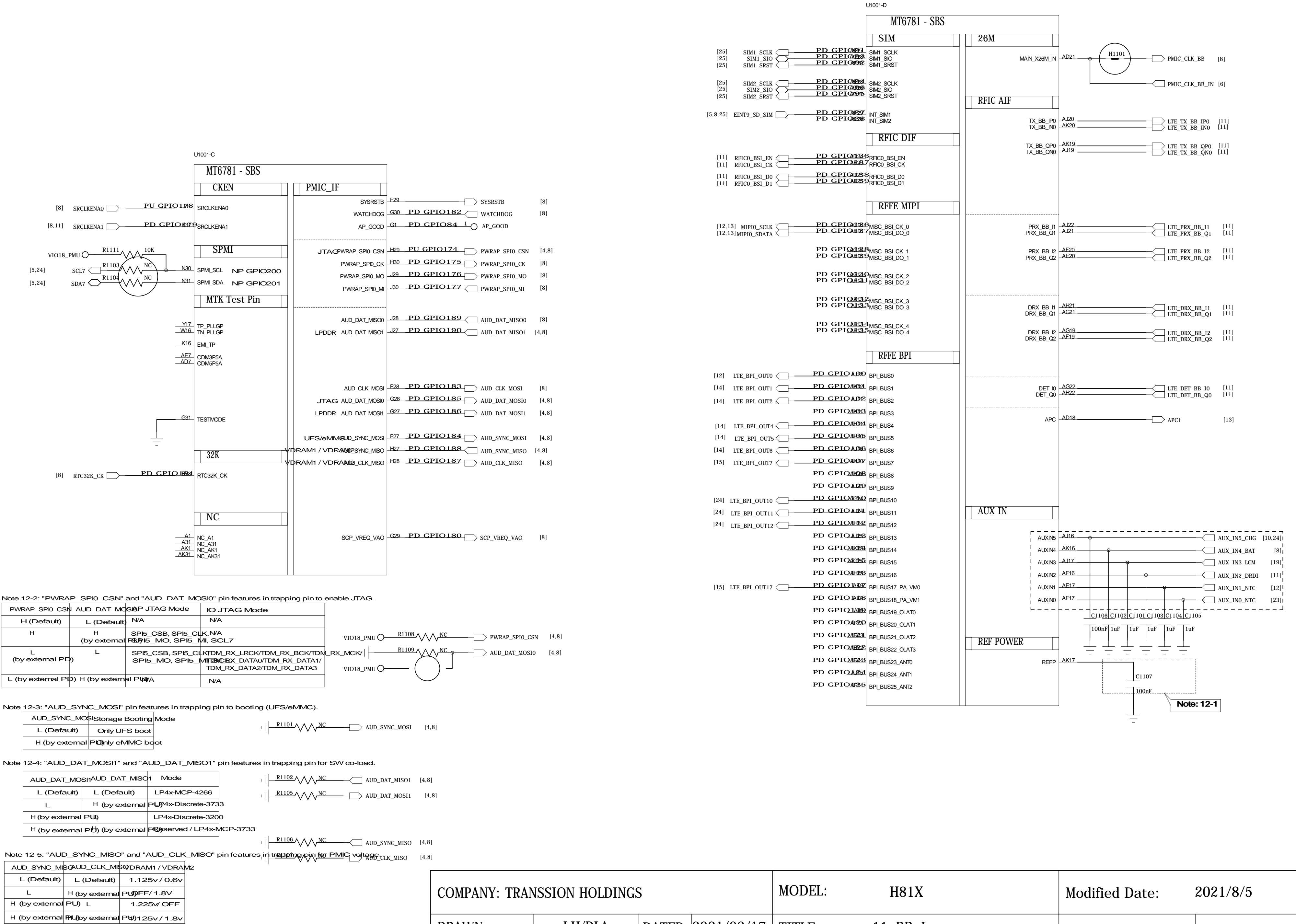
TL1001 WPL1001 MARK1001 MARK1002 MARK1003 MARK1004

MARK_1.0 MARK_1.0 MARK_1.0 MARK_1.0

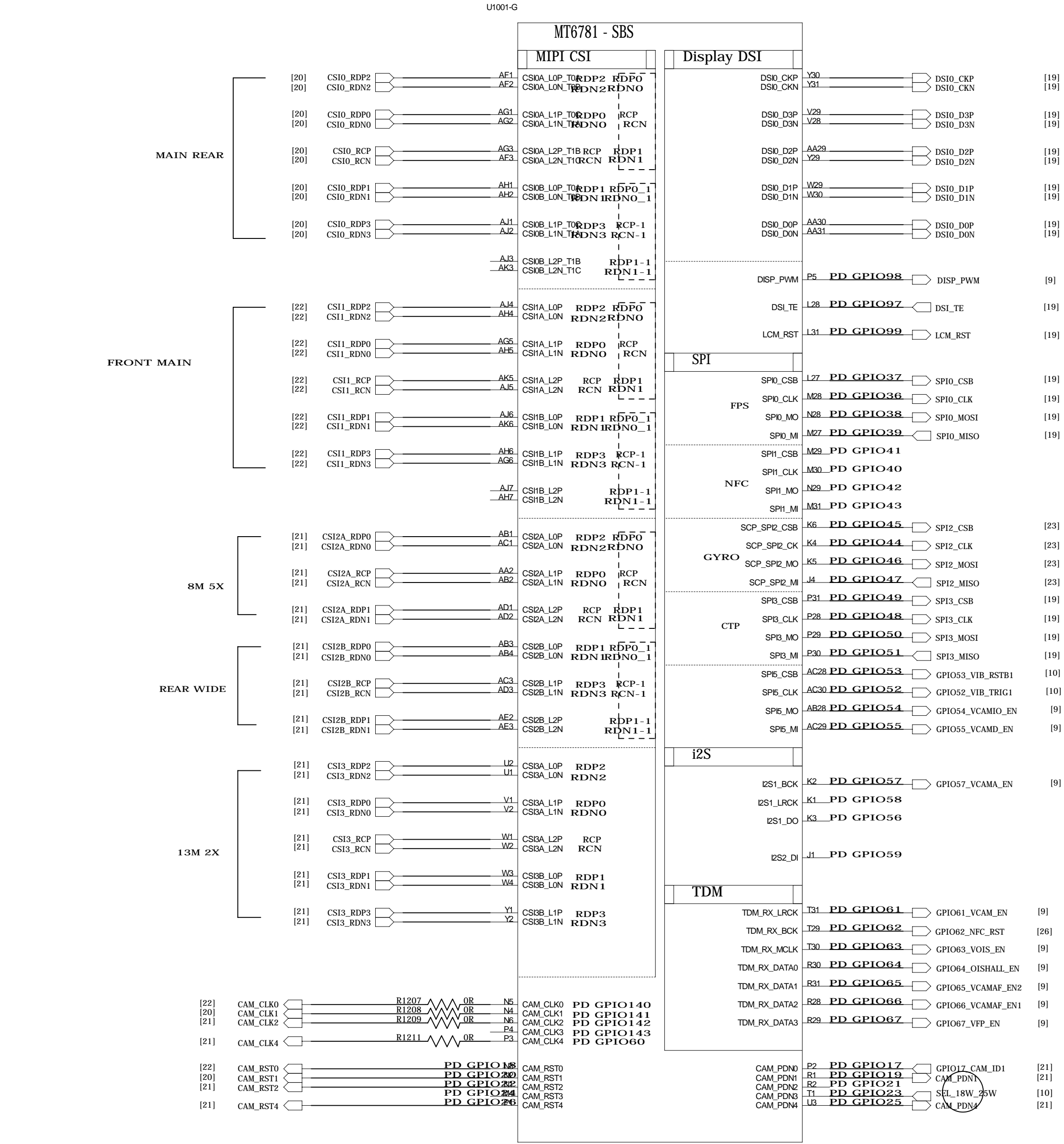
TRANSSION-2.5H

COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 10_BB_POWER		VERSION: V1.0	SHEET: 3 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

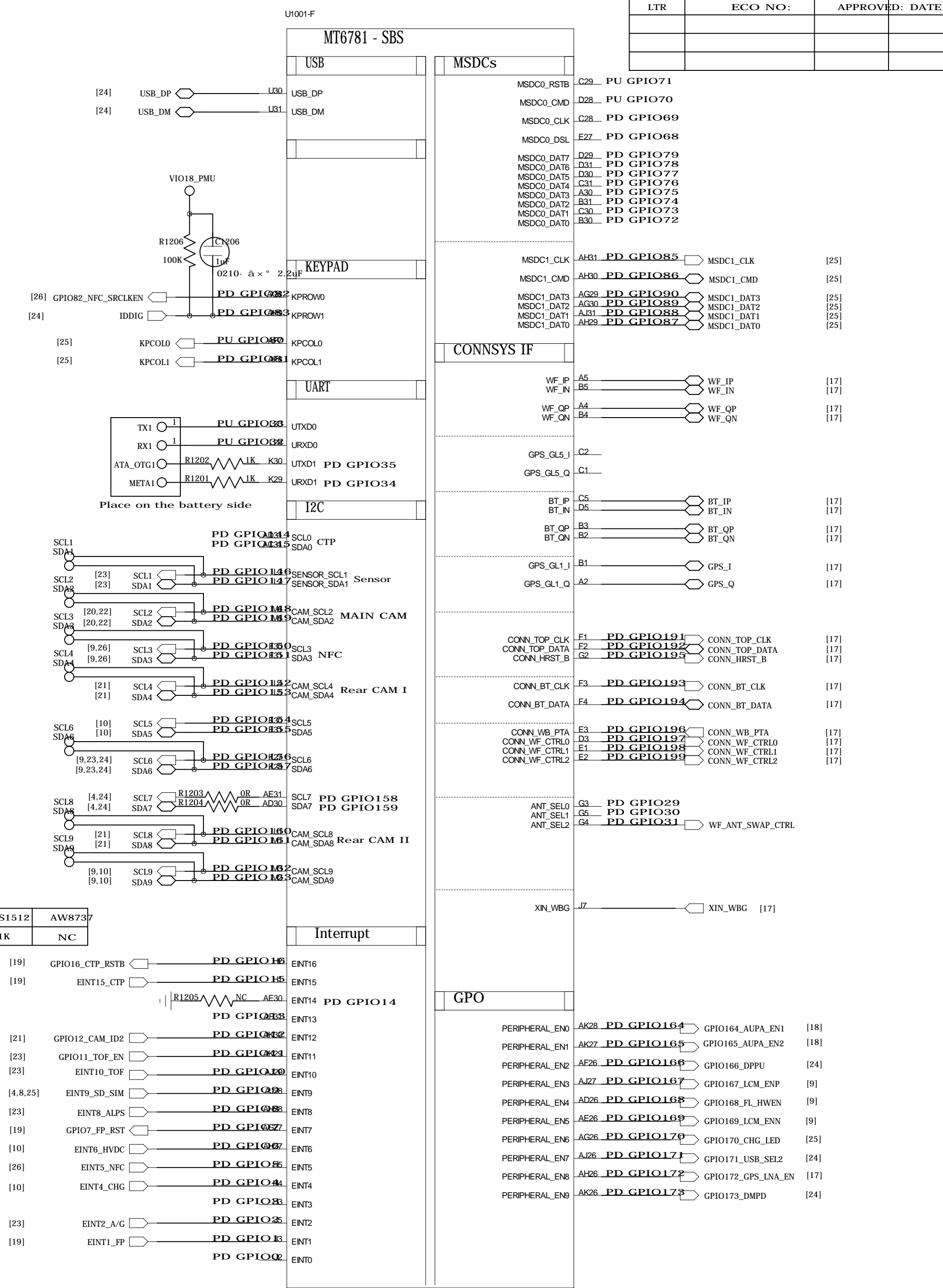
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



	FS1512	AW8737
R1205	1K	NC

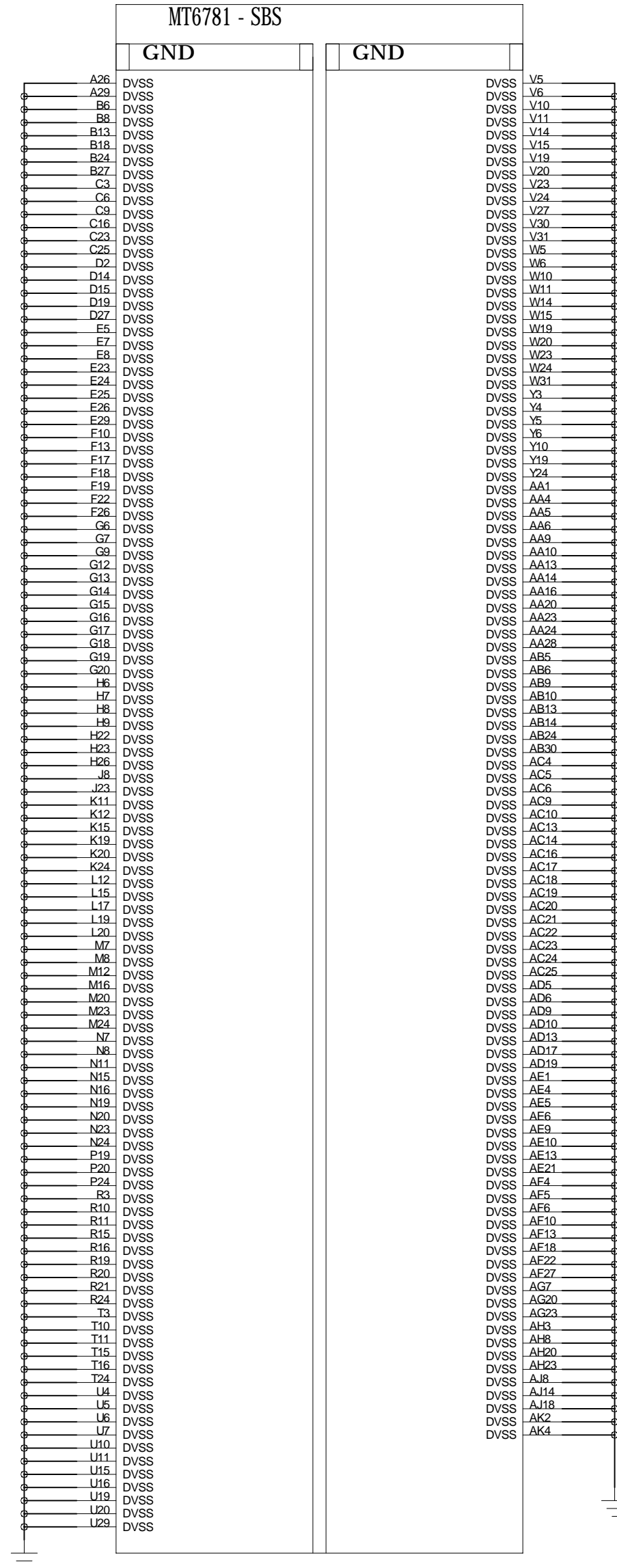


Schematic design notice of "13_BB_2" page.

Note 13-1CAM_PDN2(R2 ball) don't apply to camera function.

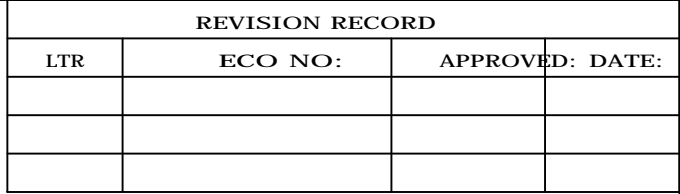
COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 12_BB_II		VERSION: V1.0	SHEET: 5 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

U1001-H



PMU_BUCK

MT6366		
	VBUCK_CTRL	
E2	VSYS_SMP5	
E1	GND_SMP5	
	VPROC11_IN	VPROC11
A6 B6	VSYS_VPROC11 VSYS_VPROC11	VPROC11 VPROC11
A8 B8	GND_VPROC11 GND_VPROC11	VPROC11_FB GND_VPROC11_FB
	VPROC12_IN	VPROC12
A10 B10	VSYS_VPROC12 VSYS_VPROC12	VPROC12 VPROC12
D8 D9	GND_VPROC12 GND_VPROC12	VPROC12_FB GND_VPROC12_FB
	VCORE_IN	VCORE
A15 B15	VSYS_VCORE VSYS_VCORE	VCORE VCORE
B13 A13	GND_VCORE GND_VCORE	VCORE_FB GND_VCORE_FB
	VMODEM_IN	VMODEM
F14	VSYS_VMODEM	VMODEM VMODEM
G15 G16	GND_VMODEM GND_VMODEM	VMODEM_FB GND_VMODEM_FB
	VPA_IN	VPA
A5	VSYS_VPA	VPA
B4	GND_VPA	VPA_FB
	VS1_IN	VS1
B1 C1	VSYS_VS1 VSYS_VS1	VS1 VS1
A3 B3	GND_VS1 GND_VS1	VS1_FB
	VS2_IN	VS2
K15 K16	VSYS_VS2 VSYS_VS2	VS2 VS2
L14	GND_VS2	VS2_FB
	VGPU_IN	VGPU
A11 B11	VSYS_VGPU VSYS_VGPU	VGPU VGPU
D12 D13	GND_VGPU GND_VGPU	VGPU_FB GND_VGPU_FB
	VDRAM1	VDRAM1
J16	VSYS_VDRAM1	VDRAM1
H15	GND_VDRAM1	VDRAM1_FB GND_VDRAM1_FB

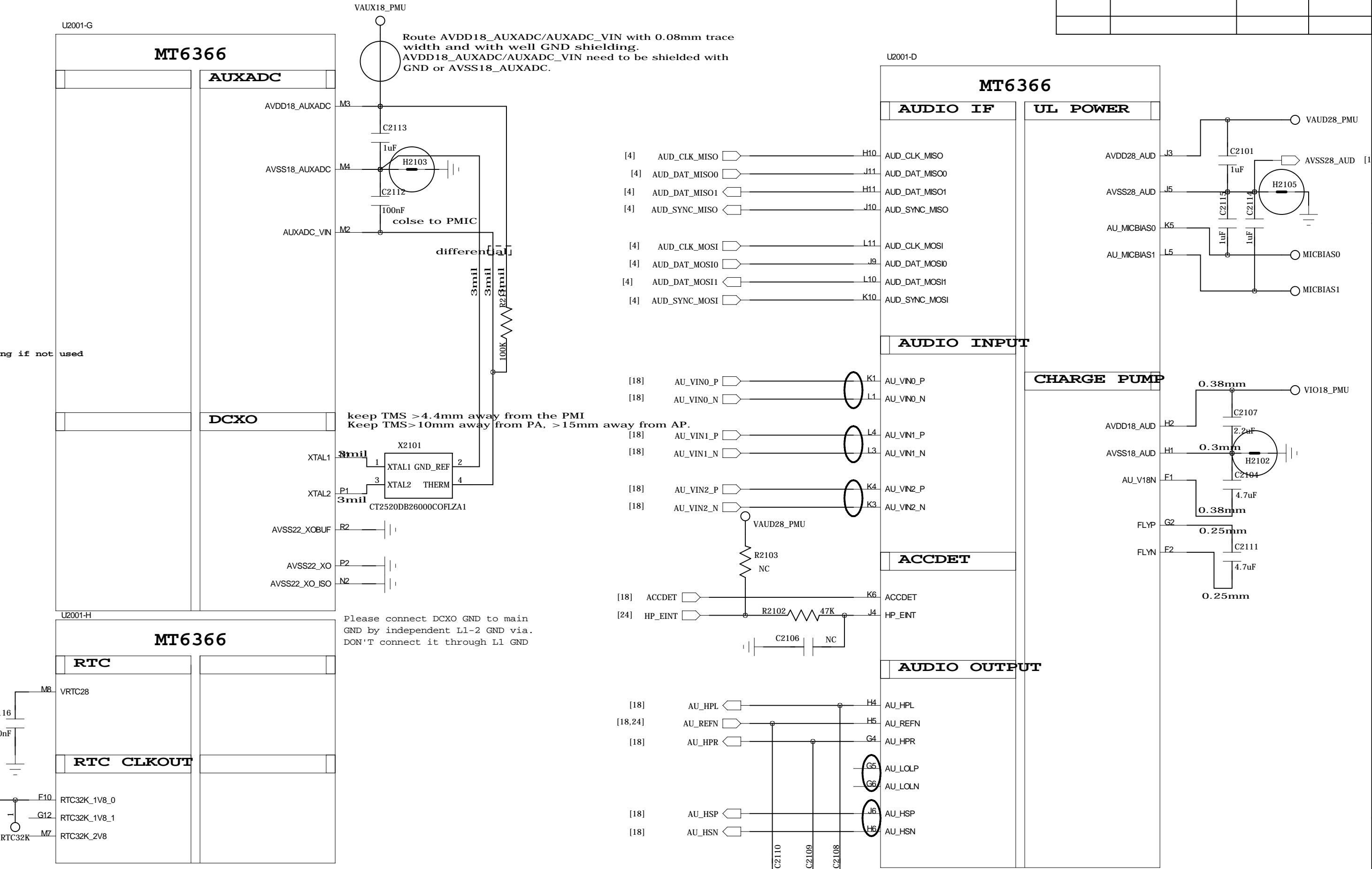
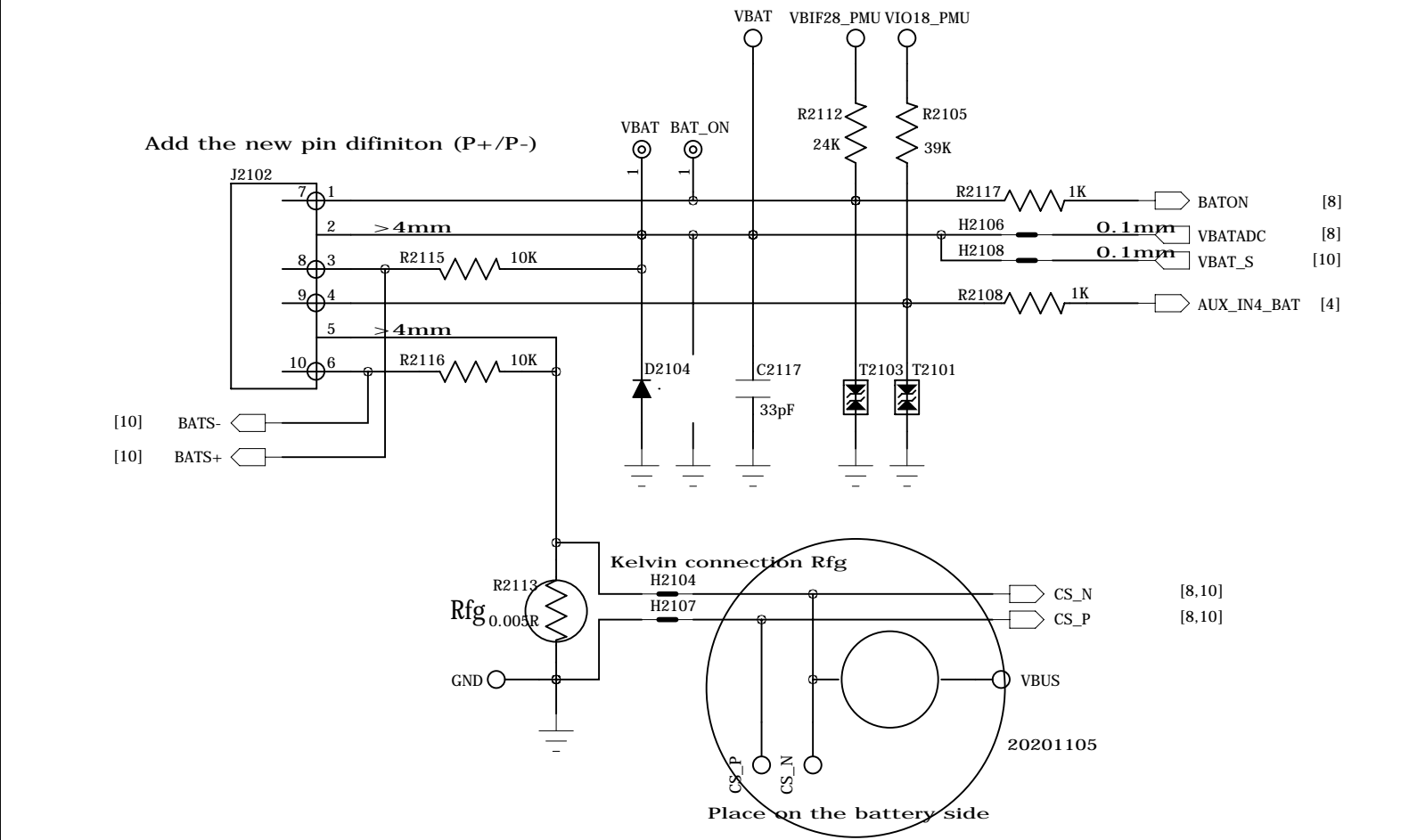


COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 20_POWER_MT6366_I		VERSION: V1.0	SHEET: 7 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

POWER_MT6366_II

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

BATTERY CONNECTOR



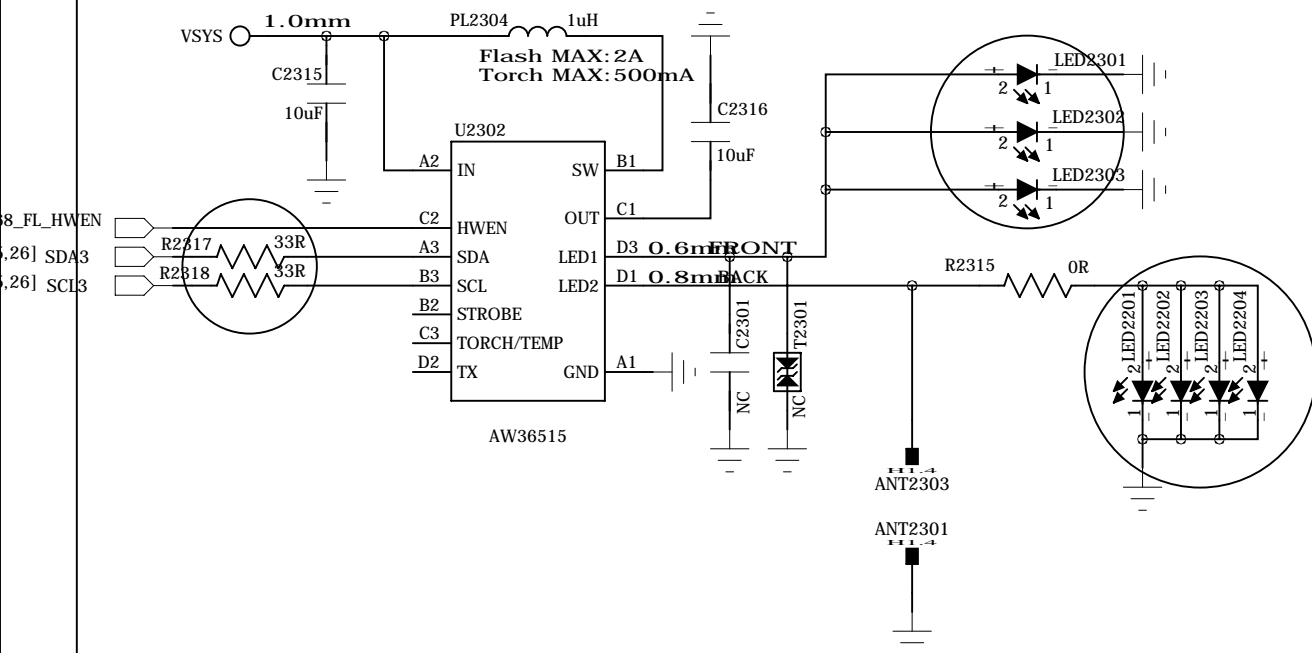
COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 21_POWER_MT6366_II		VERSION: V1.0	SHEET: 8 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

POWER_THIRD-PARTY_I

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

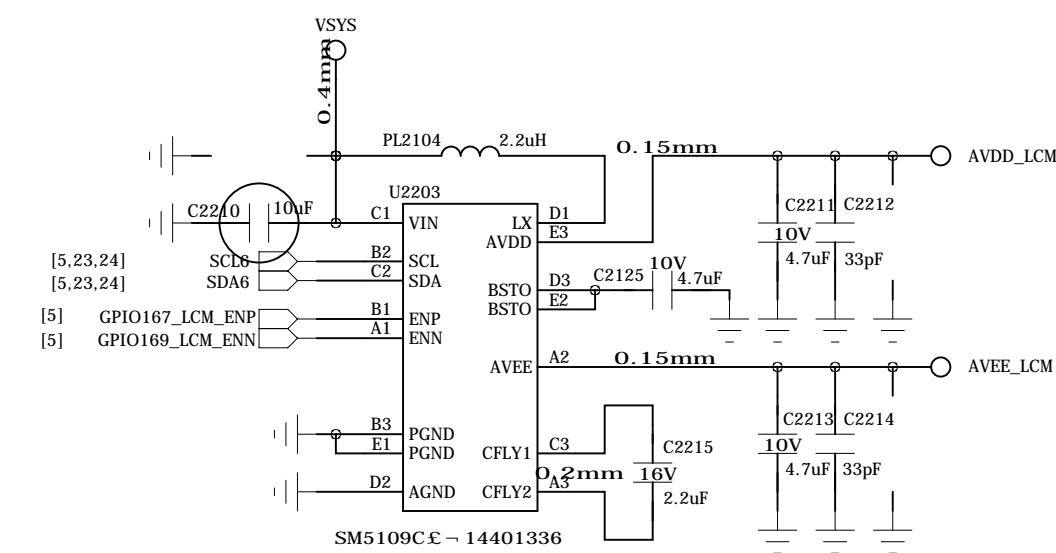
FLASH LED

AW36515:I2C ADDRESS:0xC6(Write)/0xC7(Read)

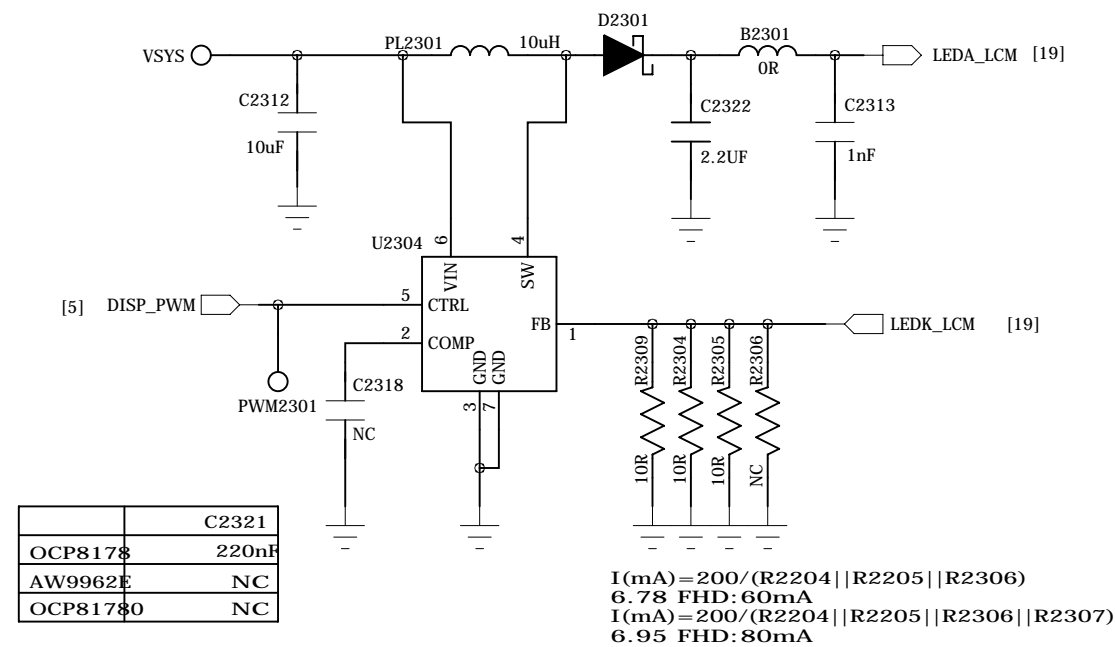


LCM BIAS

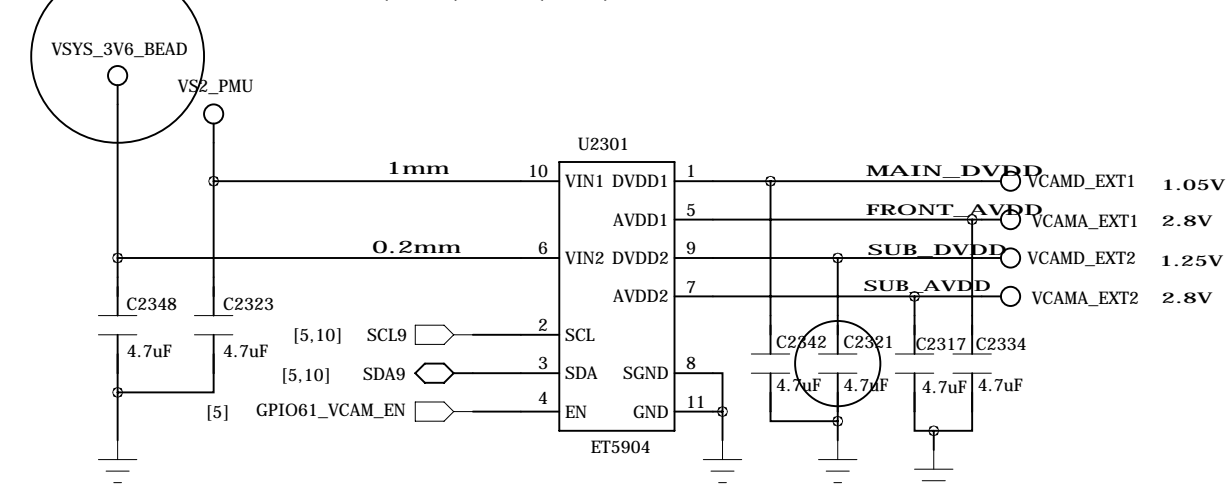
NT50358ACG/J: I2C ADDRESS: 0x7C (Write) / 0x7D (Read)



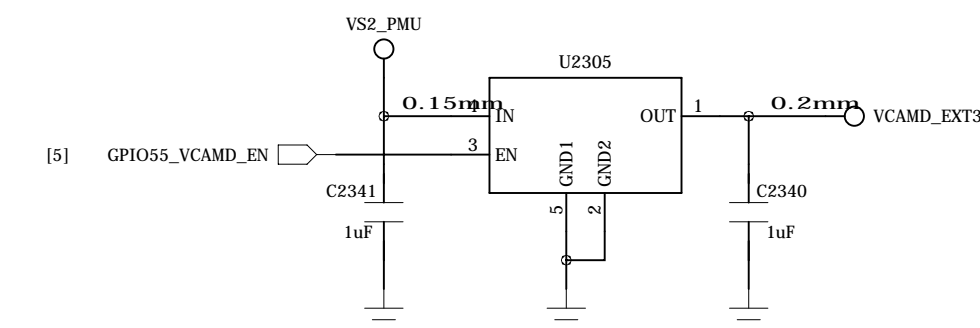
LCM LED



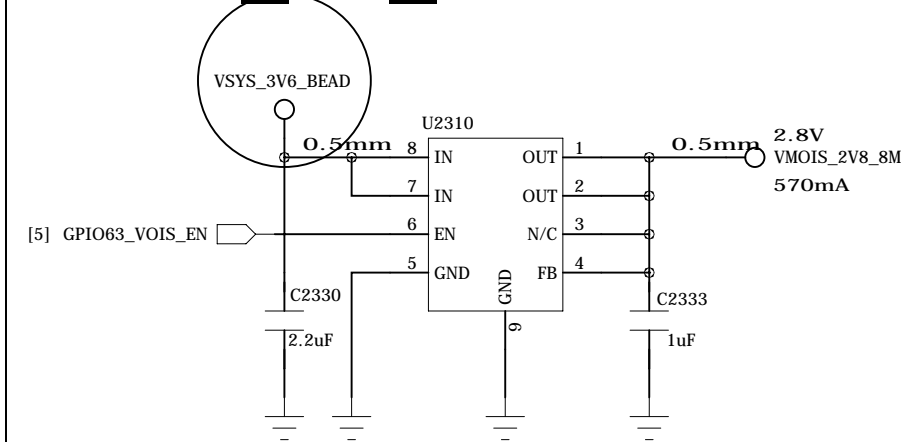
~~ET5904:I2C ADDRESS:0x50(Write)/0x51(Read)~~
~~WL2866D:I2C ADDRESS:0x50(Write)/0x51(Read)~~



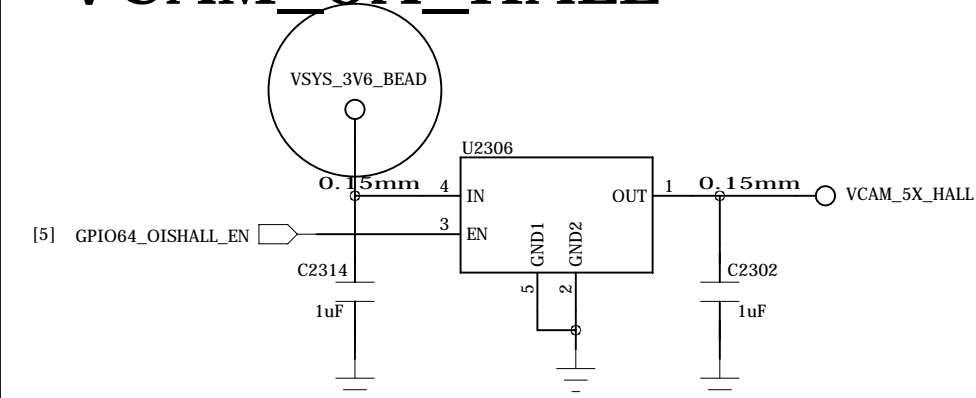
VCAMD_EXT3(1.25V)



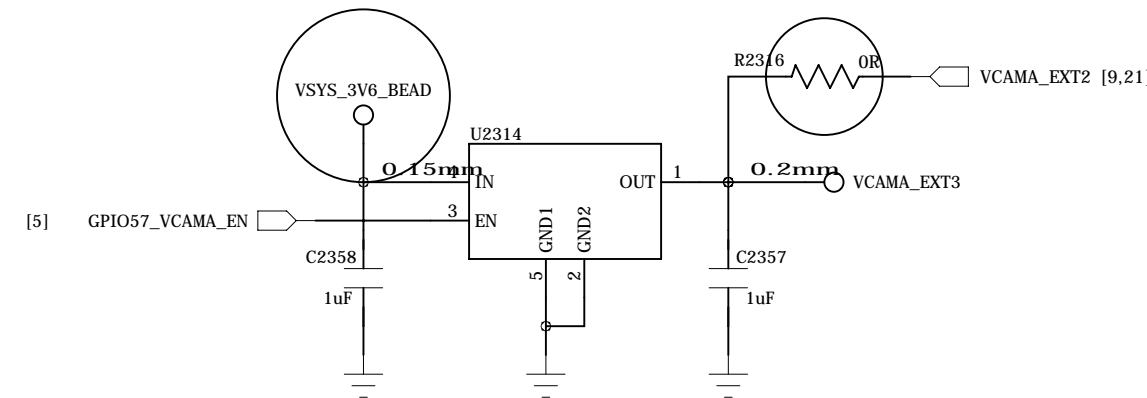
VCAM_5X_OIS



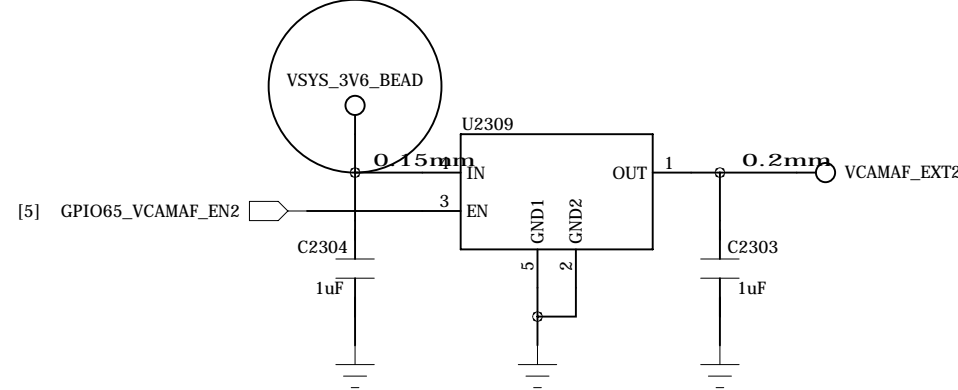
VCAM_5X_HALL



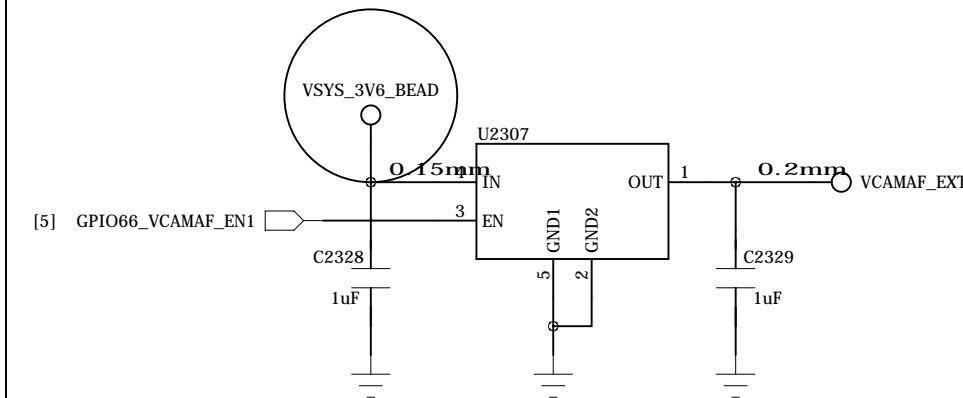
VCAMA_EXT(2.8V)



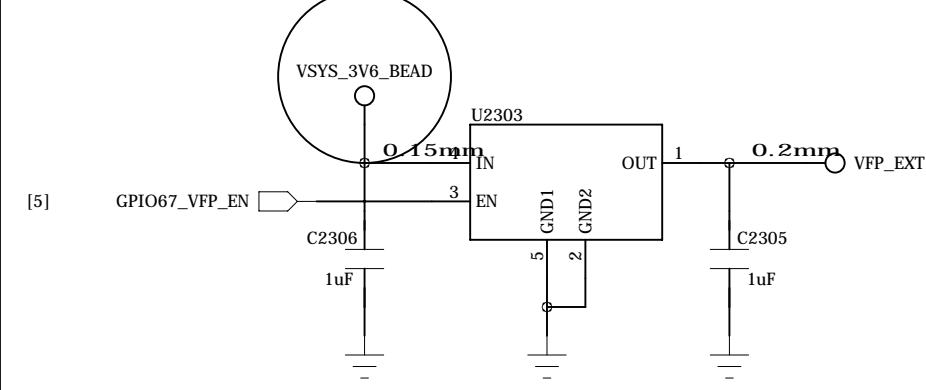
VCAMAF_EXT(2.8V)



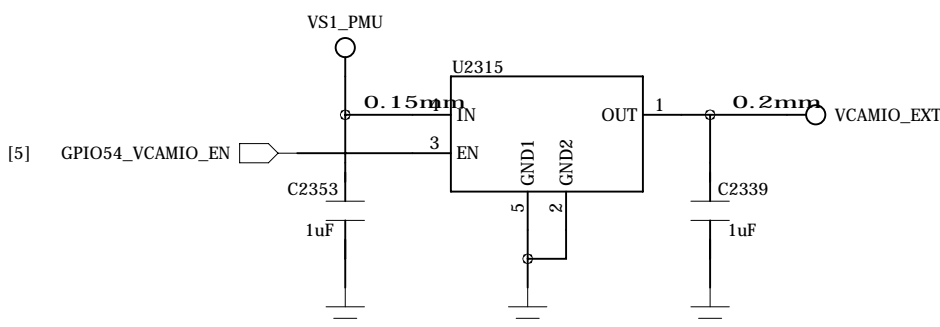
VCAMAF_EXT(2.8V)



FPS_EXT(2.8V)

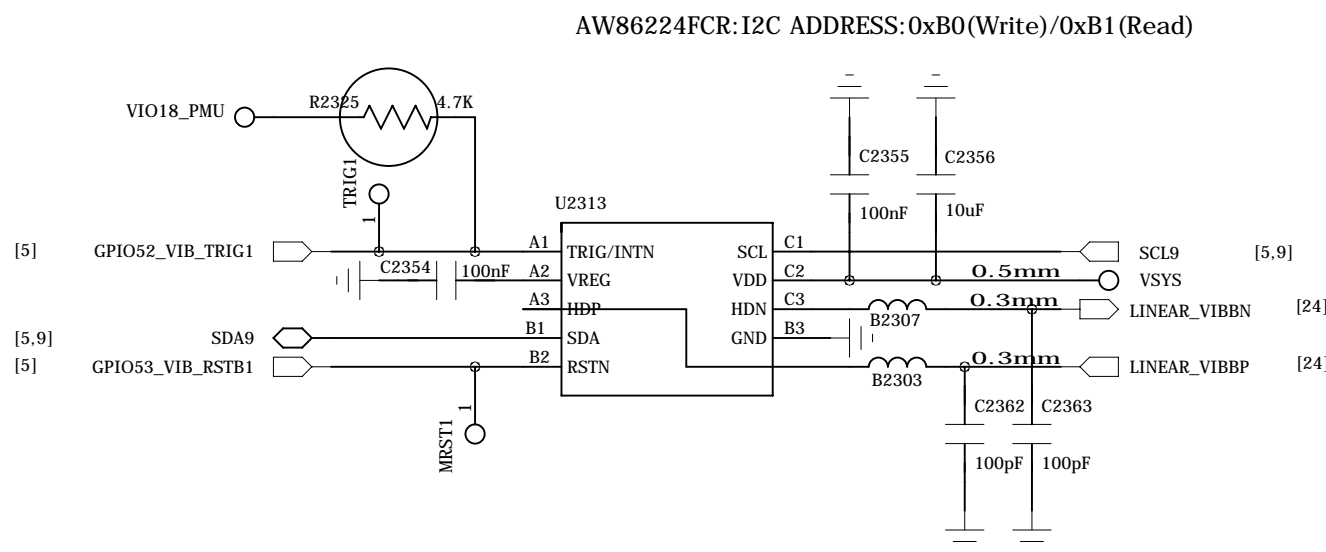
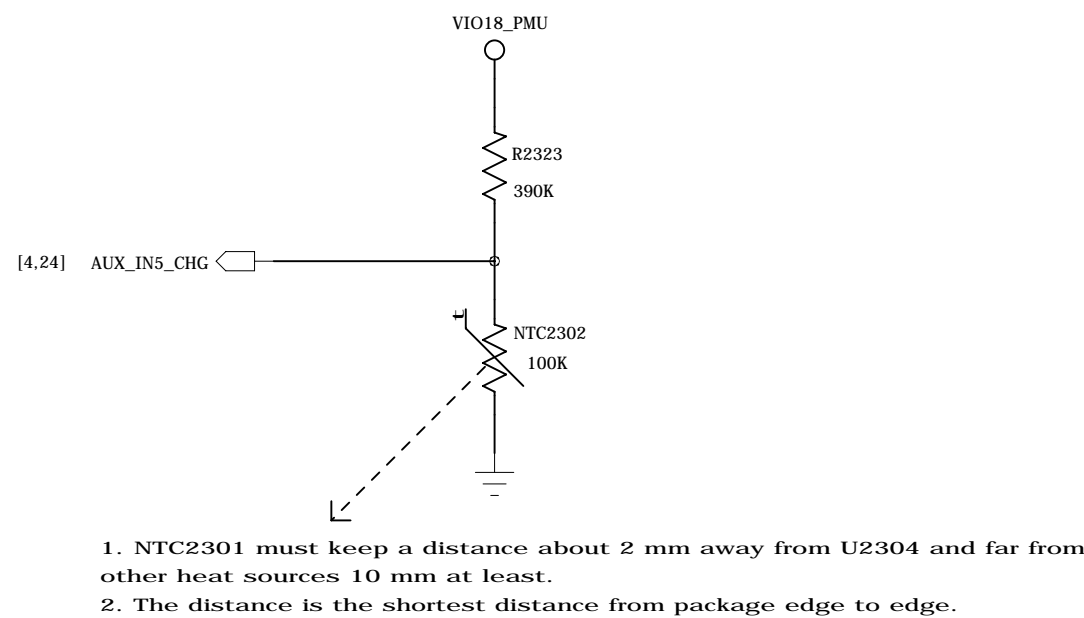
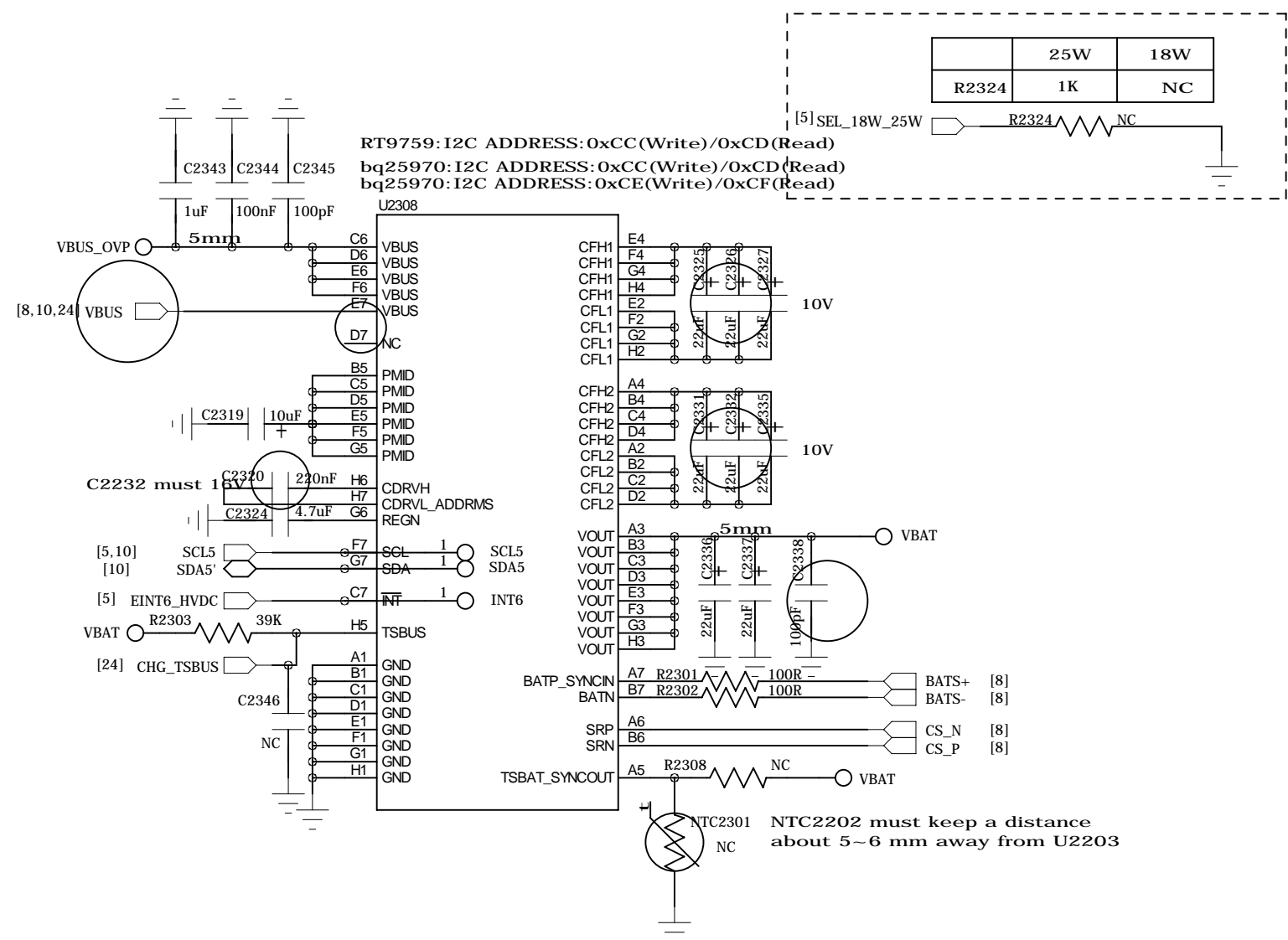
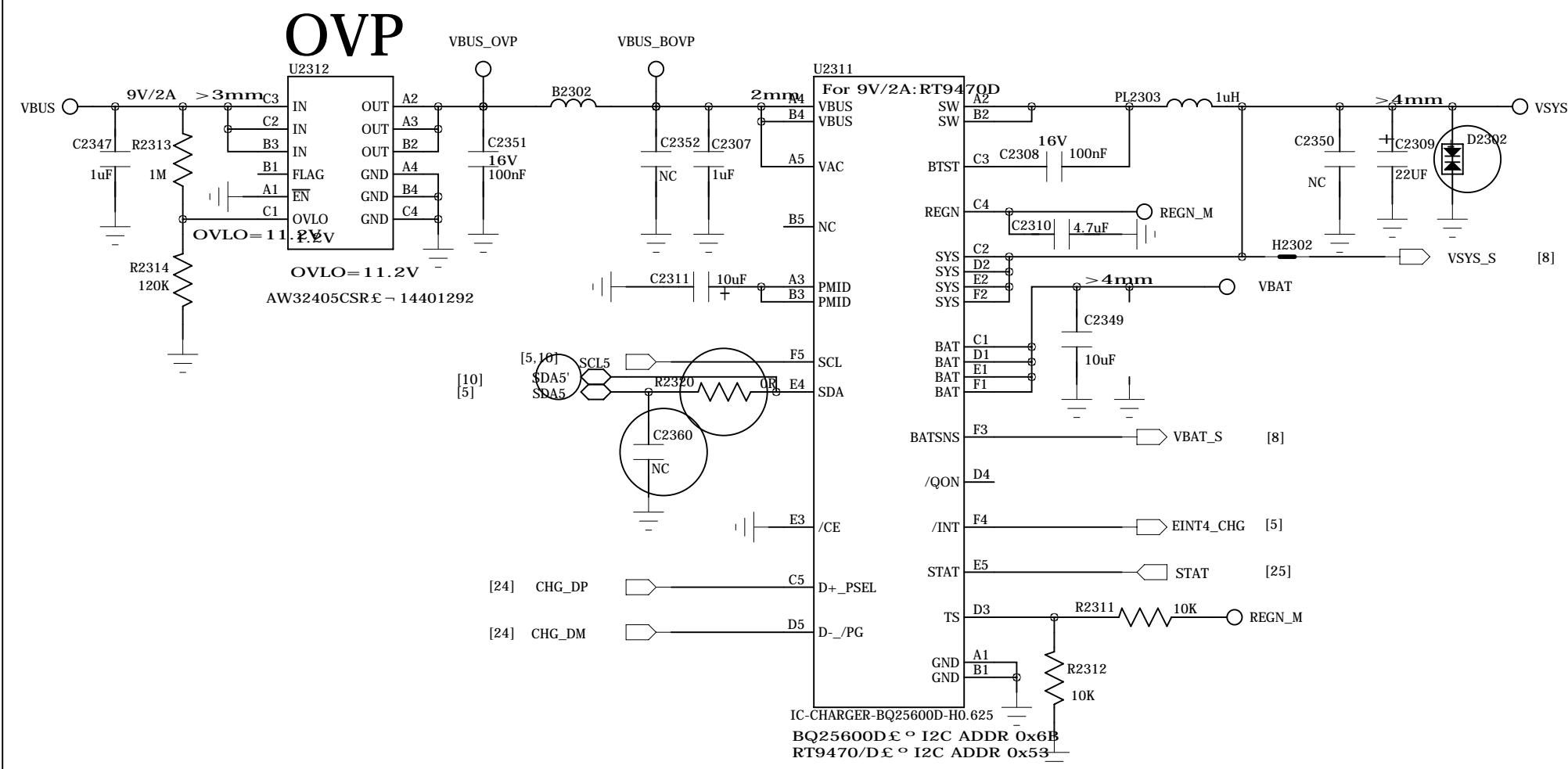


VCAMIO_EXT(1.8V)



COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 23_POWER_THIRD-PARTY-I		VERSION: V1.0	SHEET: 9 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

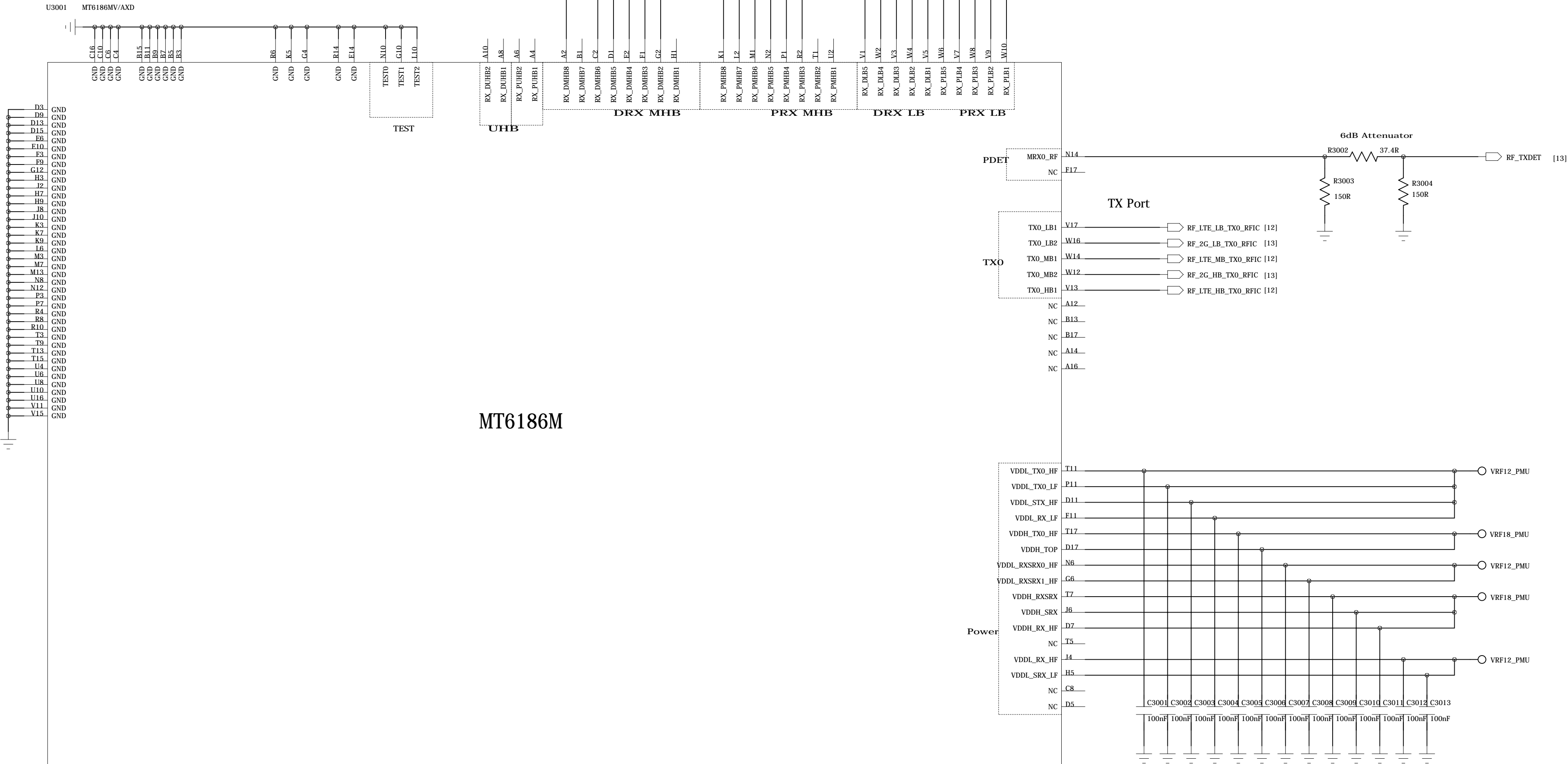
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 23_POWER_THIRD-PARTY-II		VERSION: V1.0	SHEET: 10 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

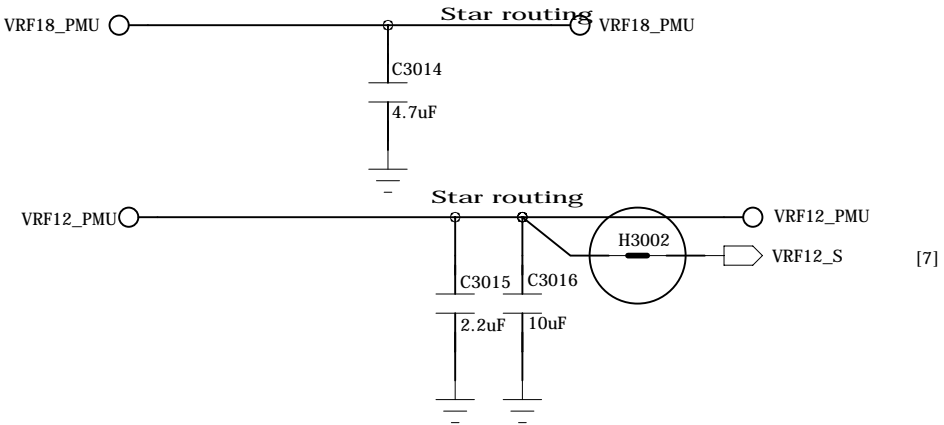
RF_MT6186M_PIN_OUT

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



MT6186M

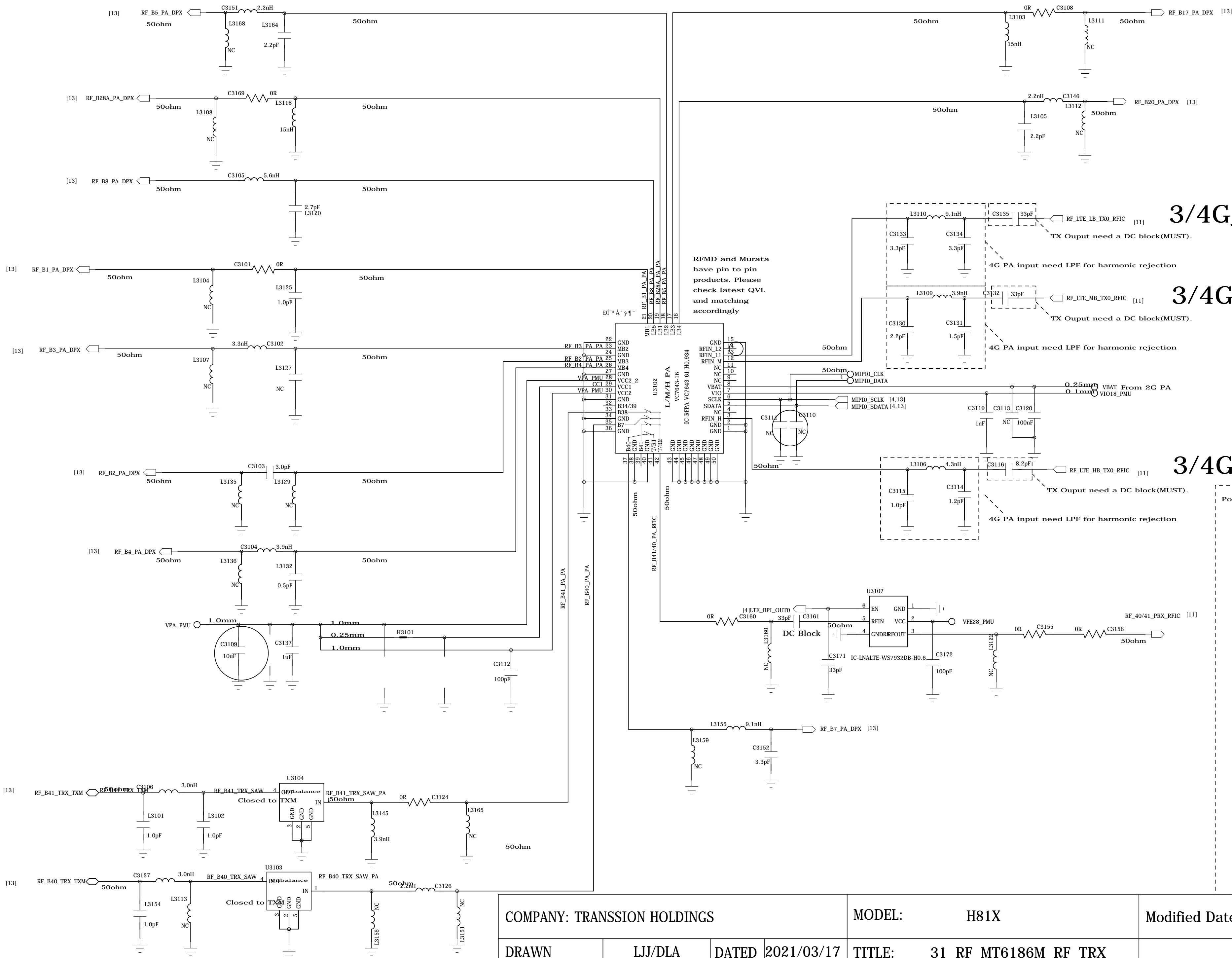
Power domain of MT6186M



COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 30_RF_MT6186M_PIN_OUT		VERSION: V1.0	SHEET: 11 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

RF_MT6186M_RF_TX

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



3/4G_PAIN_LB

TX Output need a DC block(MUST).

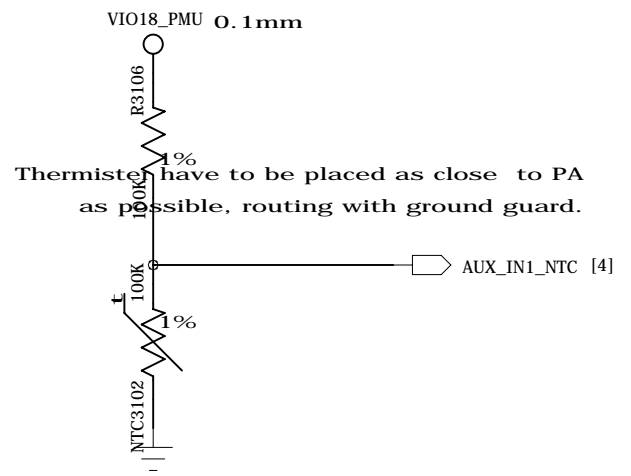
3/4G_PAIN_MB

TX Output need a DC block(MUST).

3/4G_PAIN_HB

TX Output need a DC block(MUST).

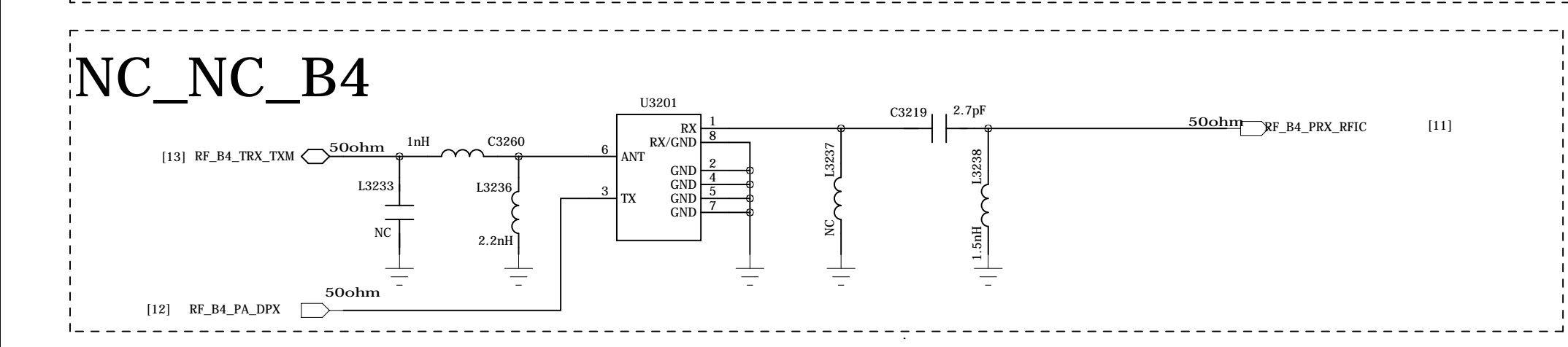
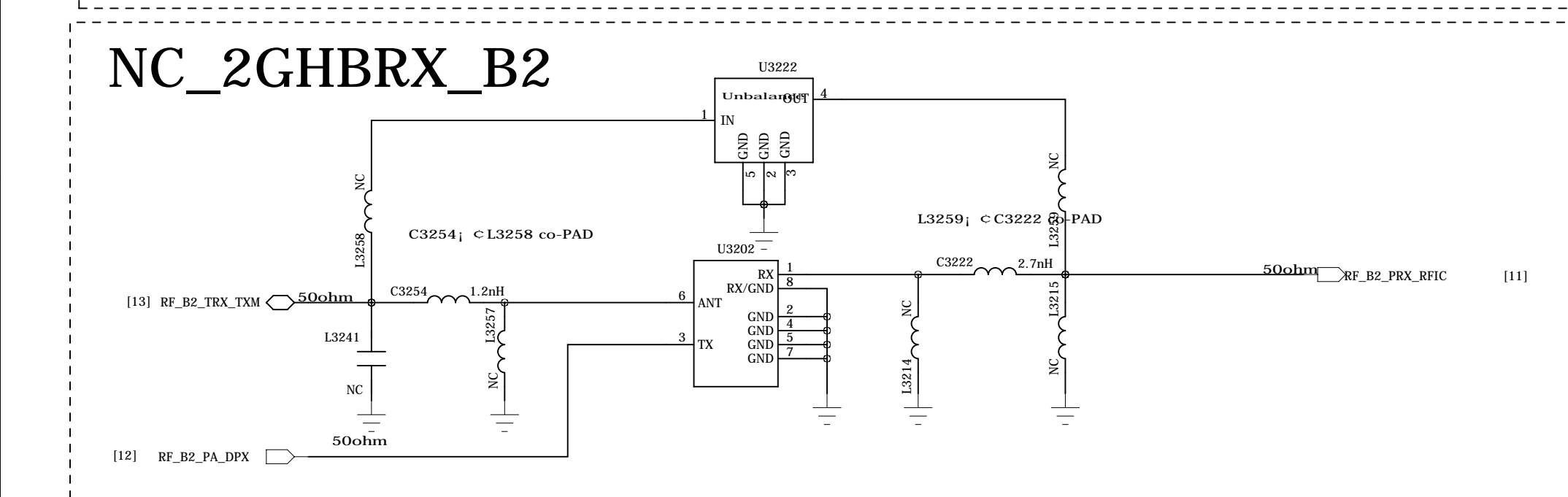
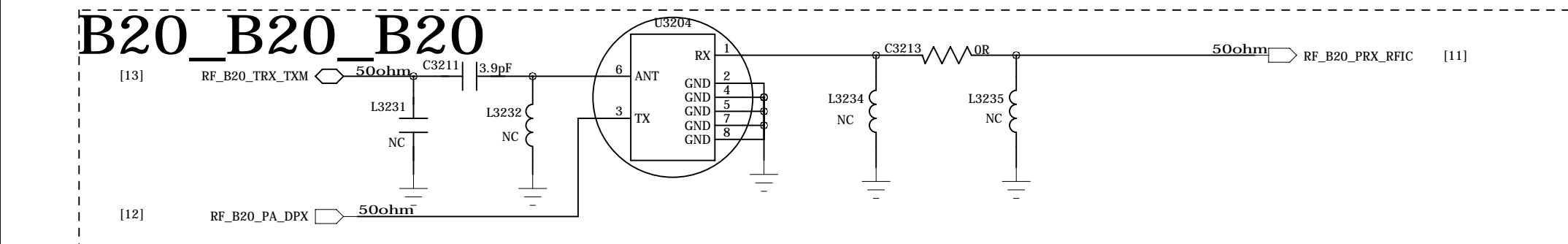
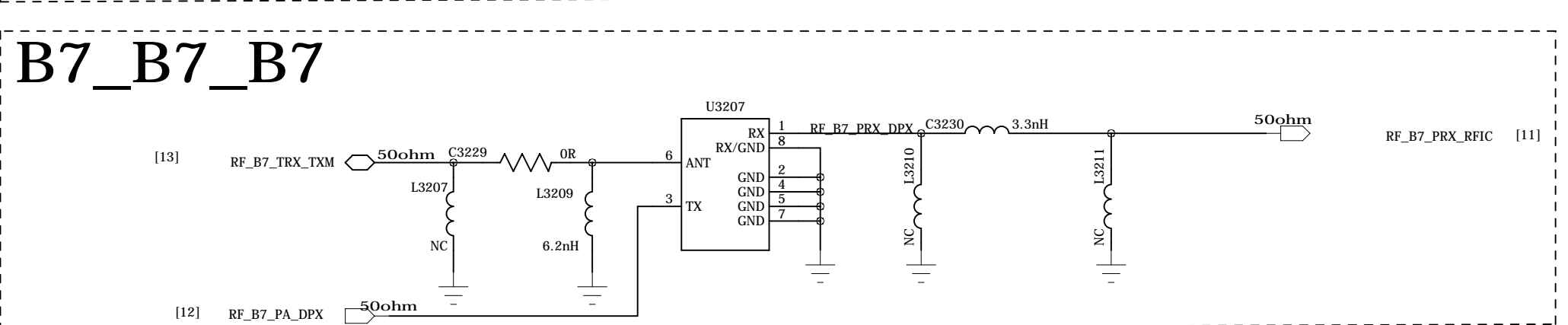
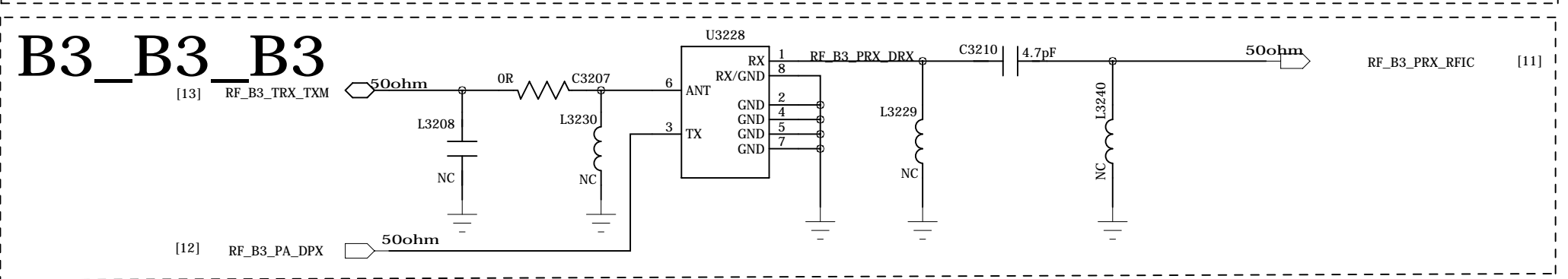
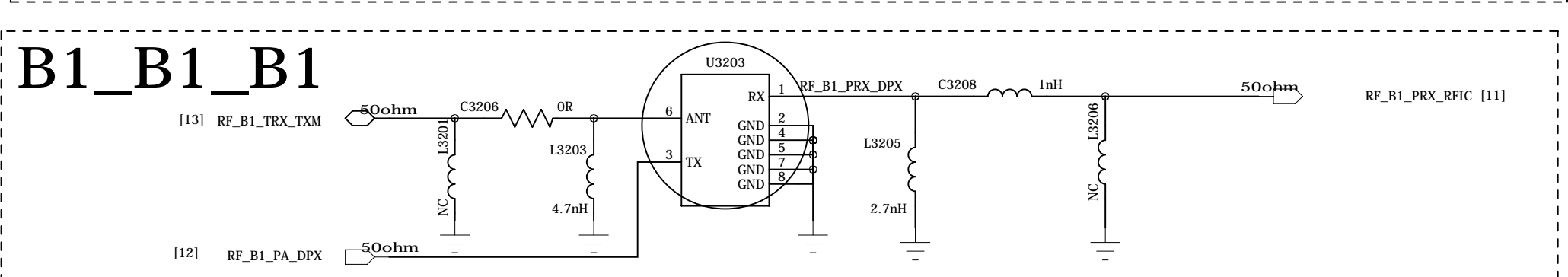
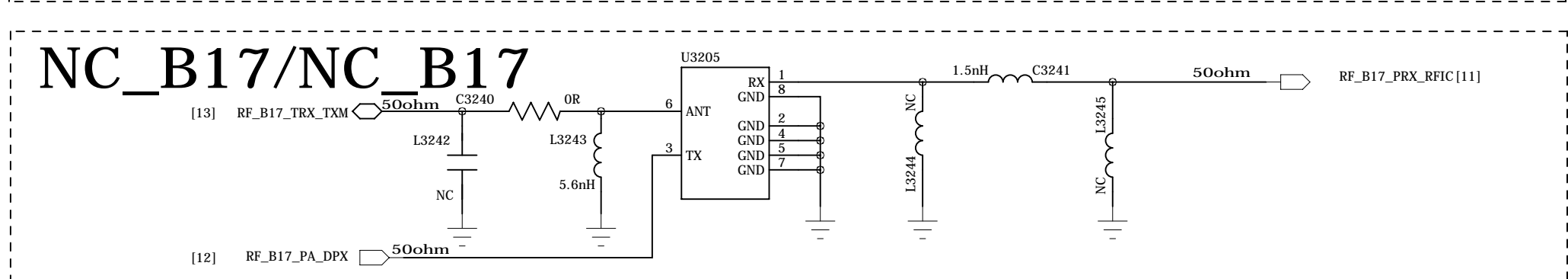
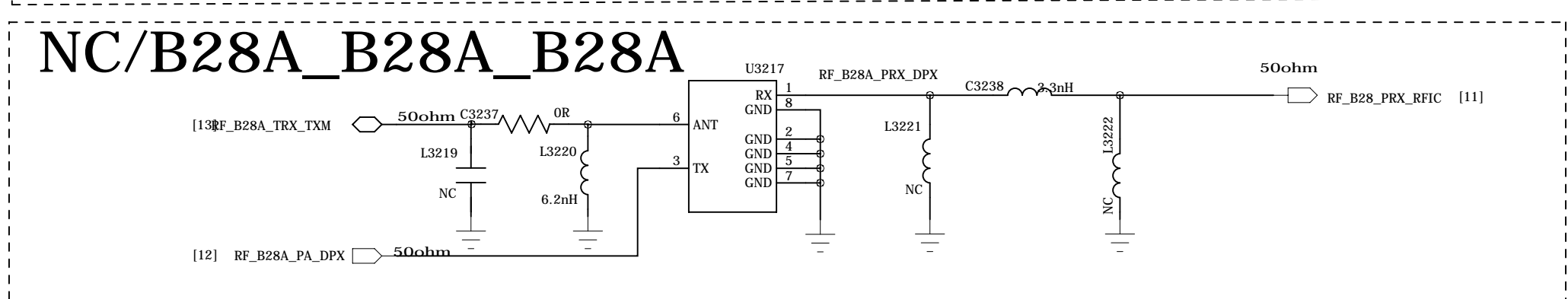
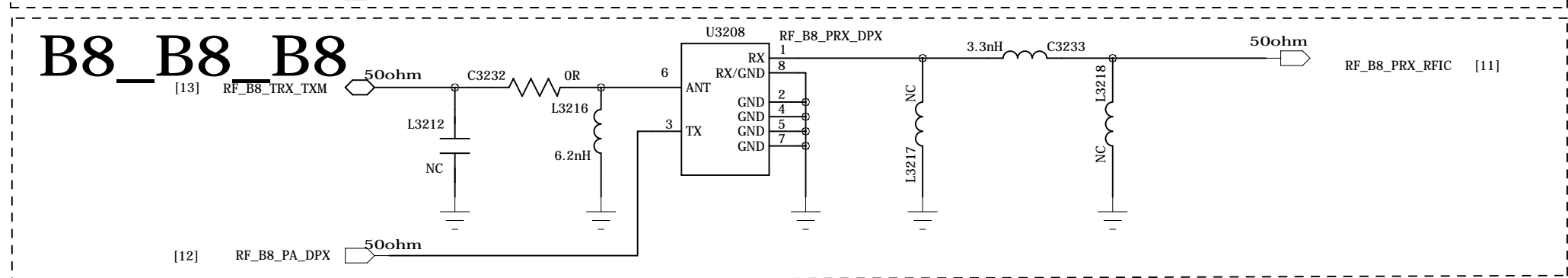
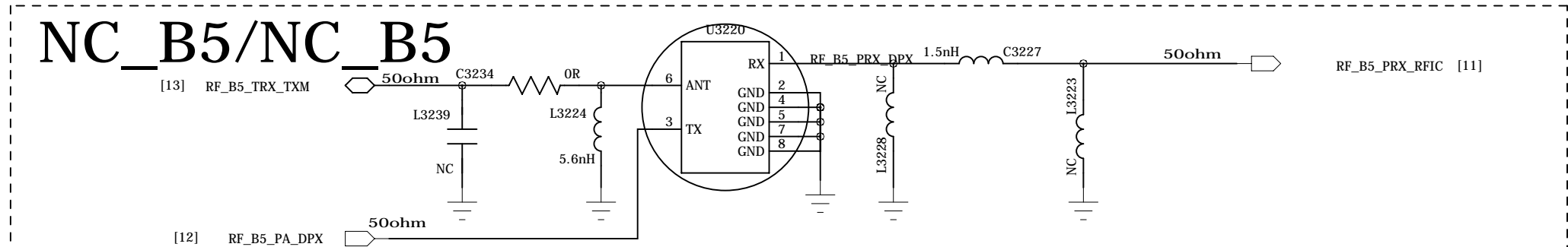
Power



Thermistors have to be placed as close to PA as possible, routing with ground guard.

COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 31_RF_MT6186M_RF_TRX		VERSION: V1.0	SHEET: 12 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

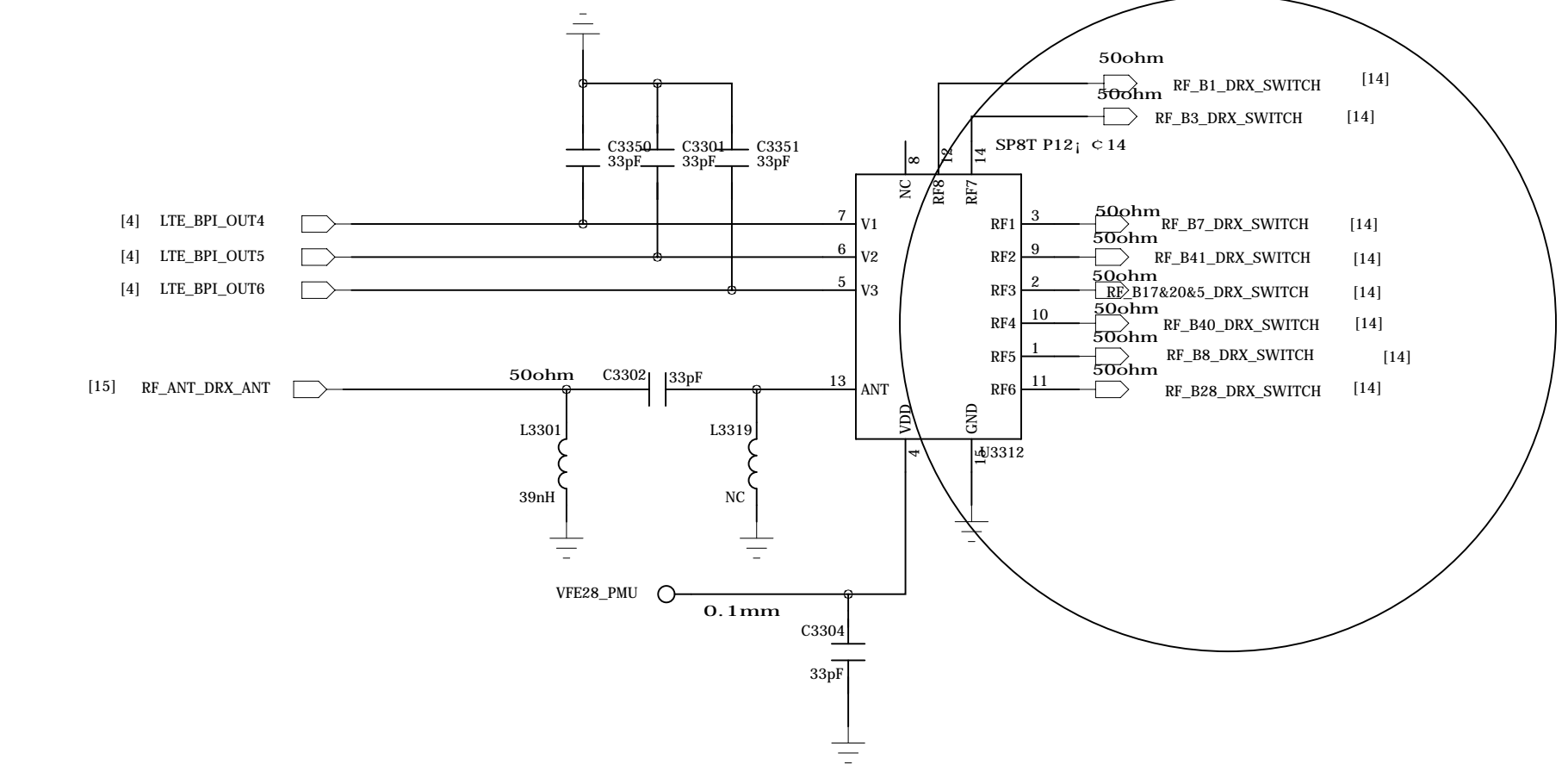
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 32_RF_MT6186M_RF_PRX		VERSION: V1.0	SHEET: 13 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

RF_MT6186M_RF_DRX

SP6T

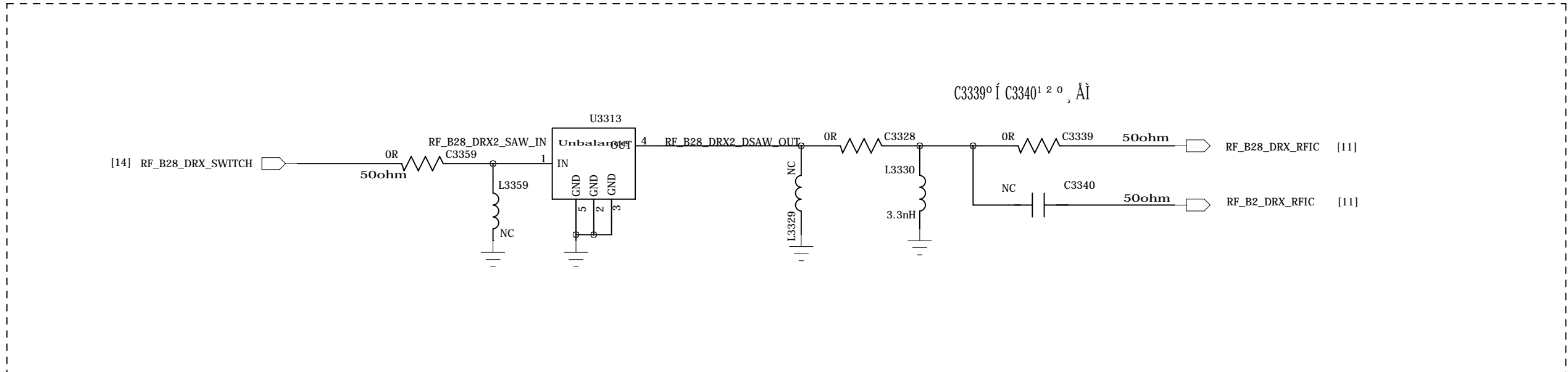


VC1613 control logic										SP6T control logic									
VC1	VC2	RF1	RF2	RF3	V1	V2	V3	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8				
H	L	Y	N	N	L	L	L	Y	N	N	N	N	N	N	N				
H	H	N	Y	N	L	L	H	N	Y	N	N	N	N	N	N				
N	H	N	N	Y	L	L	H	N	Y	N	N	N	N	N	N				
					L	H	L	N	N	Y	N	N	N	N	N				
					L	H	H	N	N	N	Y	N	N	N	N				
					H	L	L	N	N	N	N	Y	N	N	N				
					H	L	H	N	N	N	N	N	Y	N	N				
					H	H	L	N	N	N	N	N	N	Y	N				
					H	H	H	N	N	N	N	N	N	N	Y				

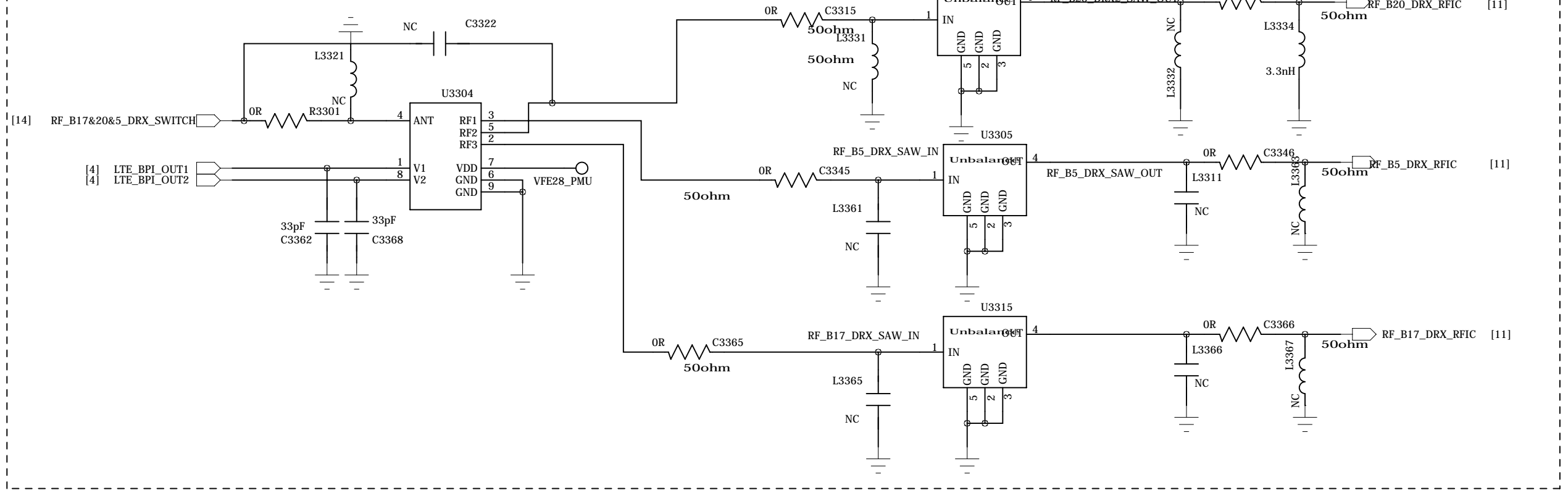
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

VFE28_PMU 0.2mm VFE28_PMU

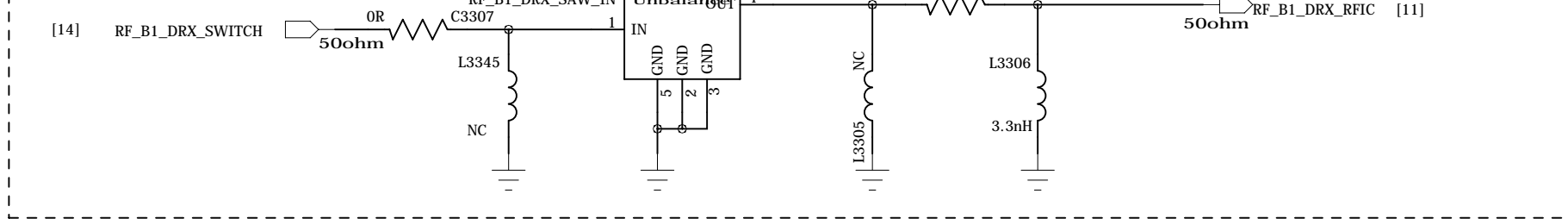
Power 1uF C3303



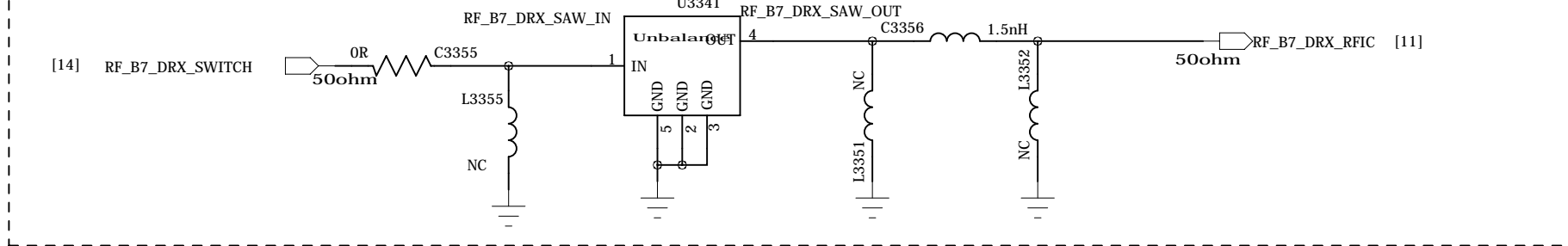
B20_B20&B28A_B20&B28A



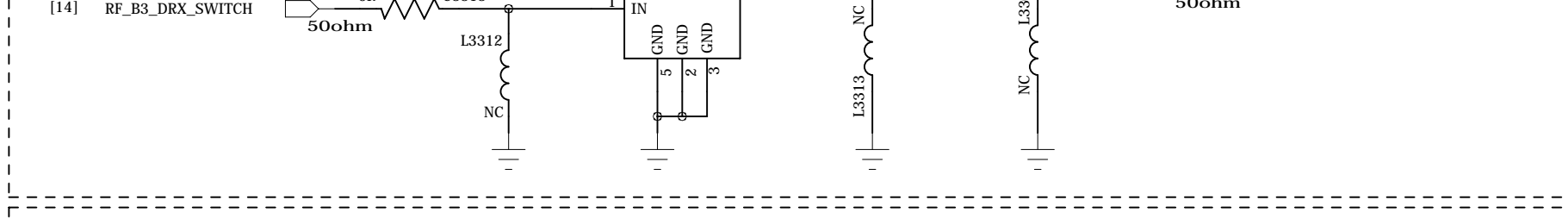
B1/NC_B1_B1



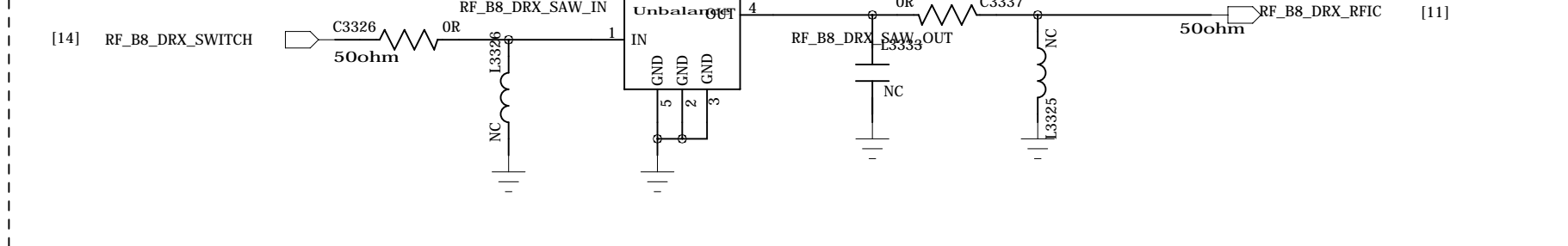
B7_B7_B7



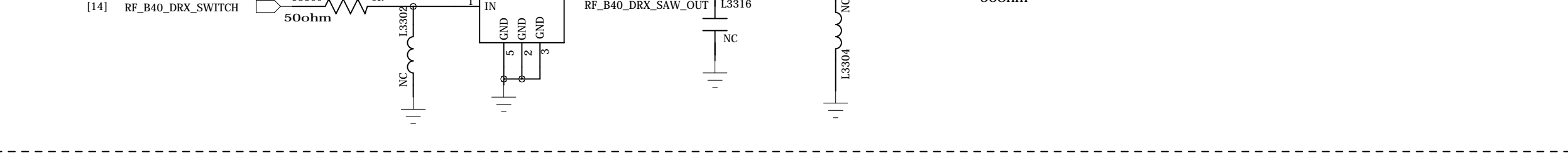
B3_B3_B3



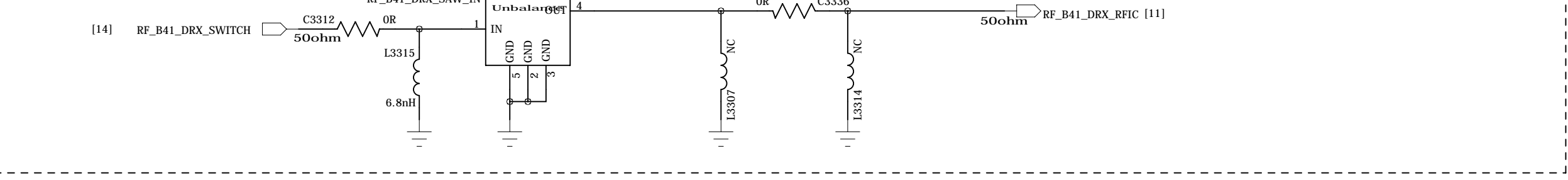
NC/B8_B8_B8



NC_B40



NC_B41_B41/NC

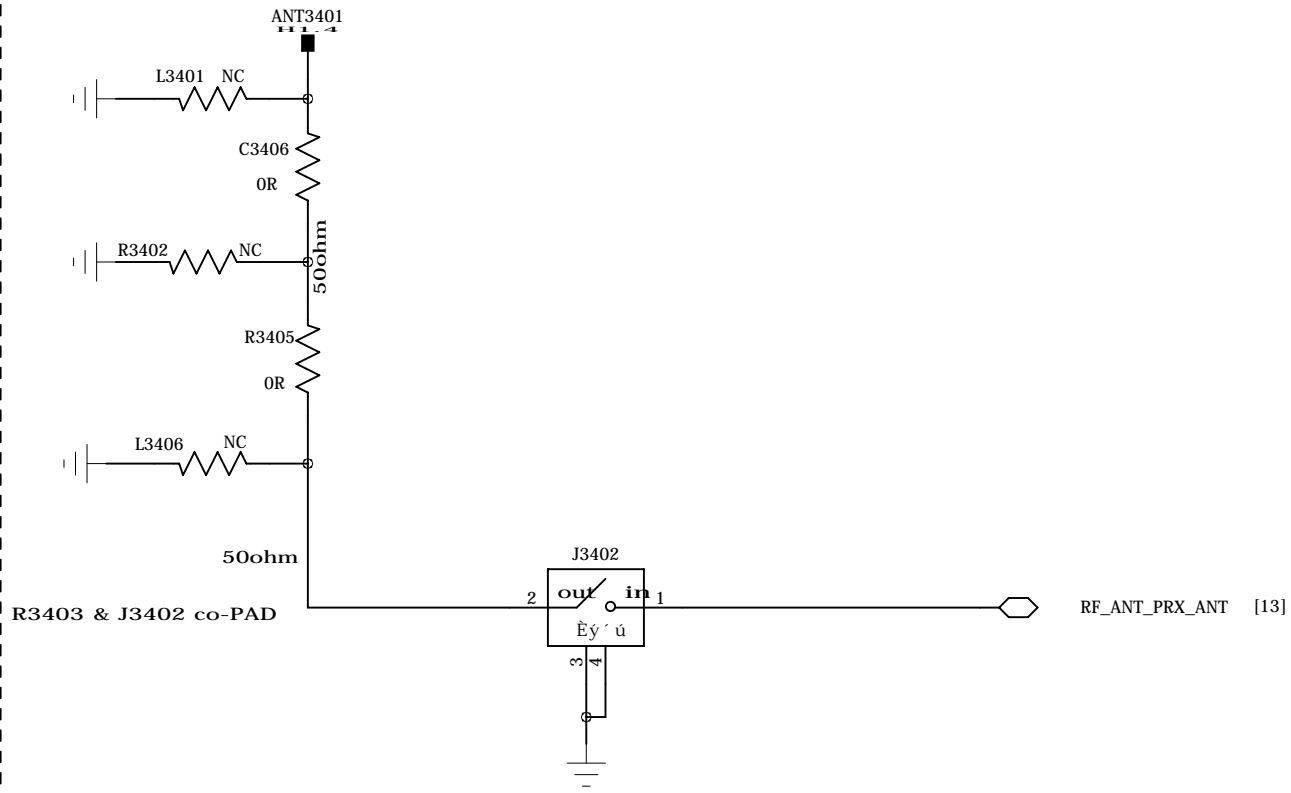


COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 33_RF_MT6186M_RF_DRX		VERSION: V1.0	SHEET: 14 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

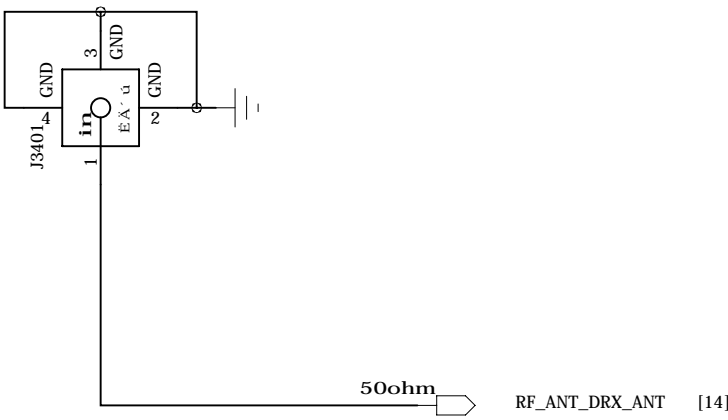
RF_MT6186M_RF_ANT

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

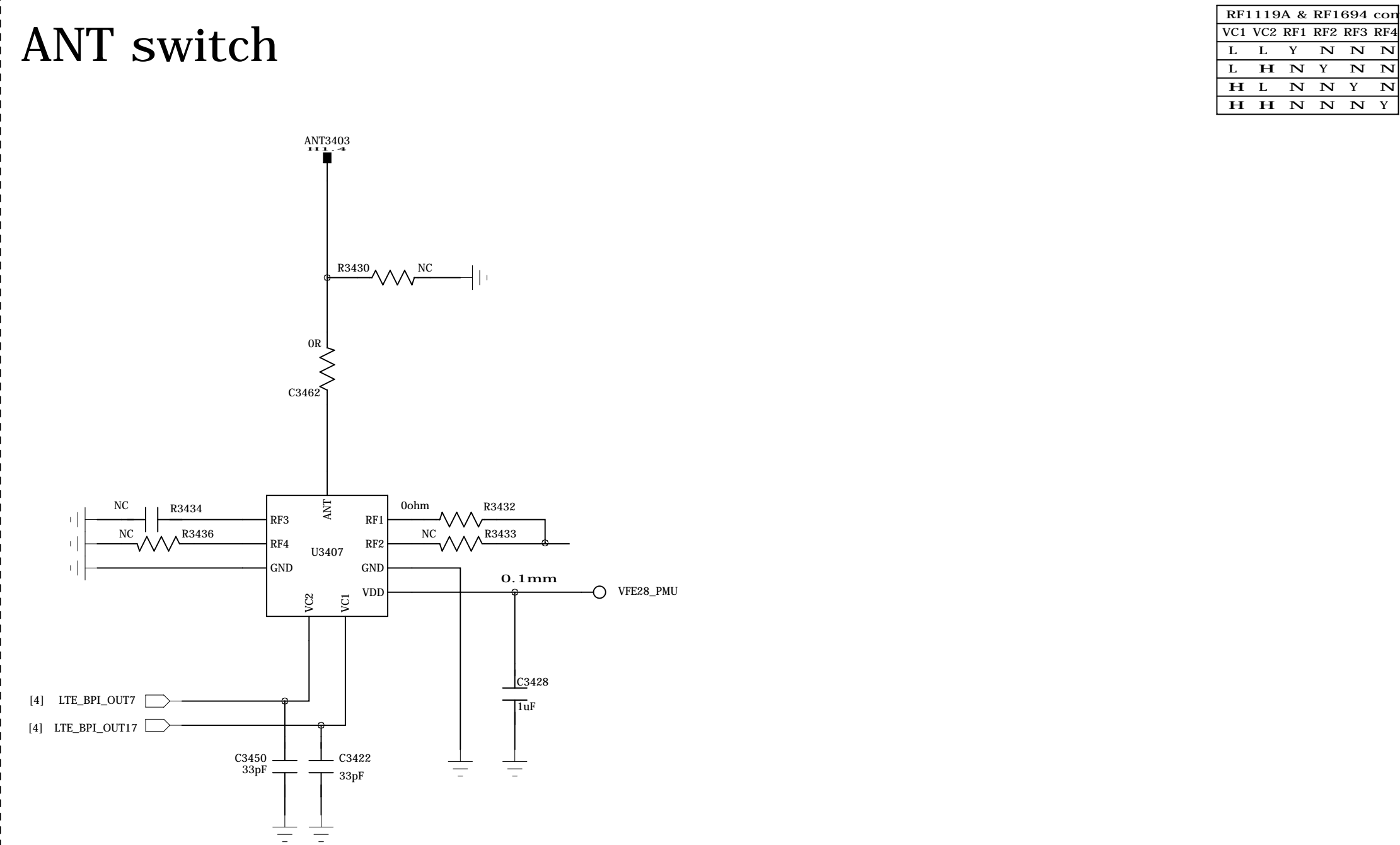
ASM_Main
791~960MHz + 1710~2690MHz



DRX ANT
791~960MHz 1710~2690MHz

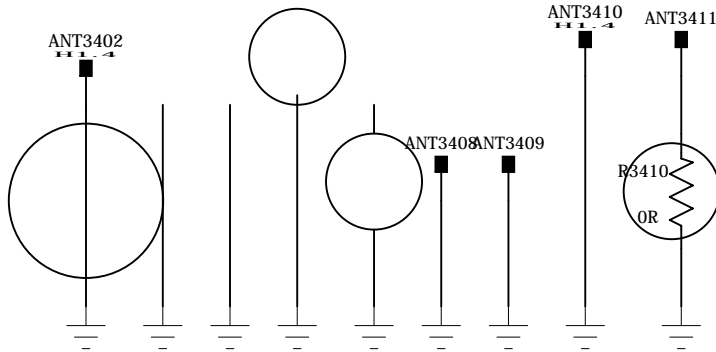


ANT switch



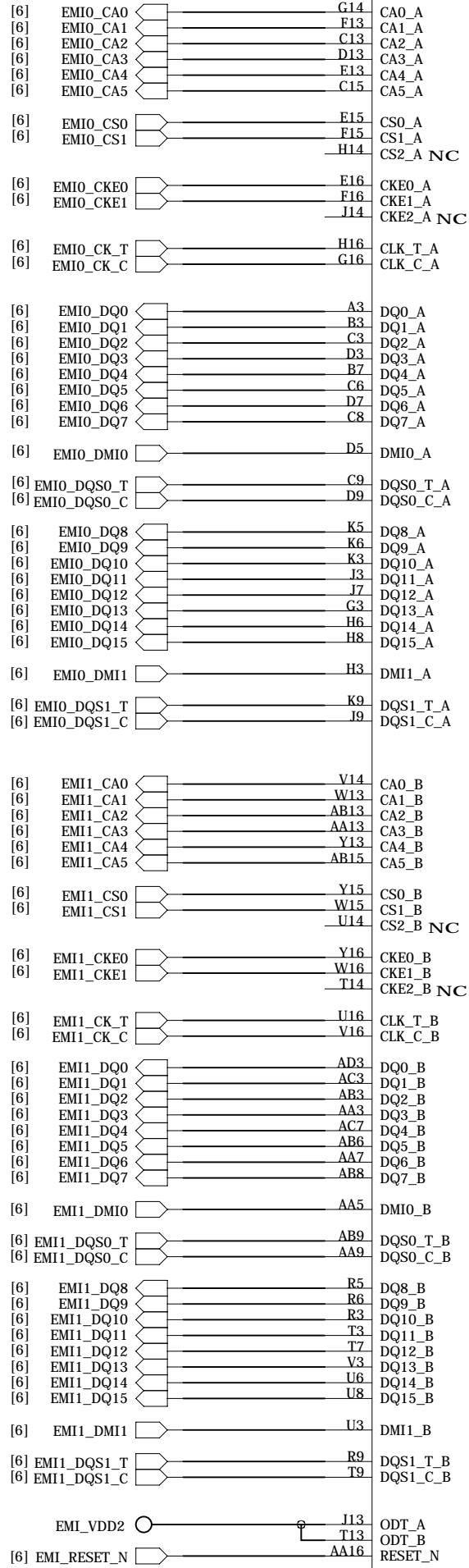
RF1119A & RF1694 control logic						
VC1	VC2	RF1	RF2	RF3	RF4	
L	L	Y	N	N	N	
L	H	N	Y	N	N	
H	L	N	N	Y	N	
H	H	N	N	N	Y	

FM

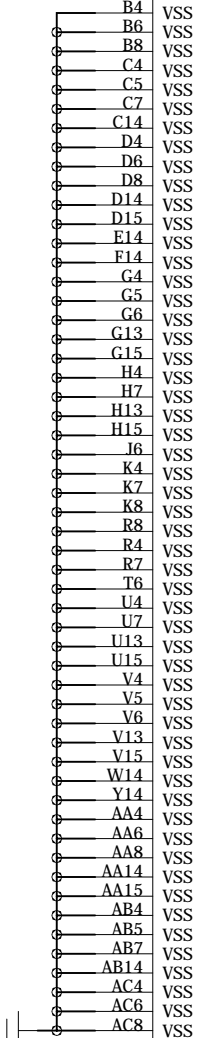


COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 34_RF_ANT_CONTROLLER		VERSION: V1.0	SHEET: 15 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

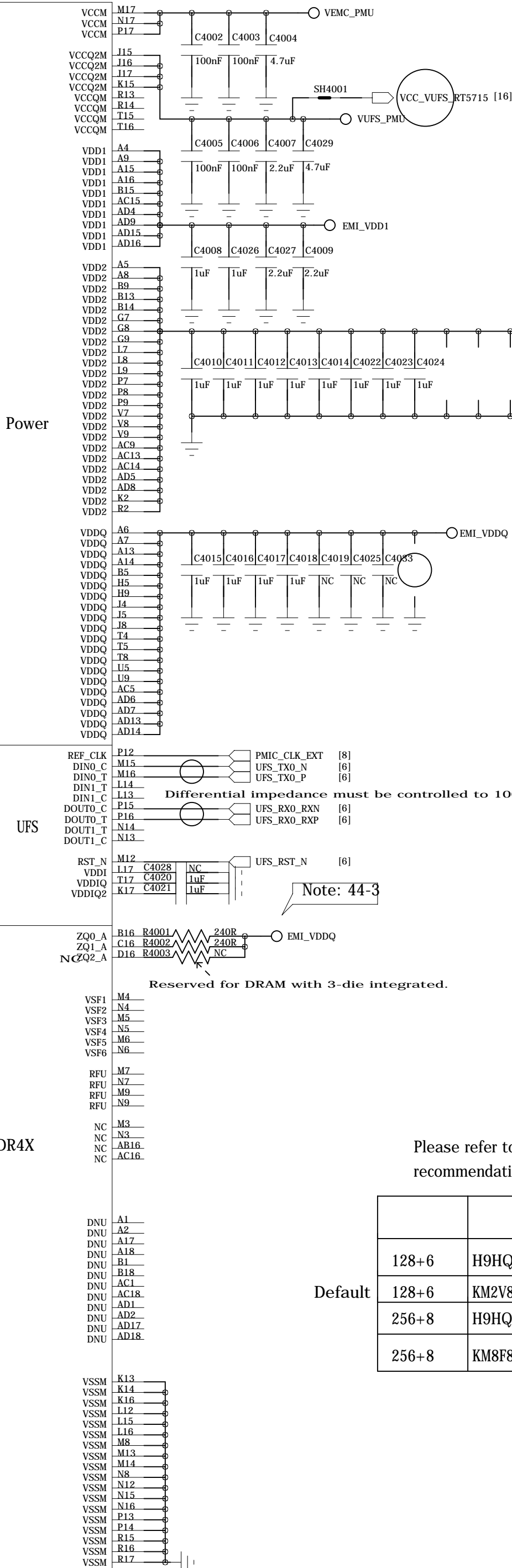
MEM_uMCP_LPDDR4x



LP-DDR4X



IC:UMCP+LPDDR4X-128GB+6GB-H1.2

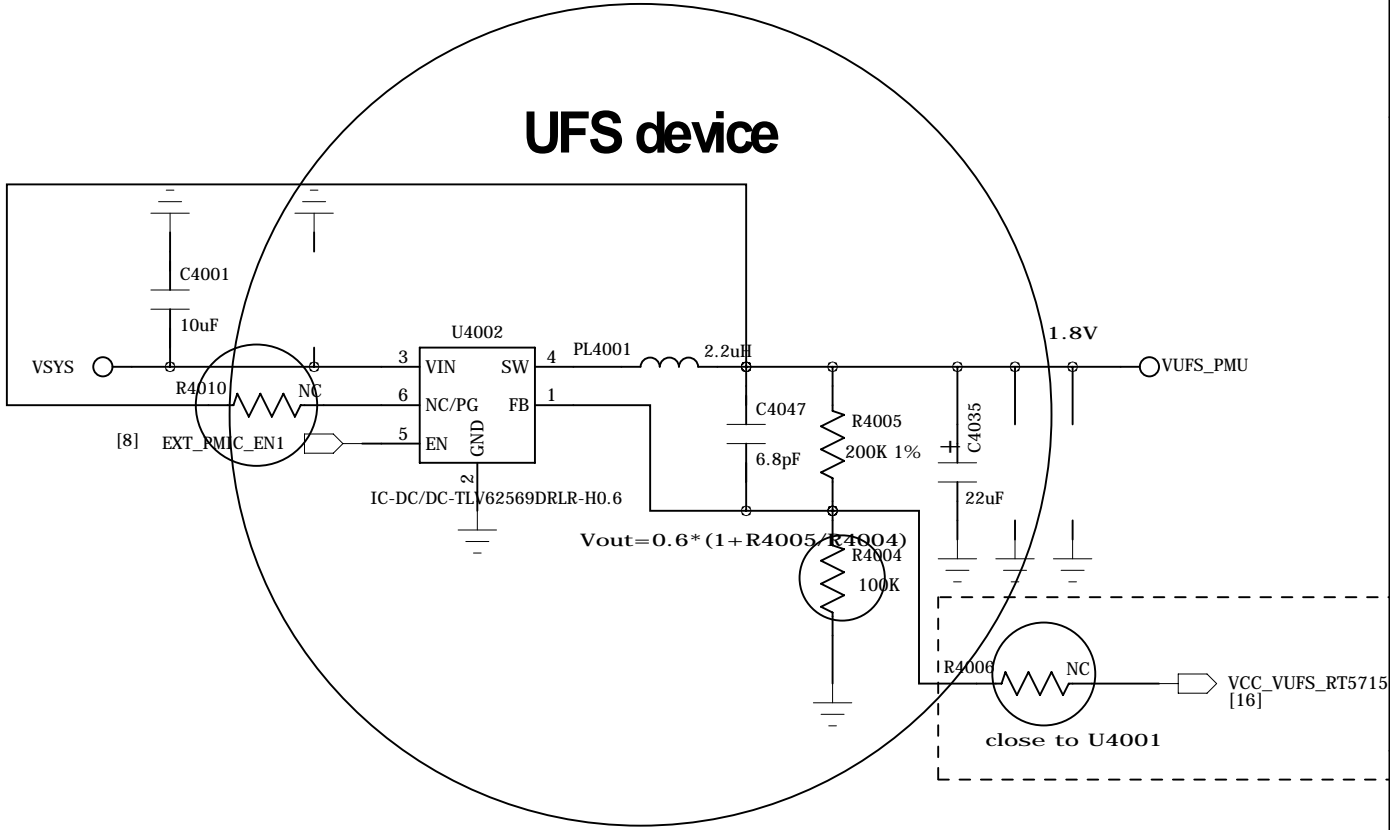


Default

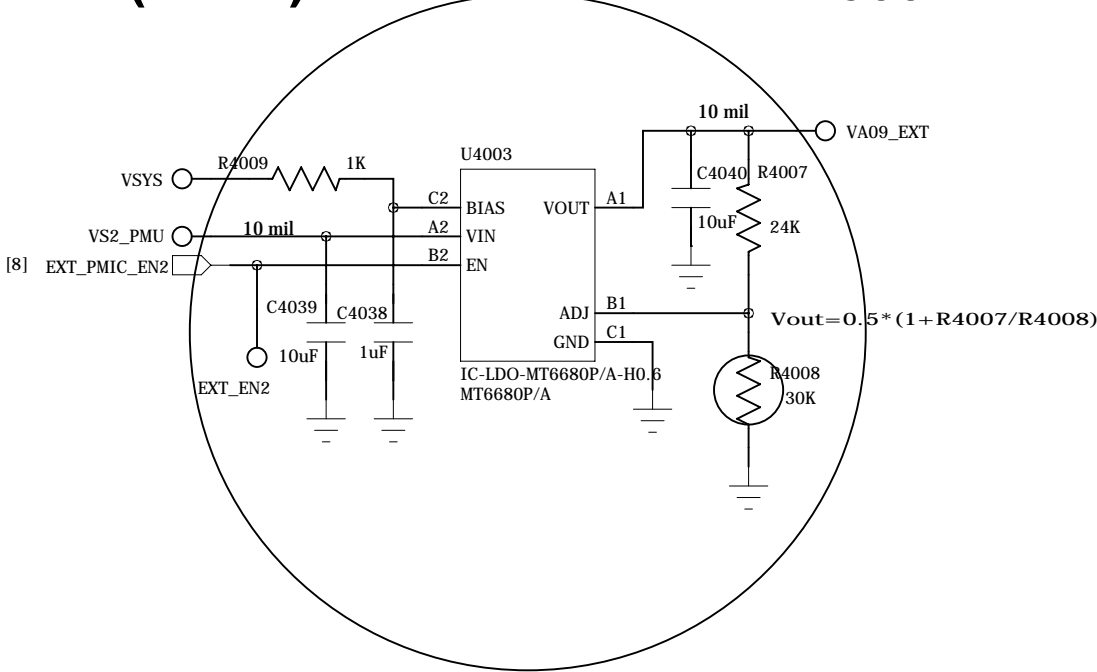
Please refer to uMCP vendor's datasheet or MTK common design notice to get the recommendation bypass cap. value for VCC/VCCQ/VDDI power domains of UFS.

	UMCP No.	C4028	C4020	C4021
128+6	H9HQ16AECMMDAR	NC	NC	1uF
128+6	KM2V8001CM-B707	NC	NC	1uF
256+8	H9HQ21AFAMZDAR-KEM	NC	1uF	1uF
256+8	KM8F8001JM-B813	NC	NC	1uF

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

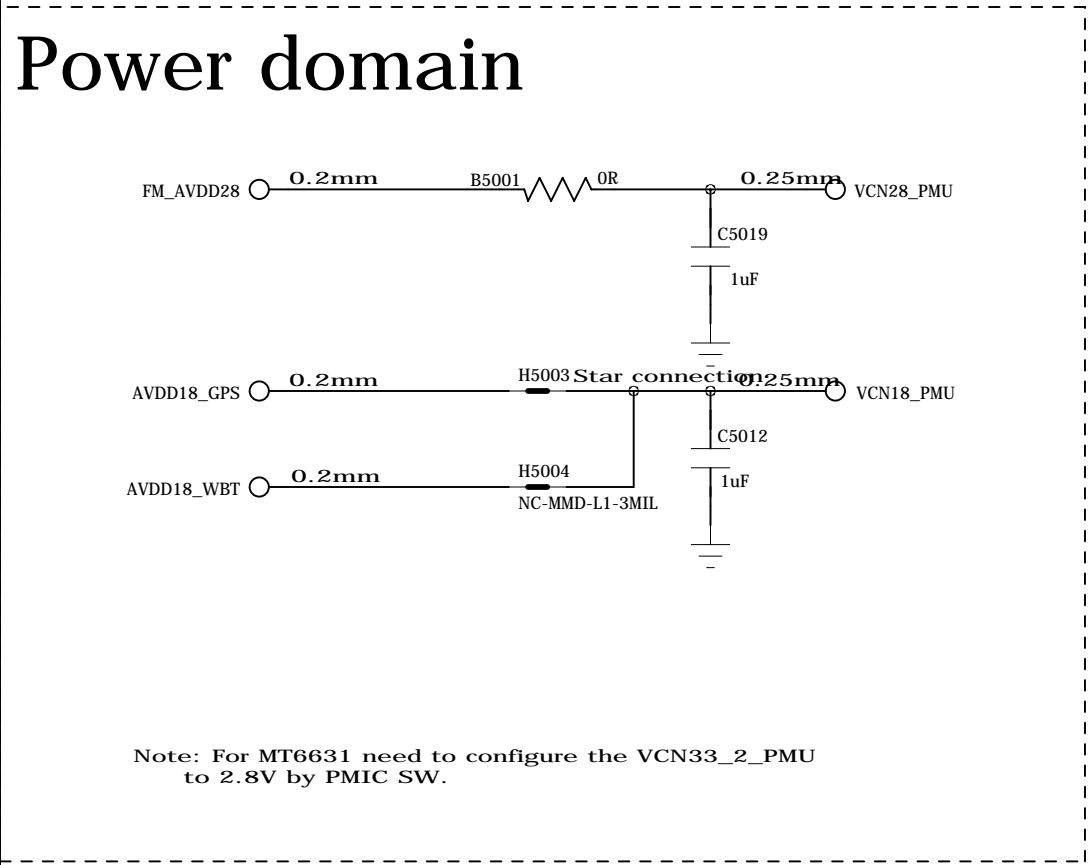


(AVDD) LDO for VA09 0.9V 500mA



COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 40_MEMORY_UMCP_LPDDR4X		VERSION: V1.0	SHEET: 16 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

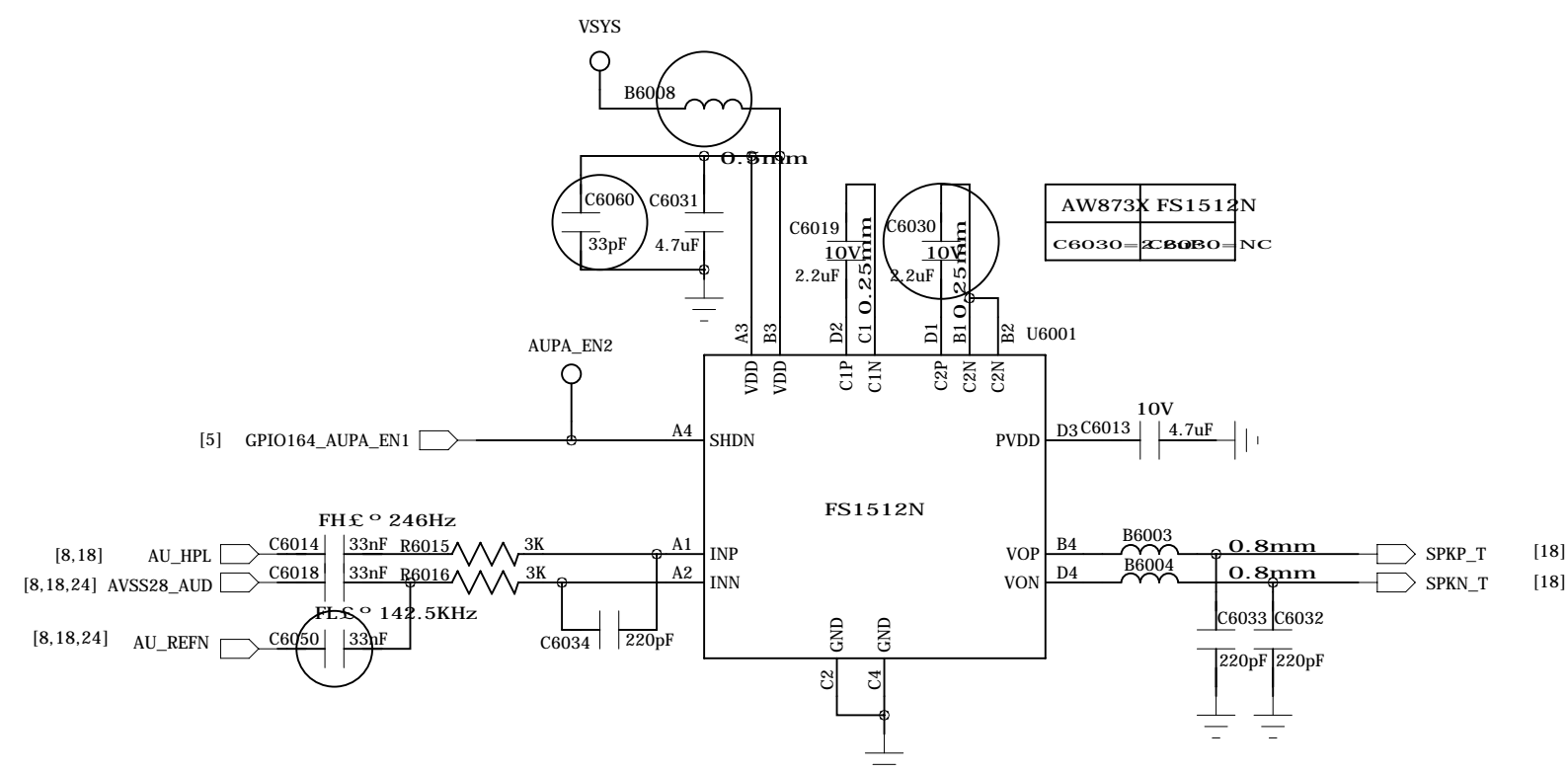
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



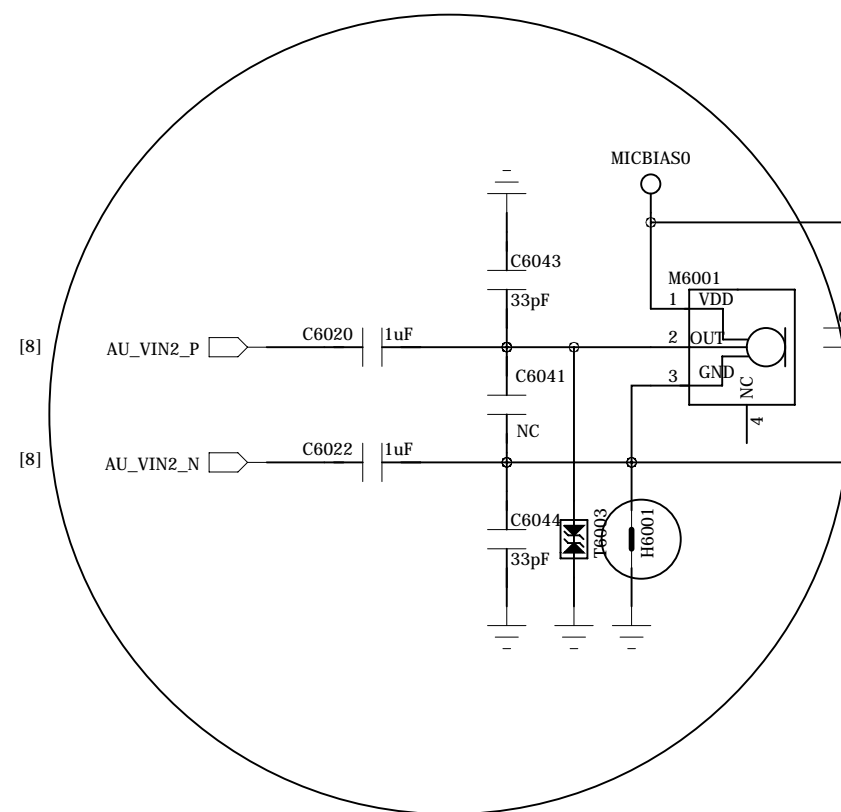
COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 50_CONNECTIVITY_MT6631		VERSION: V1.0	SHEET: 17 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

PERI_AUDIO_IO

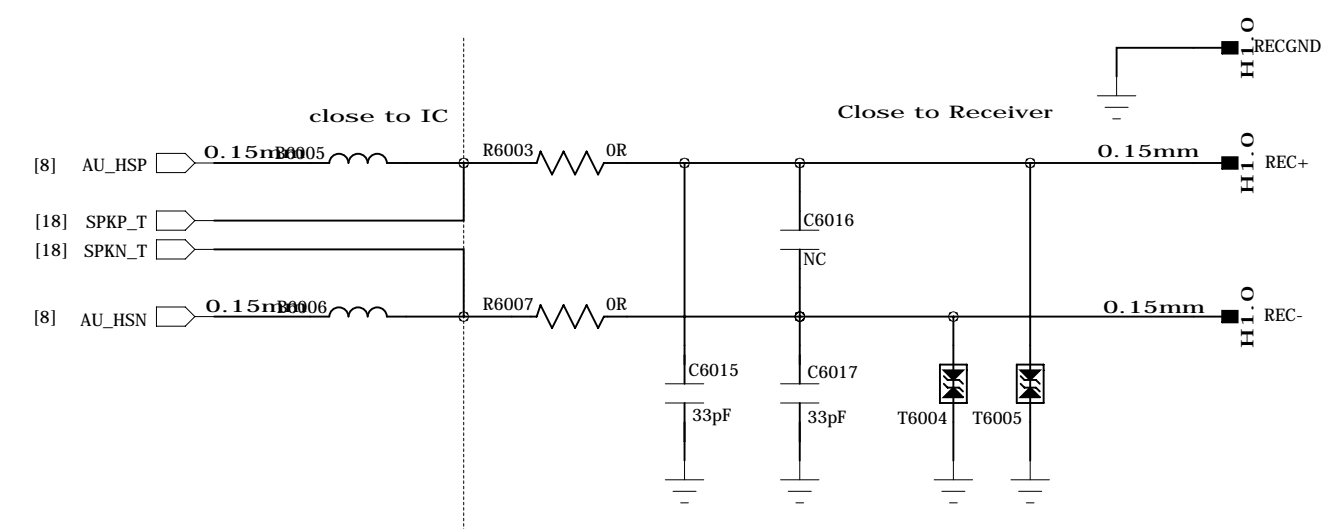
Audio_PA_TOP



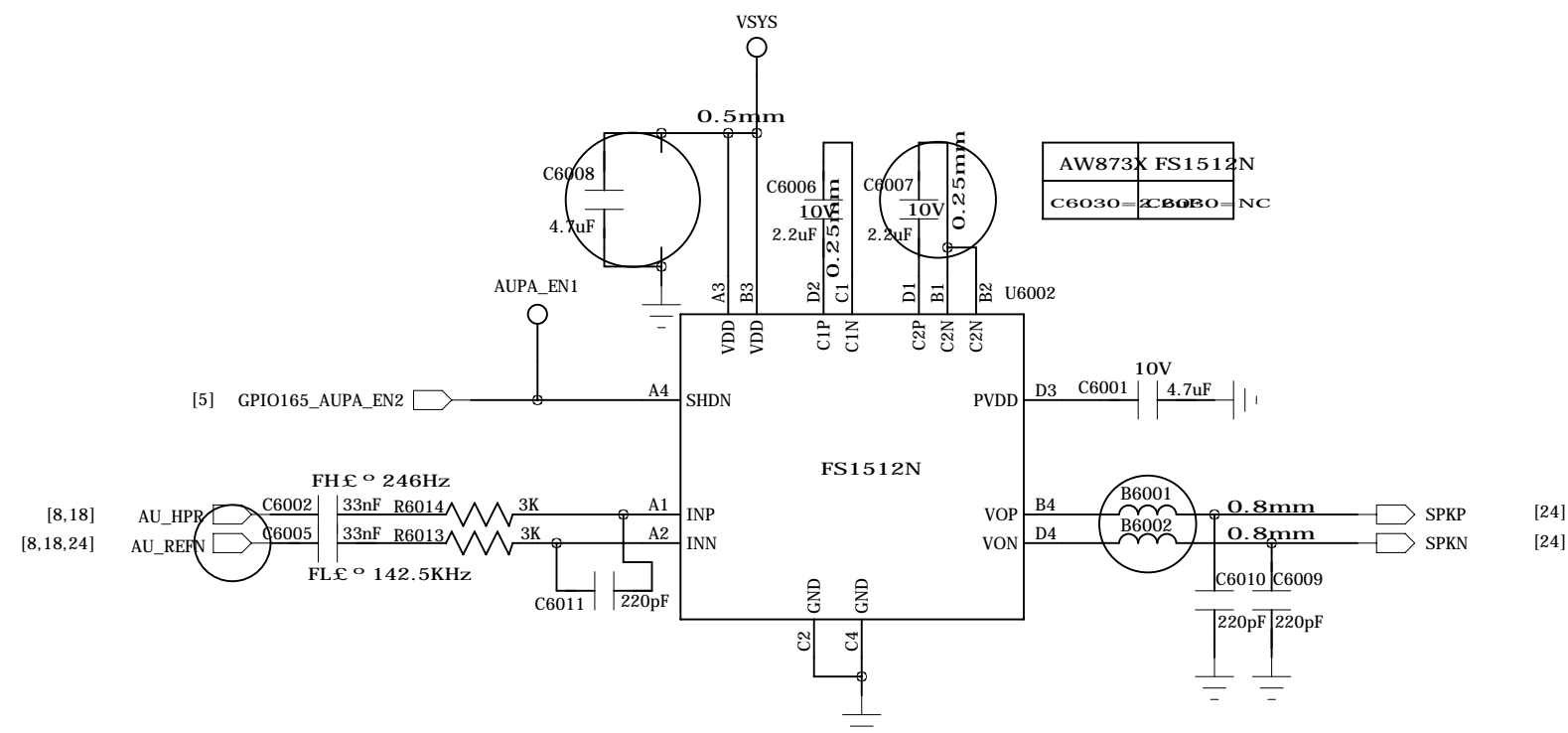
SUB MIC



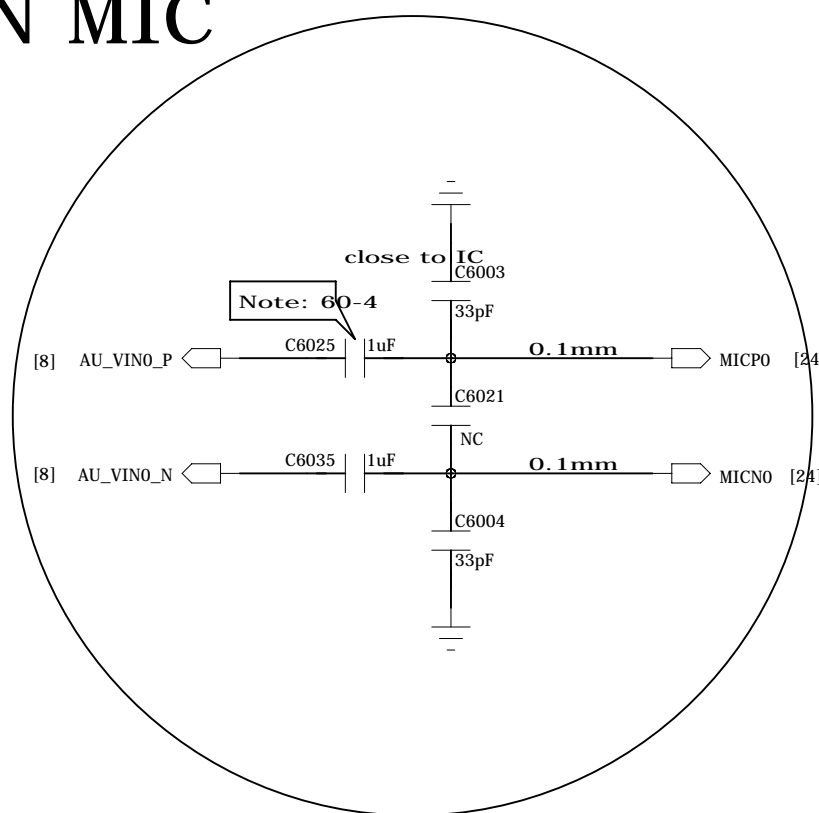
Receiver



Audio_PA_BOTTOM

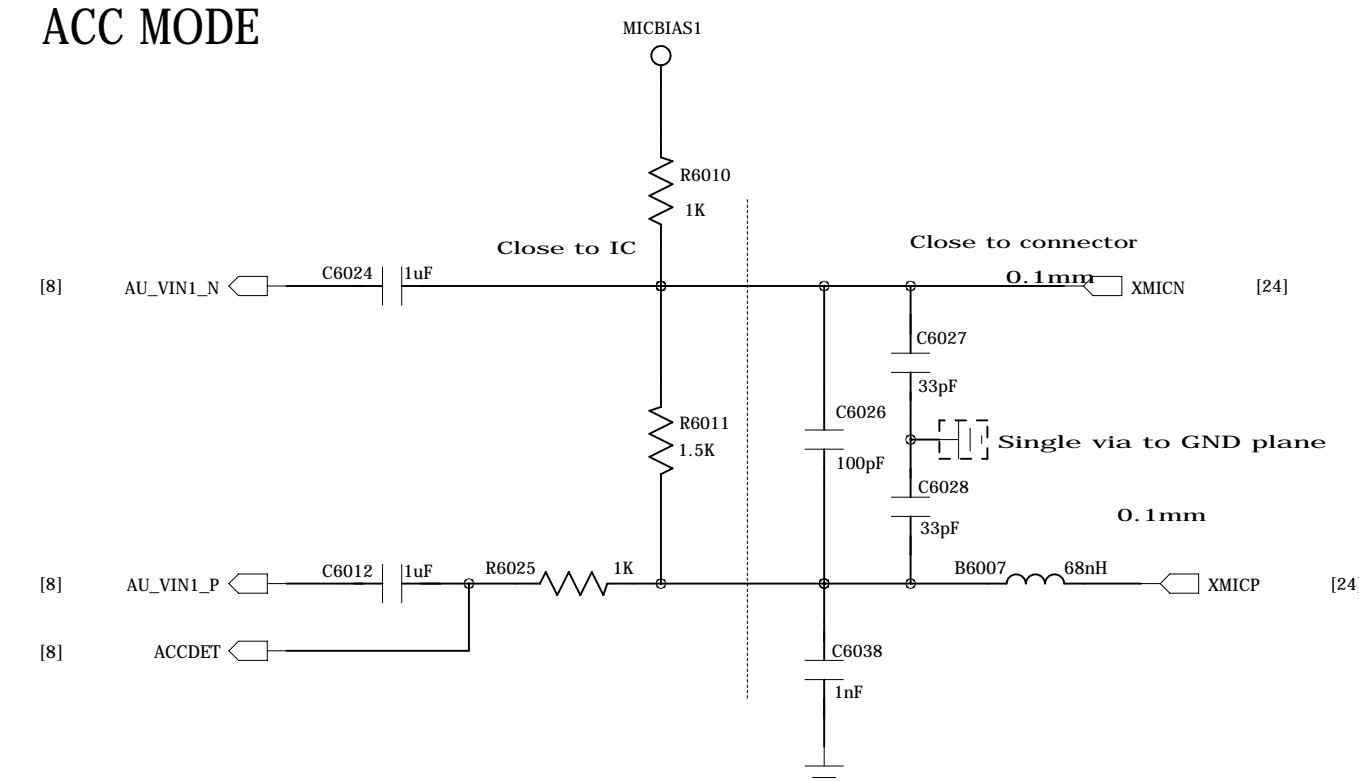


MAIN MIC

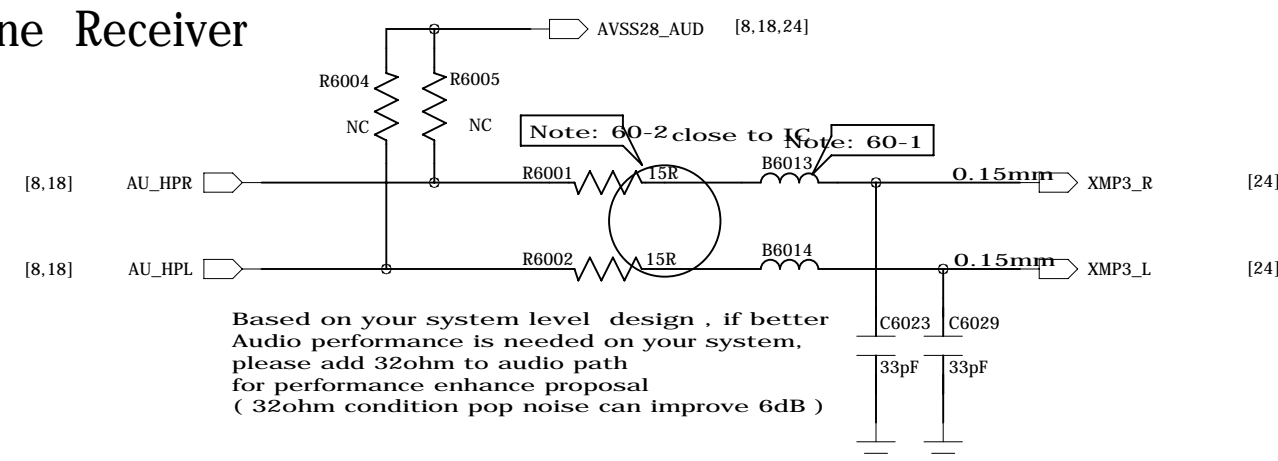


Earphone MICPHONE

ACC MODE MICBIAS1



Earphone Receiver



Schematic design notice of "60_PERI_AUDIO_IO" page.

Note 604009 B6010 B6013 B6014 needs change to "BLM18BD102SN1" for high THD p
but this BOM change will result in FM RSSI 10dB degraded.

Note 60F2: reserve a resistor in HPL and HPR in series connection both in order to optimize headphone pop noise. The recommended value of this resistor is

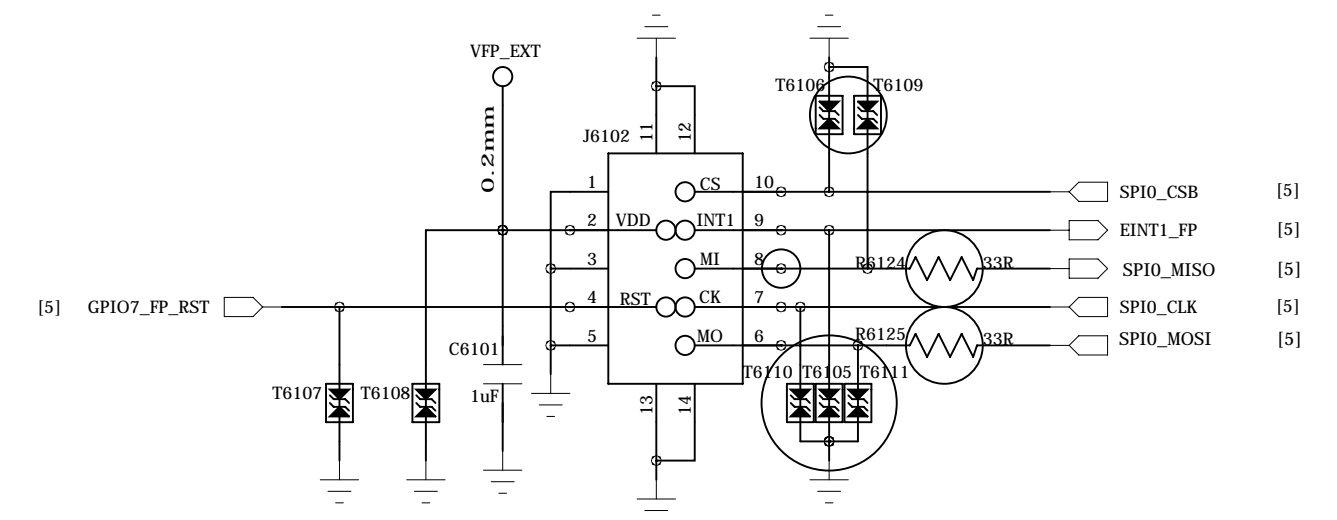
Note 60-8: Byout trace from MT6353 ball J3 AUDREFN to Audio jack GND must s

Note 60 Only support DCC mode.

COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 60_PERI_AUDIO_I		VERSION: V1.0	SHEET: 18 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

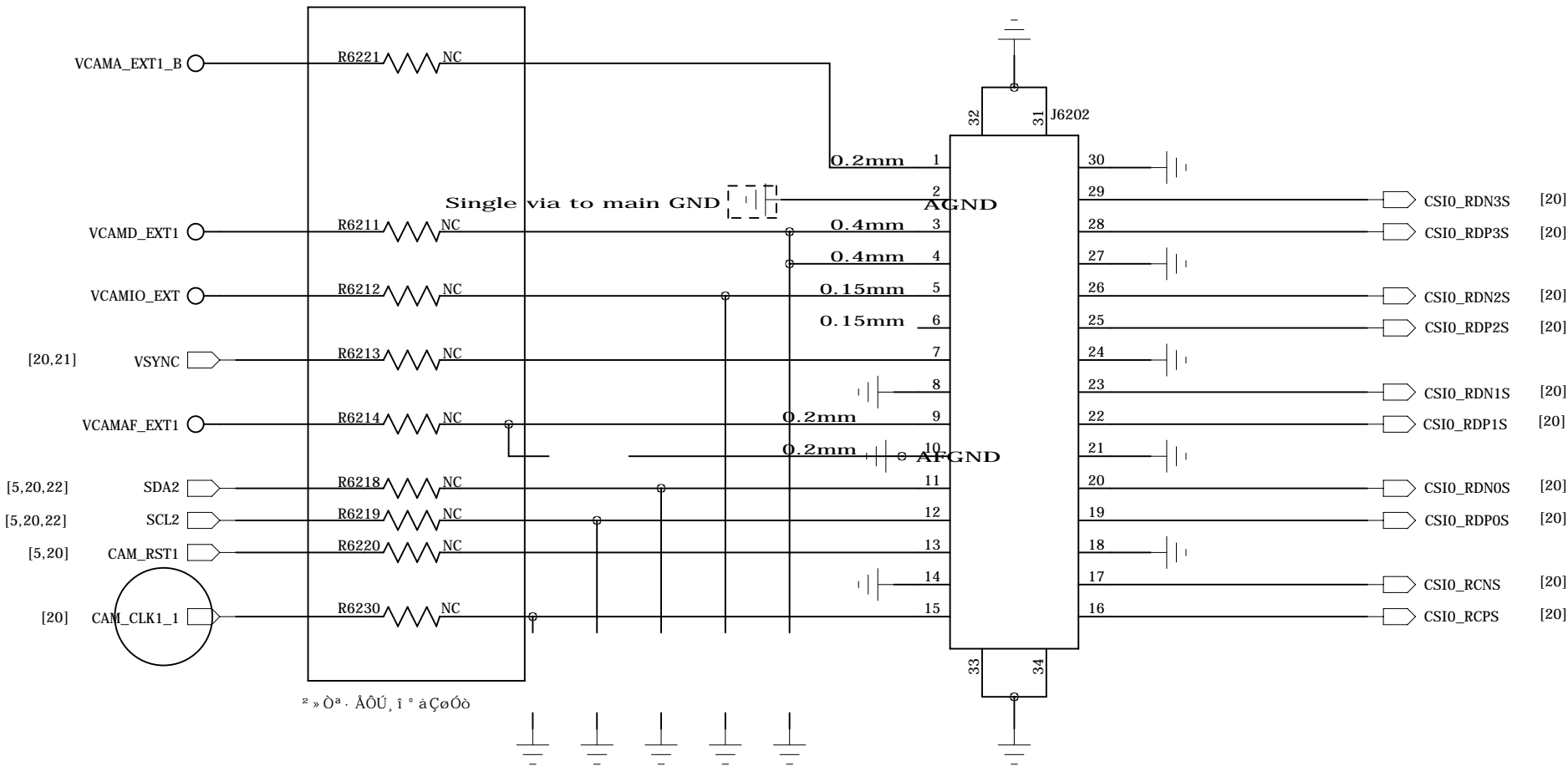
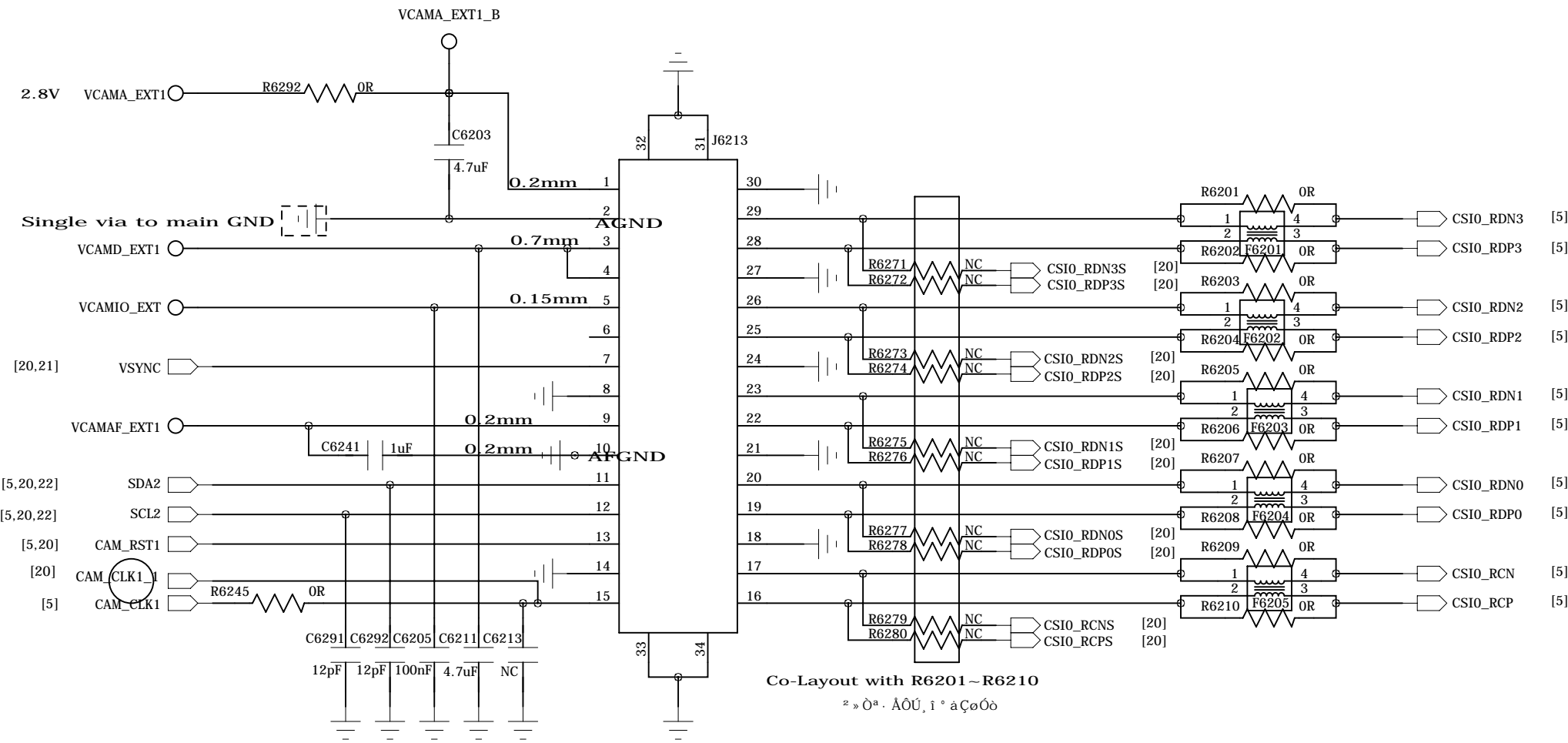
CTP (NT36525) I2C address: 0X01 (Write:0x02, Read:0x03)



COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 61_PERI_LCM_CTP_FP		VERSION: V1.0	SHEET: 19 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

PERI_CAMERA_I

MAIN CAMERA(64M/50M/48M

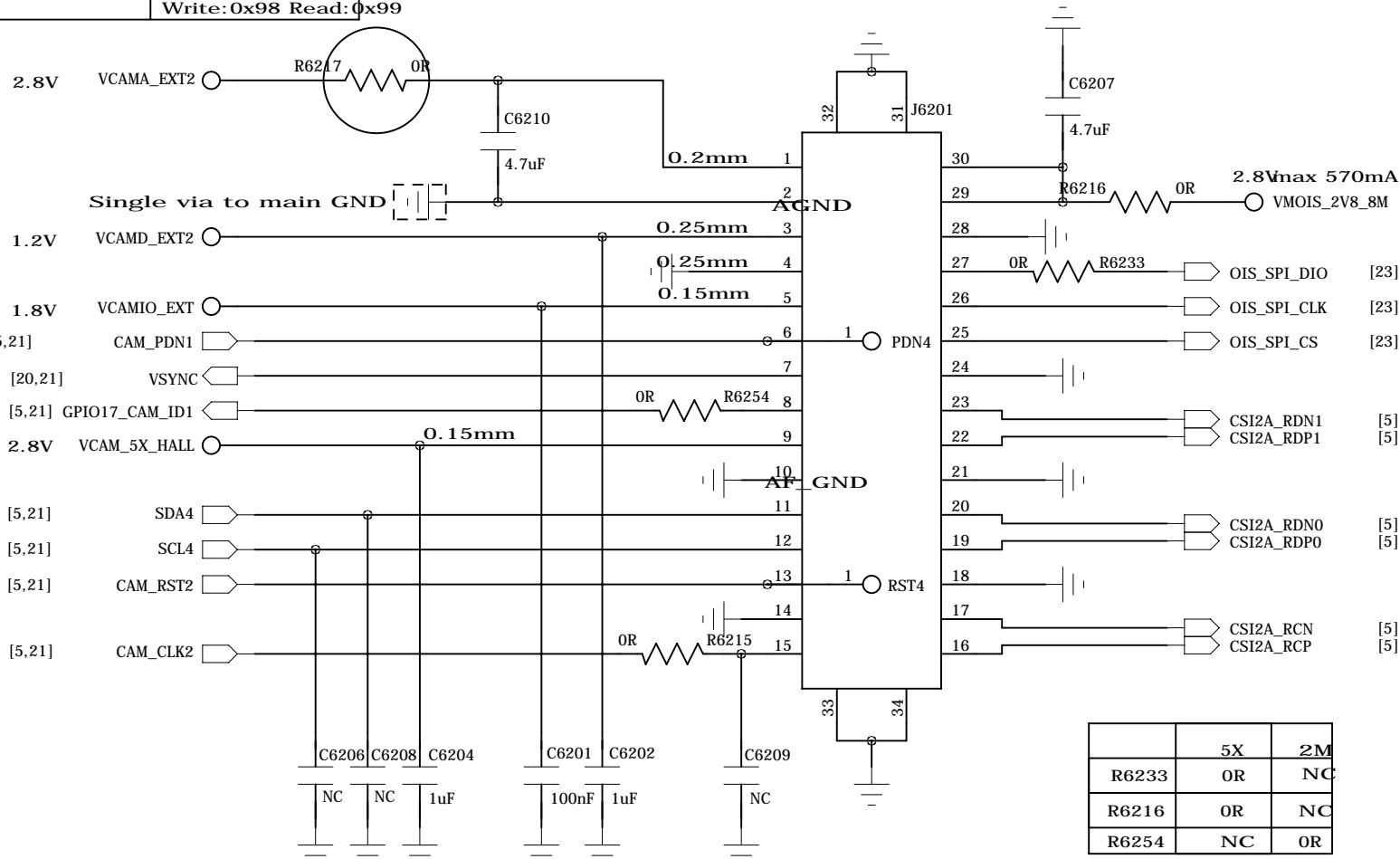


SENSOR	VCAMA	VCAMD	VCAMIO	AFVDD
S5KJN1SQ03-FC200	1.5V 150.9mA	1.1V 670.6mA	1.8V 13.7mA	2.8V 100mA
OV64B40-GA52	2.8V 95mA	1.1V 590mA	1.8V 3mA	2.8V 100mA
OV48B2Q-GA52	2.8V 58.5mA	1.15V 461.5mA	1.8V 3.9mA	2.8V 100mA
S5KGM1ST03-FC200	1.05V 58mA	1.05V 190mA	1.8V 1mA	2.8V 100mA
S5KJN1SQ03-FC200	TBDmA	1.05V TBDmA	1.8V TBDmA	2.8V 100mA
OV50C40-GA52	0.8V TBDmA	1.2V TBDmA	1.8V TBDmA	2.8V 100mA

	SENSOR	I2C Address
High	64M	SENSOR(S5KGW1SD00-FC200) Write:0x18 Read:0x21 MOTOR(DW9800W) Write:0x18 Read:0x19 EEPROM(P24C128E-C4W1TC) 0xA0 Read:0xA1
		SENSOR(OV64B40-GA52) Write:0x46 Read:0x47 MOTOR(DW9800W) Write:0x18 Read:0x19 EEPROM(GT24P128E-20V1TC) 0xA0 Read:0xA1
Low	64M	SENSOR(OV64B40-GA52) Write:0x46 Read:0x47 MOTOR(DW9800W) Write:0x18 Read:0x19 EEPROM(GT24P128E-20V1TC) 0xA0 Read:0xA1
		SENSOR(S5KGM1ST03-FC200) Write:0x18 Read:0x19 EEPROM(P24C128E-C4W1TC) 0xA0 Read:0xA1
High	48M	SENSOR(OV48B2Q-GA52) Write:0x20 Read:0x21 MOTOR(DW9800W) Write:0x18 Read:0x19 EEPROM(P24C128E-C4W1TC) 0xA0 Read:0xA1
		SENSOR(S5KGM1ST03-FC200) Write:0x18 Read:0x19 EEPROM(P24C128E-C4W1TC) 0xA0 Read:0xA1
Low	48M	SENSOR(S5KGM1ST03-FC200) Write:0x18 Read:0x19 EEPROM(P24C128E-C4W1TC) 0xA0 Read:0xA1
		SENSOR(S5KGM1ST03-FC200) Write:0x18 Read:0x19 EEPROM((GT24P128E-20V1TC) 0xA0 Read:0xA1
.64	50M	SENSOR(S5KJN1SQ03-FC200) Write:0x18 Read:0x19 MOTOR(DW9800W) Write:0x18 Read:0x19 EEPROM((P24C128E-C4W1TC) 0xA0 Read:0xA1
		SENSOR(S5KJN1SQ03-FC200) Write:0x18 Read:0x19 MOTOR(DW9800W) Write:0x18 Read:0x19 EEPROM((P24C128E-C4W1TC) 0xA0 Read:0xA1

CAM II (8M 5X+AF/2M MICRO)

SENSOR	VCAMA	VCAMD	VCAMD	OVMOIS	OISVIDD	SENSOR	VCAMA	VCAMD	I2C Address		
OV08A10-GA5A-002B	46mA	1.2V	110mA	1.8V	8mA	2.8V	15mA				
						GC02M1-C24Y	2.8V	40mA	18V	70mA	Write:0x20 Read:0x21
						OV02B10-A25A	005V	33mA	18V	34mA	Write:0x78 Read:0x79
	SENSOR		I2C Address								
8M	OV08A10		Write:0x6C Read:0x6D								
	OIS Driver(BU63169-00W12)		Write:0x1C Read:0x1D								
	EEPROM(GT24P128E-20000108A)		Read:0xA9								
	AF Driver(AK7315D-20000108A)		Write:0x28 Read:0x29 Write:0x98 Read:0x99								

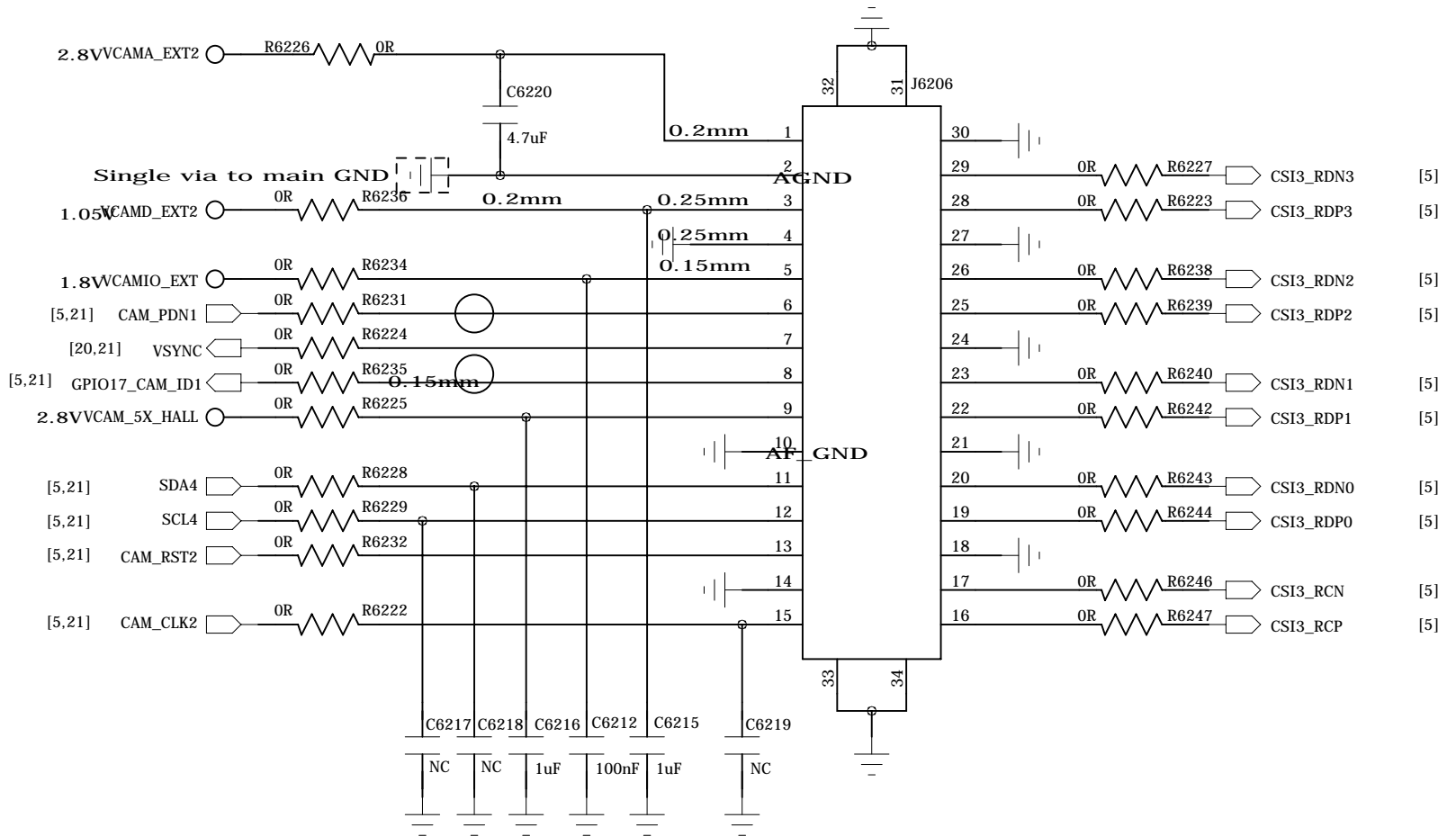


CAM II (13M 2X)

SENSOR		VCAMA	VCAMD	VCAMIO	AFVDD
S5K3L6XX05-FCX9		28 V 45 mA	1.2 V 160 mA	1.8 V 0.1 A	2.8 V 100 mA

	SENSOR		I2C Address	
13M	S5K3L6XX05-FCX9		Write: 0x5A Read: 0x5B	
	CIS Driver (DD971)		Write: 0x18 Read: 0x19	
	EEPROM (P24C64-A4)		Write: 0x0A Read: 0xAB	

SENSOR	VCAMA	VCAMIO	I2C Address
GC02M1-C24V	2.8V 40mA	1.8V 70mA	Write:0x20 Read:0x21
OV02B10-A25A	0.8V 33mA	1.8V 34mA	Write:0x78 Read:0x79

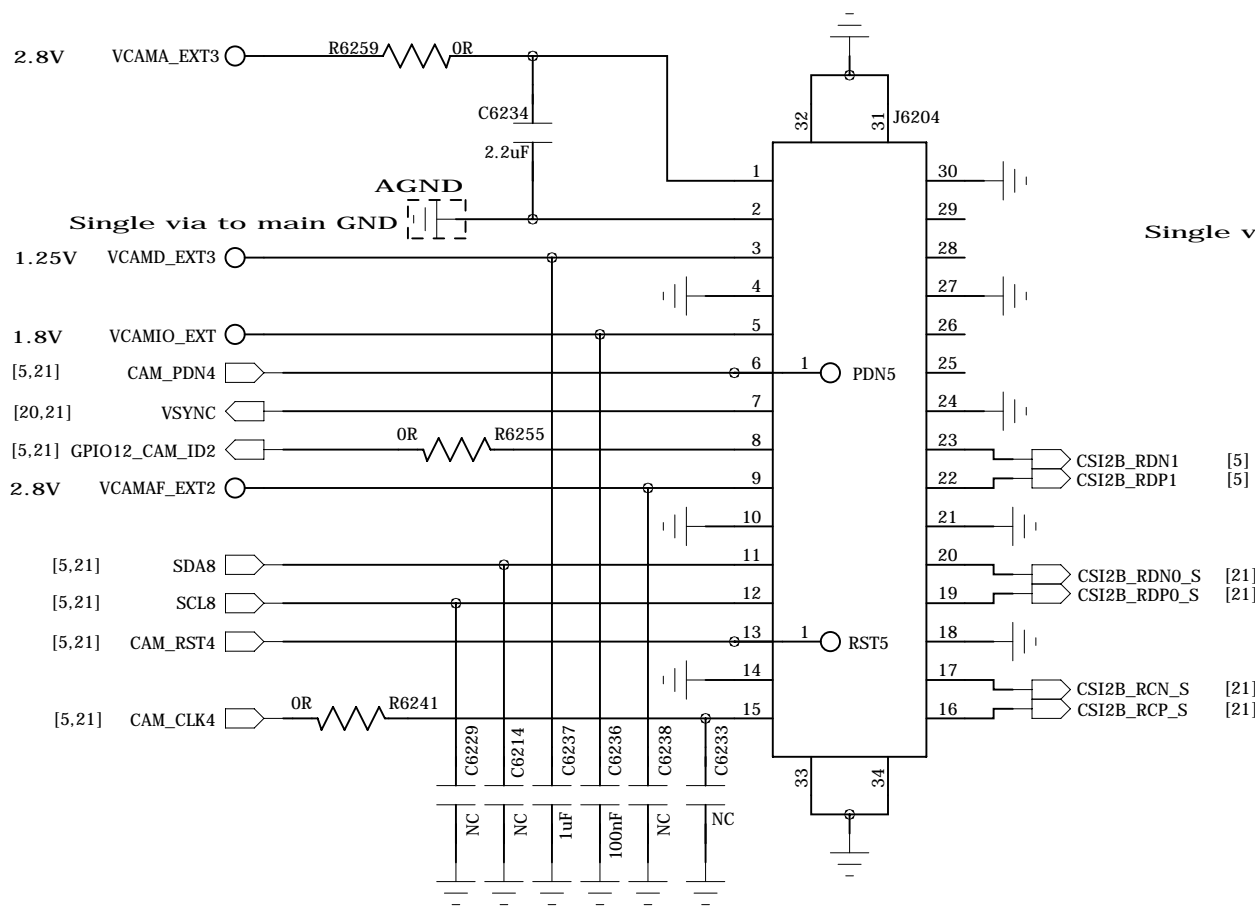


CAM III (2M Depth)

SENSOR	VCAMA	VCAMIO	I2C Address
OV02B1B-CS	2.8V 33mA	1.8V 33mA	Write:0x7A Read:0x7B
GC02M1B-C24	2.8V 40mA	1.8V 70mA	Write:0x20 Read:0x21

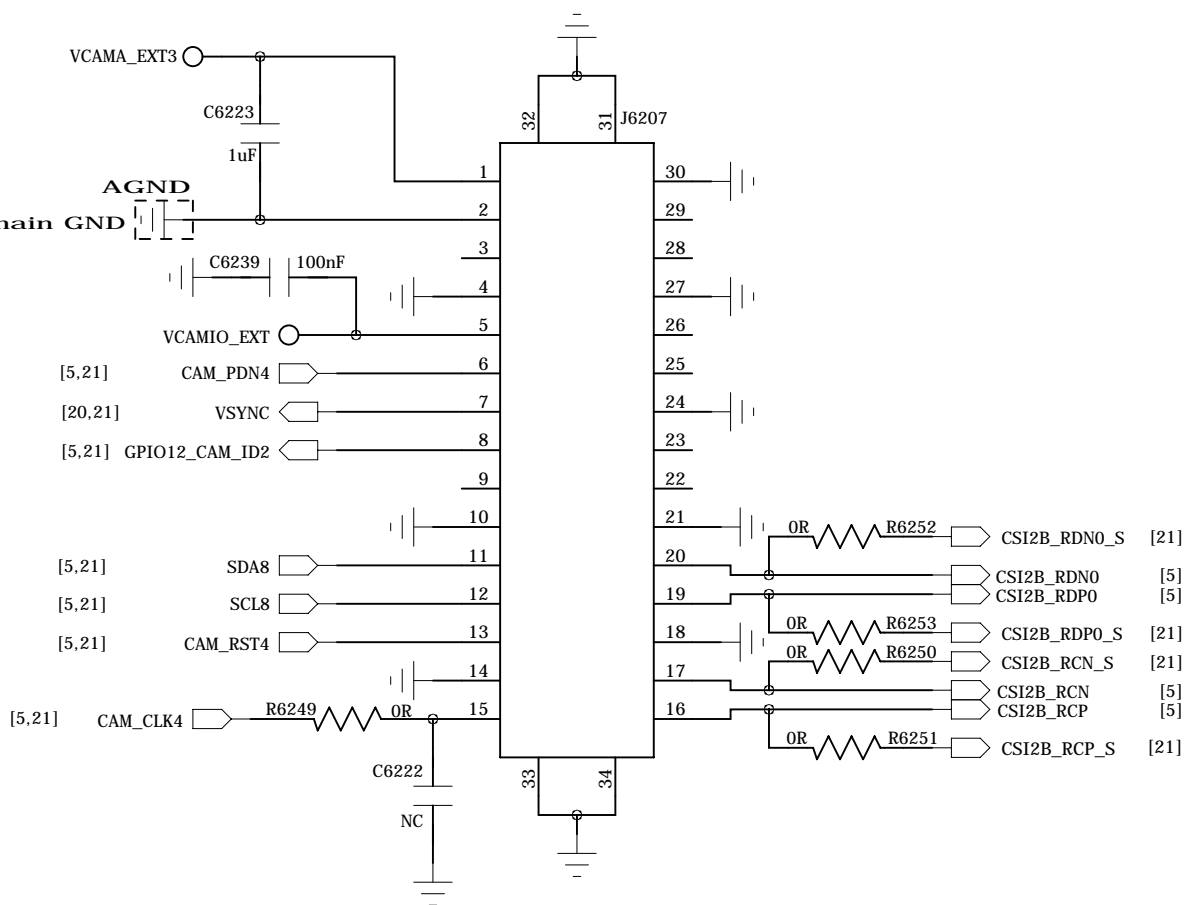
CAM IV (8M/2M)

SENSOR	VCAMA	VCAMD	VCAMIO	AFVDD
GC8034-WC1X0	2.8V 35mA 2.7~3.0V	1.25V 140mA 1.15~1.3V	1.8V 10mA 1.7~1.9V	2.8V 120mA 2.7~3.0V
	SENSOR	I2C Address		
8M	GC8034-WC1X0	Write: 0x6E Read: 0x6F		
	MOTOR(DW9714V)	Write: 0x18 Read: 0x19		
	EEPROM(P24C64E-C4H)	Write: 0xA0 Read: 0xA1		



CAM IV (2M)

SENSOR	VCAMA	VCAMD	VCAMI	OVFVDD	I2C Address
OV02B1B	2.8V 33mA		1.8V 34mA		Write:0x7A Read:0x7B
GC02M1B-C2	2.8V 70mA		1.8V 40mA		Write:0x20 Read:0x21



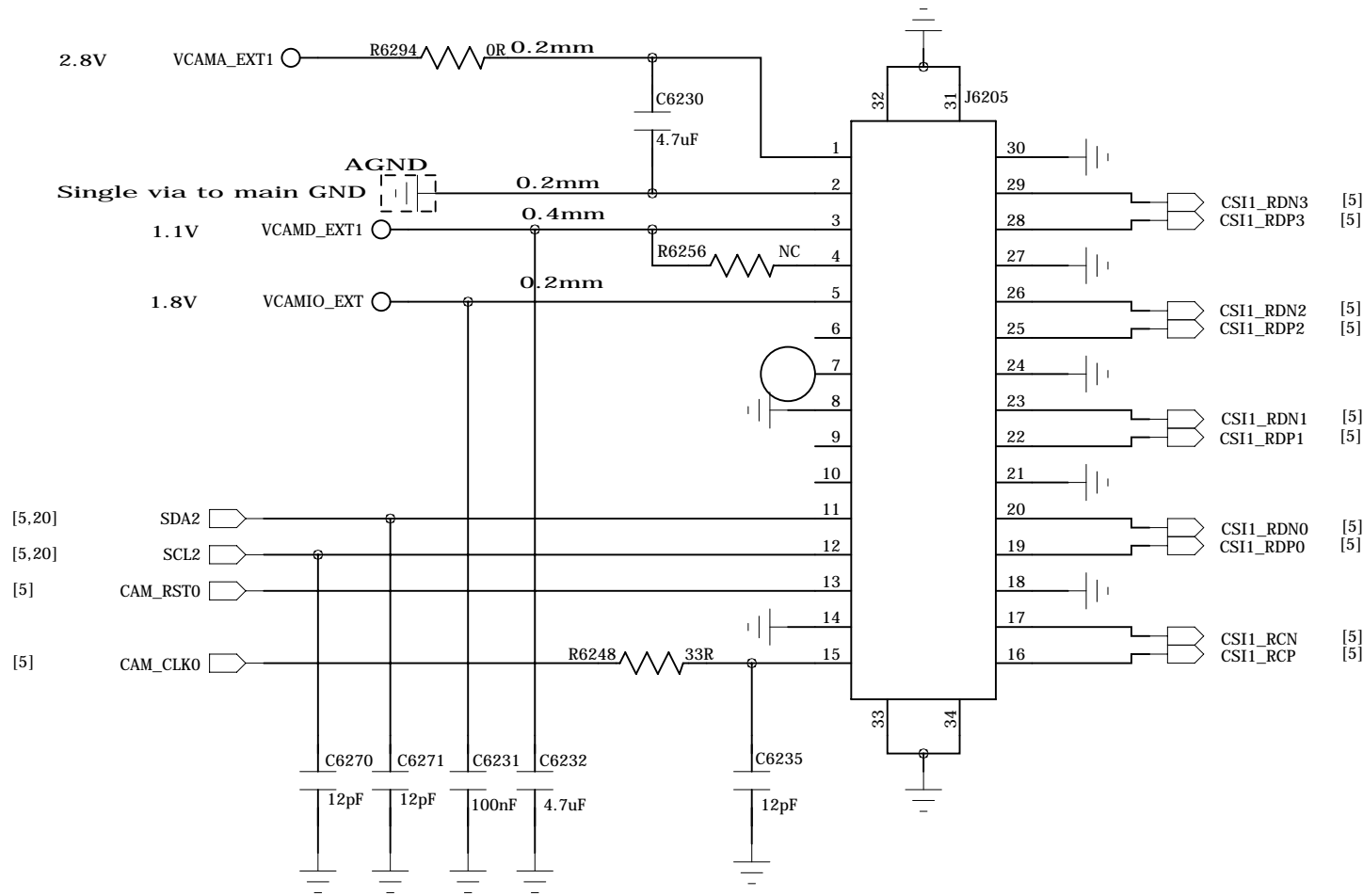
COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 62_PERI_CAMERA_II		VERSION: V1.0	SHEET: 21 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

FRONT MAIN CAMERA (16M+ FF)

SENSOR	VCAMA	VCAMD	VCAMIO	I2C Address		SENSOR	VCAMA	VCAMD	VCAMIO	I2C Address
HI-1631Q	2.8V 52mA	1.1V 125mA	1.8V 4mA	Write:0xA0 Read:0x41		OV16B10-GA5A	2.8V 52mA	1.05V 200mA	1.8V 5mA	Write:0x6C Read:0x6D
P24P64E-C4H-MIR				Write:0xA2 Read:0xA3		GT24P64E-2CSLI-TR				Write:0xA2 Read:0xA3
S5K3P9SP04-FC89	2.8V 57.5mA	1.05V 159.9mA	1.8V 0.5mA	Write:0x5A Read:0x5B						

Punch LCD



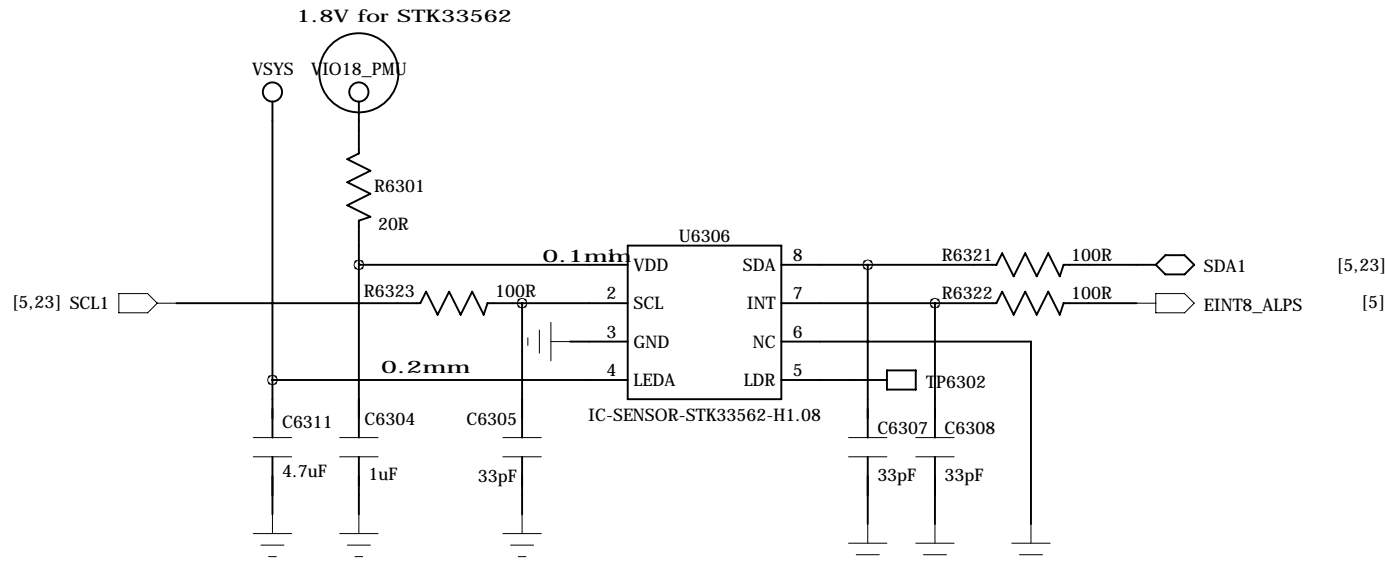
COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 62_PERI_CAMERA_III		VERSION: V1.0	SHEET: 22 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

PERI_SENSORS

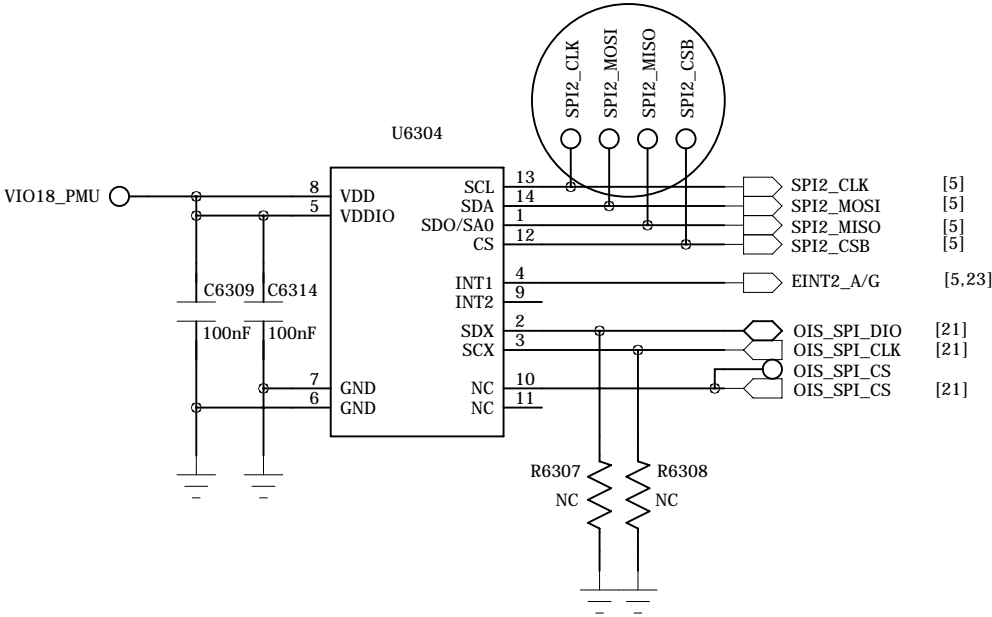
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

AL& PS Sensor

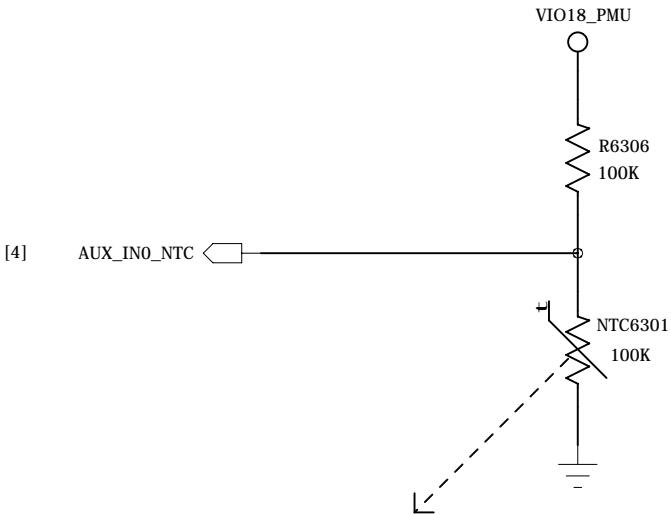
STK33562:I2C address: Write:0x8C, Read:0x8D
LTR-569ALS-WA:I2C address: Write:0x46, Read:0x47
MN78911D:I2C address: Write:0x82, Read:0x83



G-Sensor + Gyro Sensor



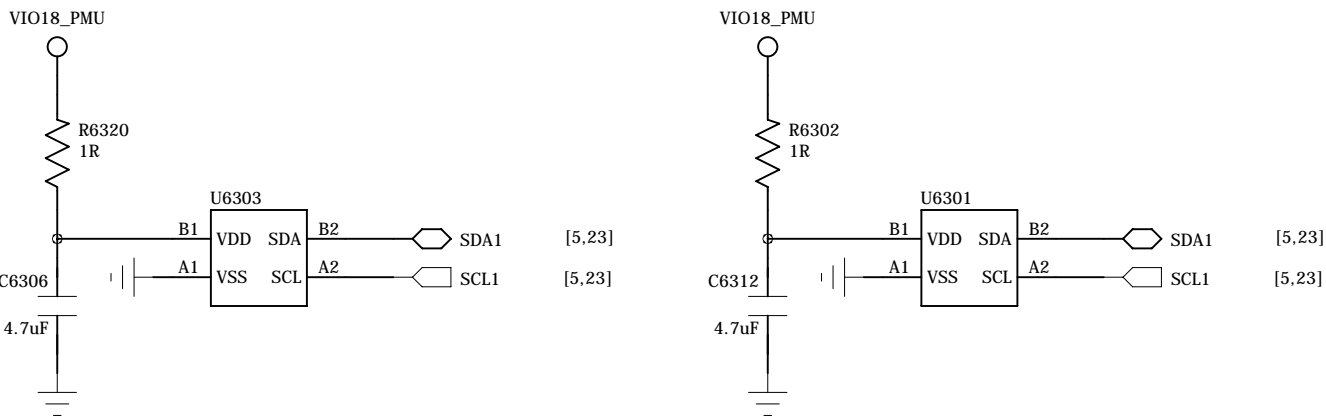
Thermistor to sense AP temperature



- 1. NTC6301must keep a distance about 6~8 mm away from BB and far from other heat sources 10 mm at least.
- 2. The distance is the shortest distance from package edge to edge.

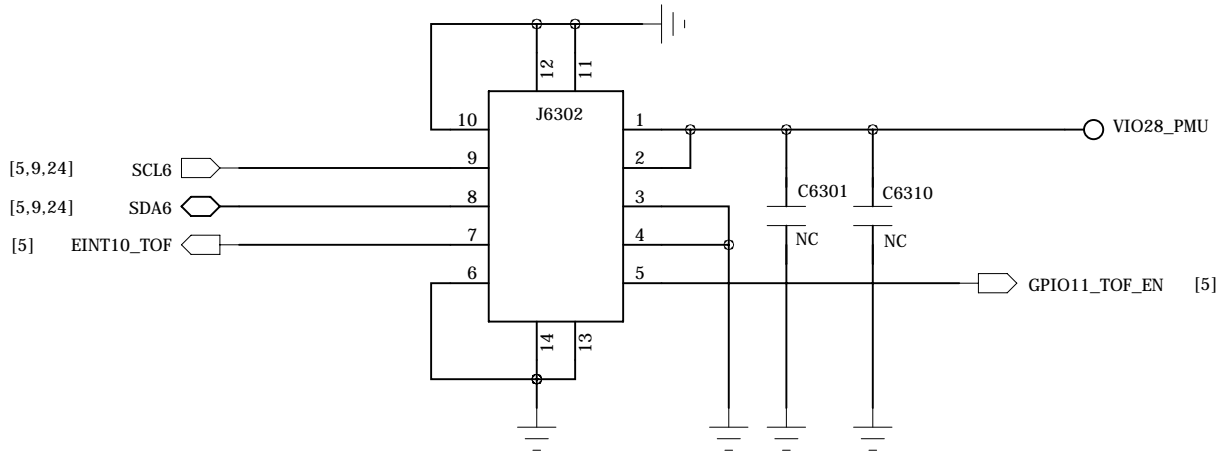
M-Sensor(COMPASS)

MMC5603:I2C ADDRESS:0x60(Write)/0x61(Read)



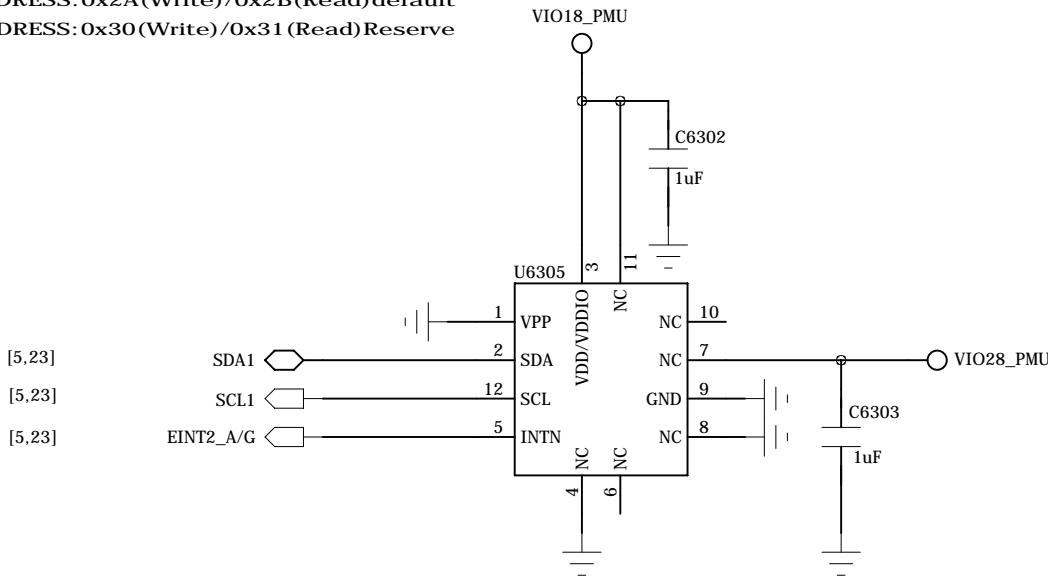
TOF

VL53L3:I2C address: Write:0x52, Read:0x53



G-Sensor

MC3416-P:I2C ADDRESS:0x98(Write)/0x99(Read)
MXC6655XA:ADDRESS:0x2A(Write)/0x2B(Read)default
STK8BA50-S:ADDRESS:0x30(Write)/0x31(Read)Reserve



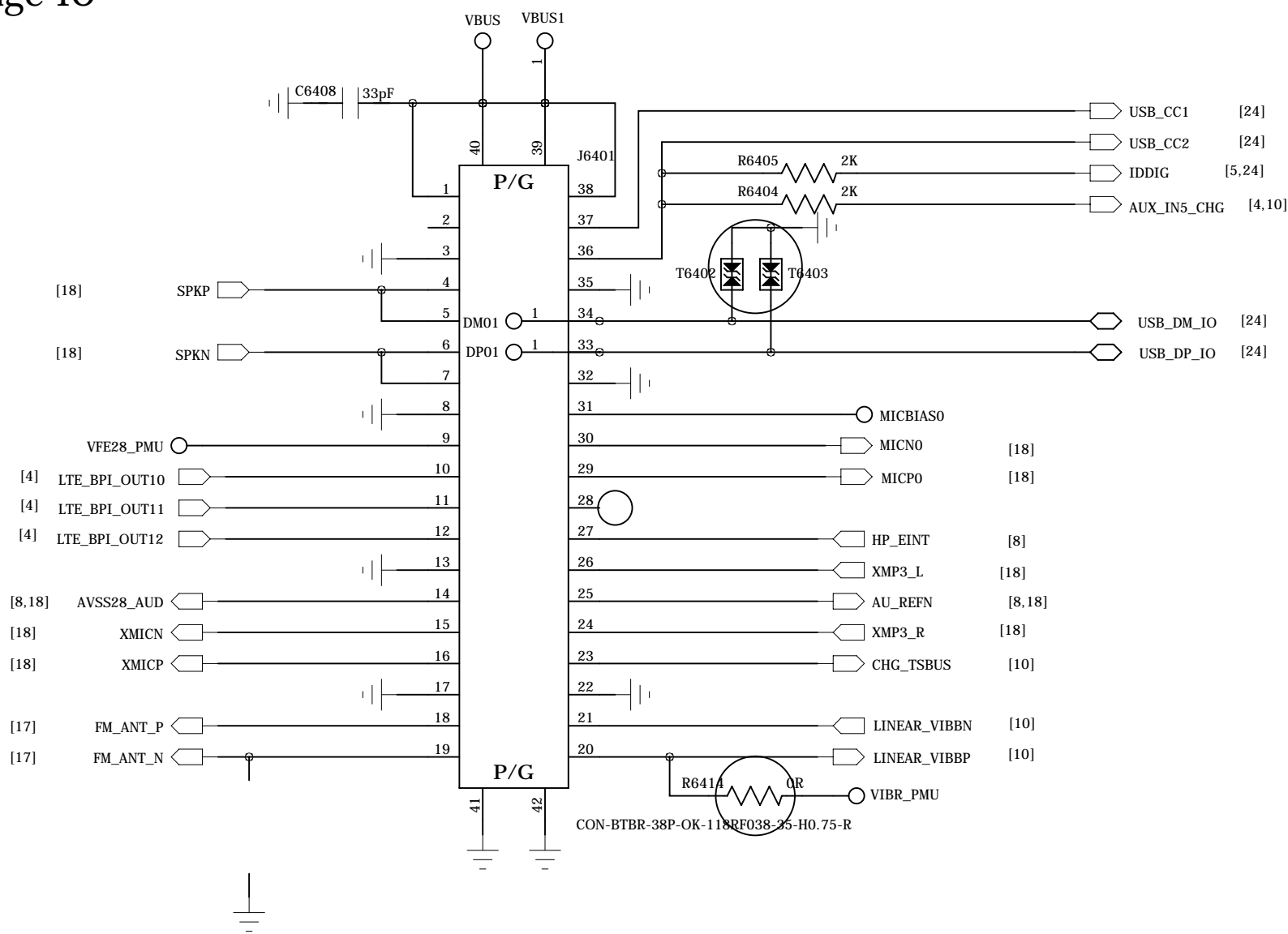
Unipolar HALL

COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 63_PERI_SENSORS		VERSION: V1.0	SHEET: 23 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

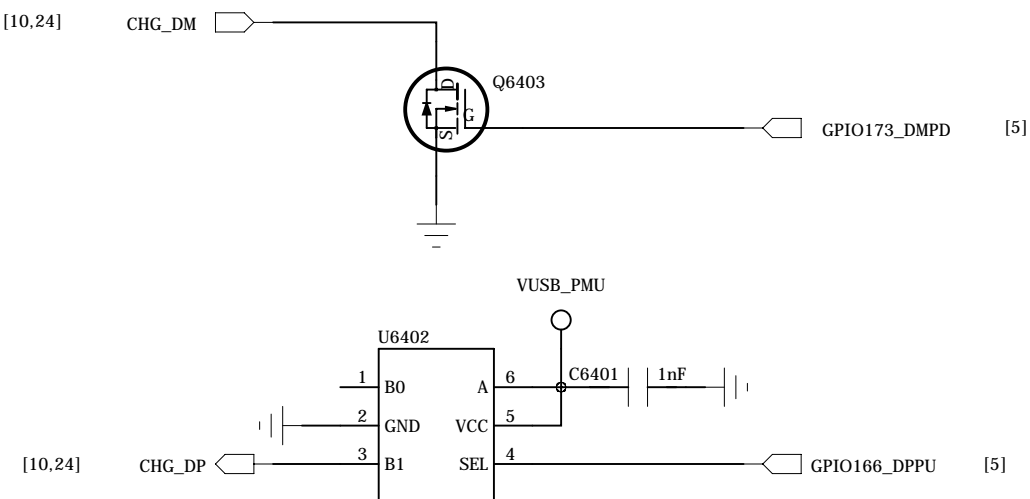
PERI_EXCH_IO

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

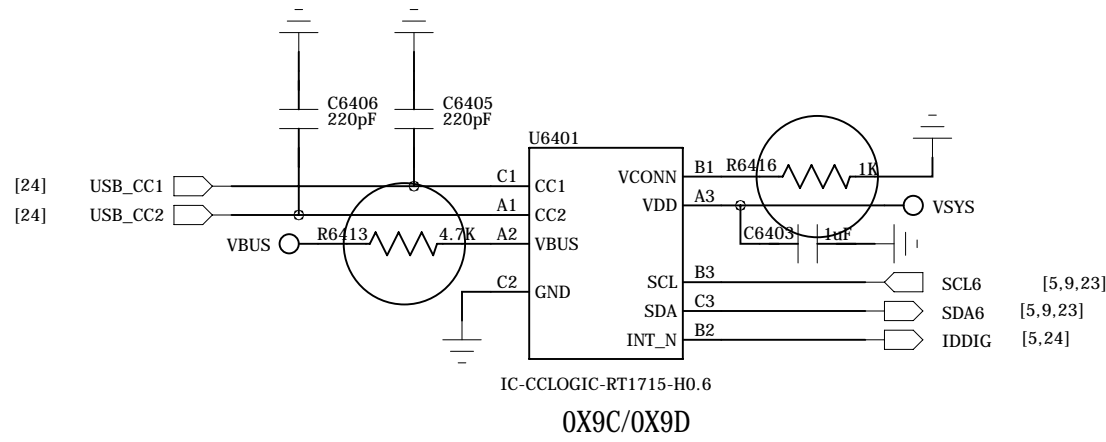
Exchange IO



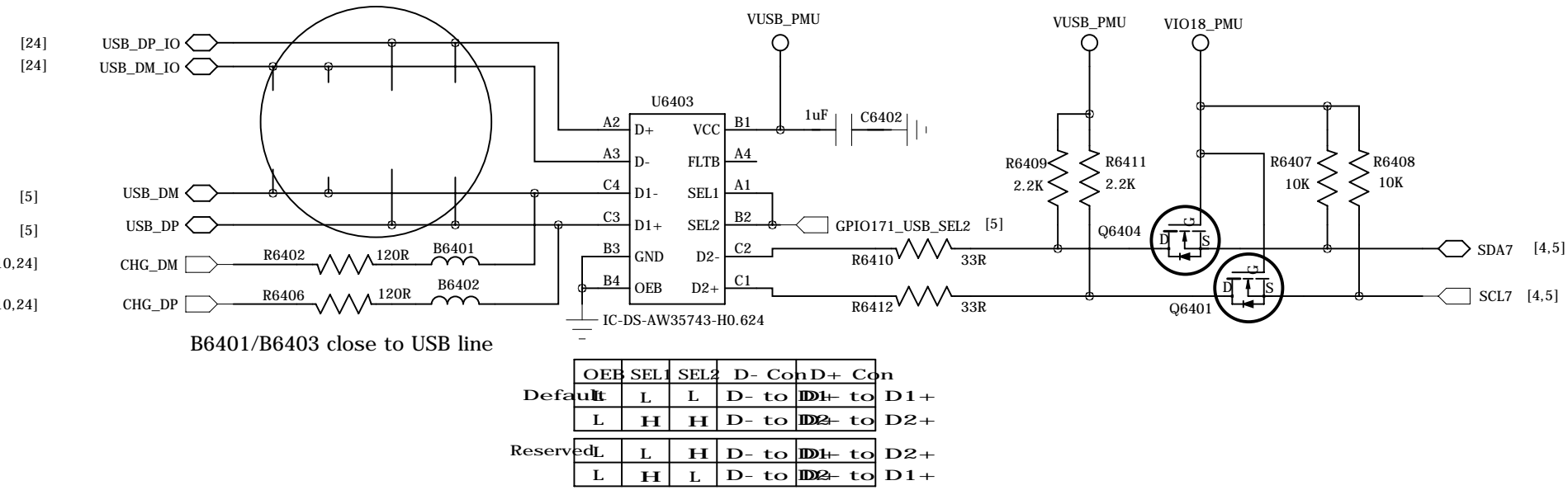
HVDCP TA



CC-LOGIC



RFC

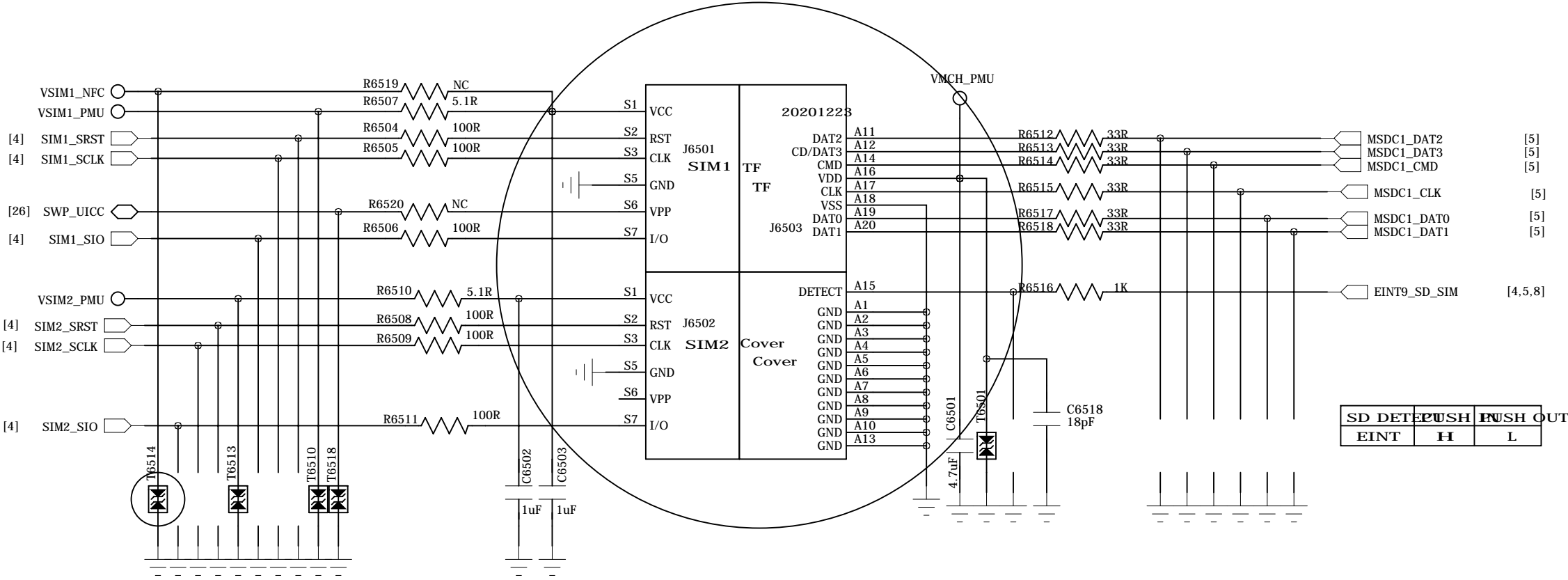


COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 64_PERI_EXCH_IO		VERSION: V1.0	SHEET: 24 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

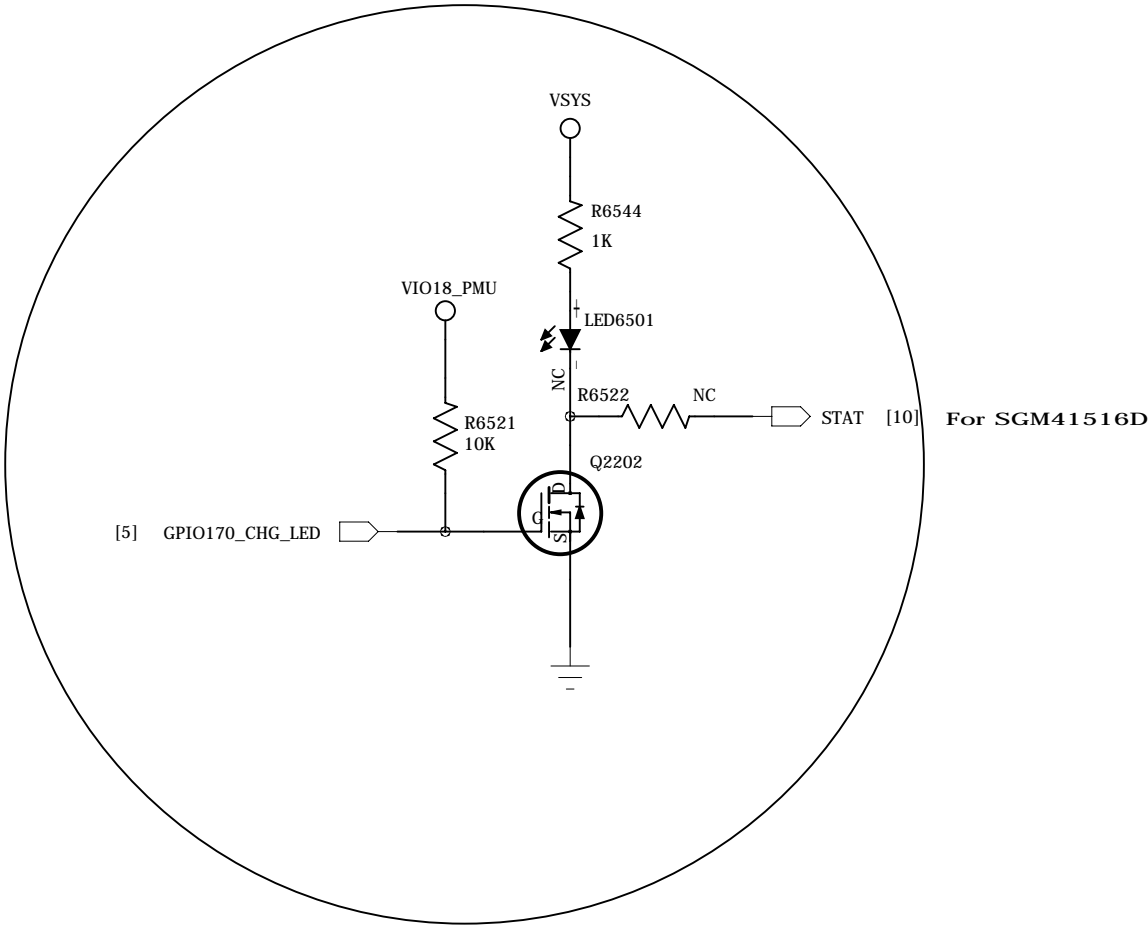
PERI_SIM_SD_KEYPAD

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

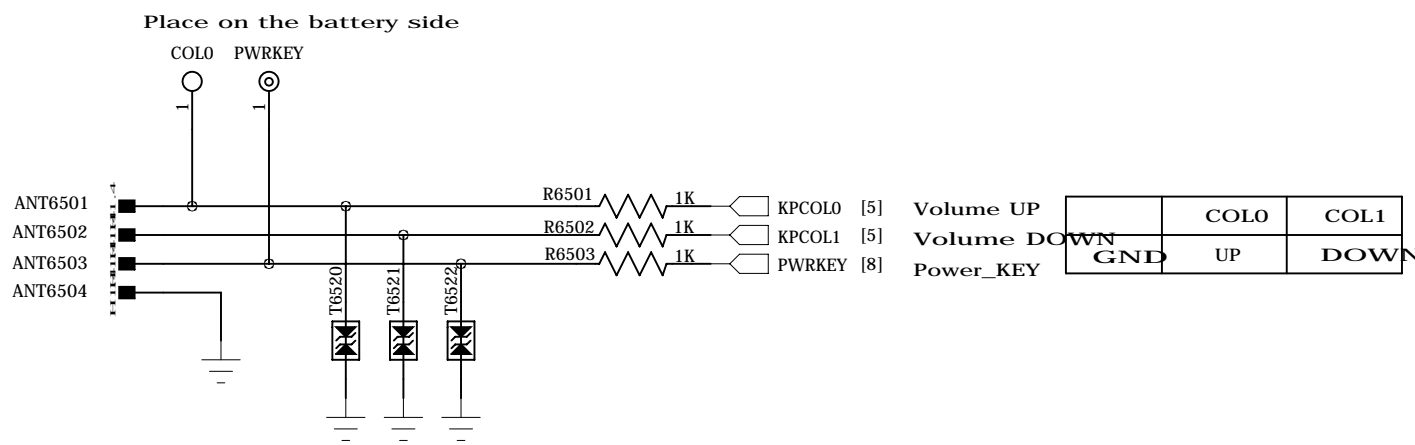
SIM1/2-SD-CARD



Indicator LED



SIDEKEY

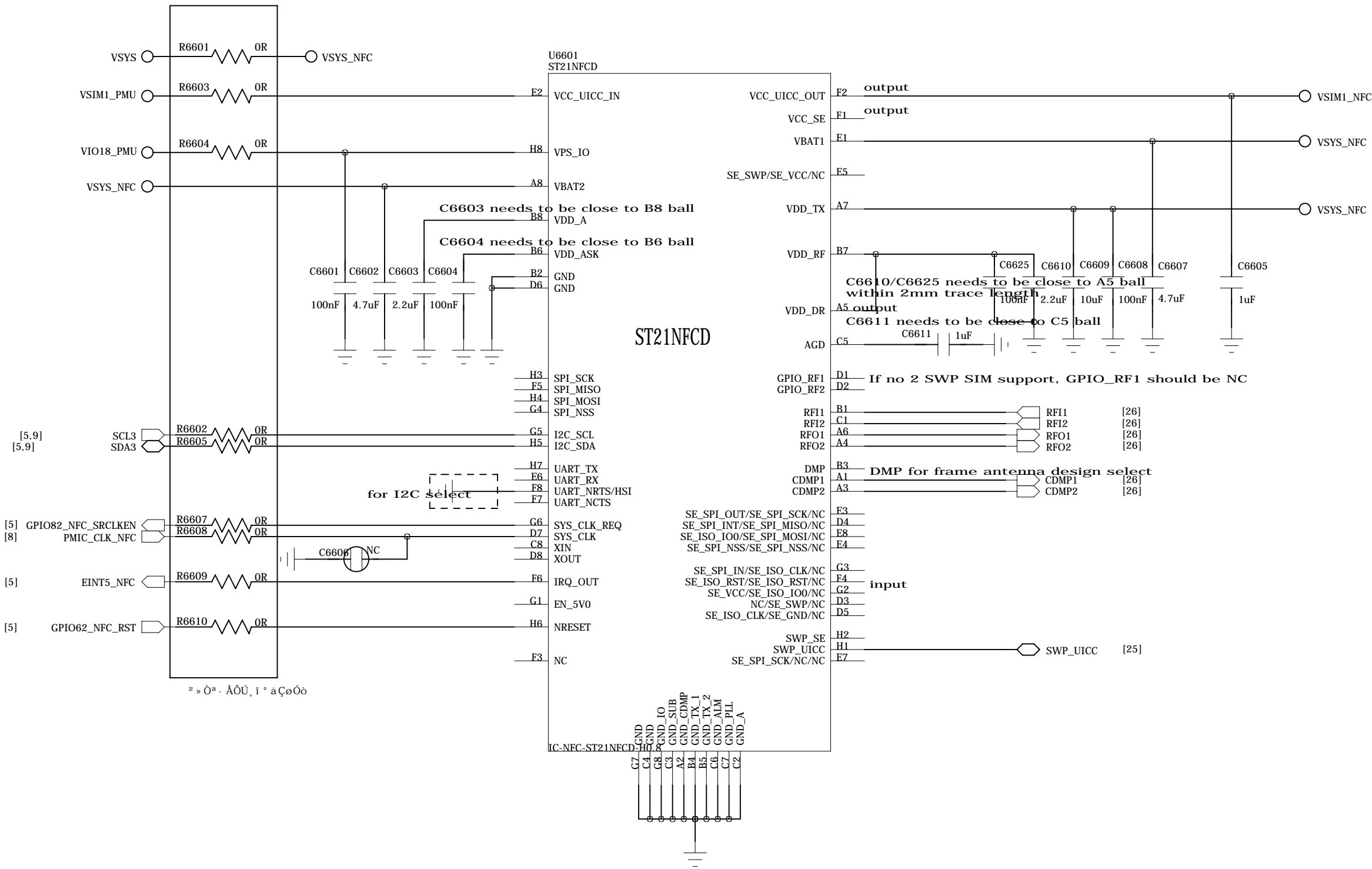


COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 65_PERI_SIM_SD_KEYPAD_LED		VERSION: V1.0	SHEET: 25 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		

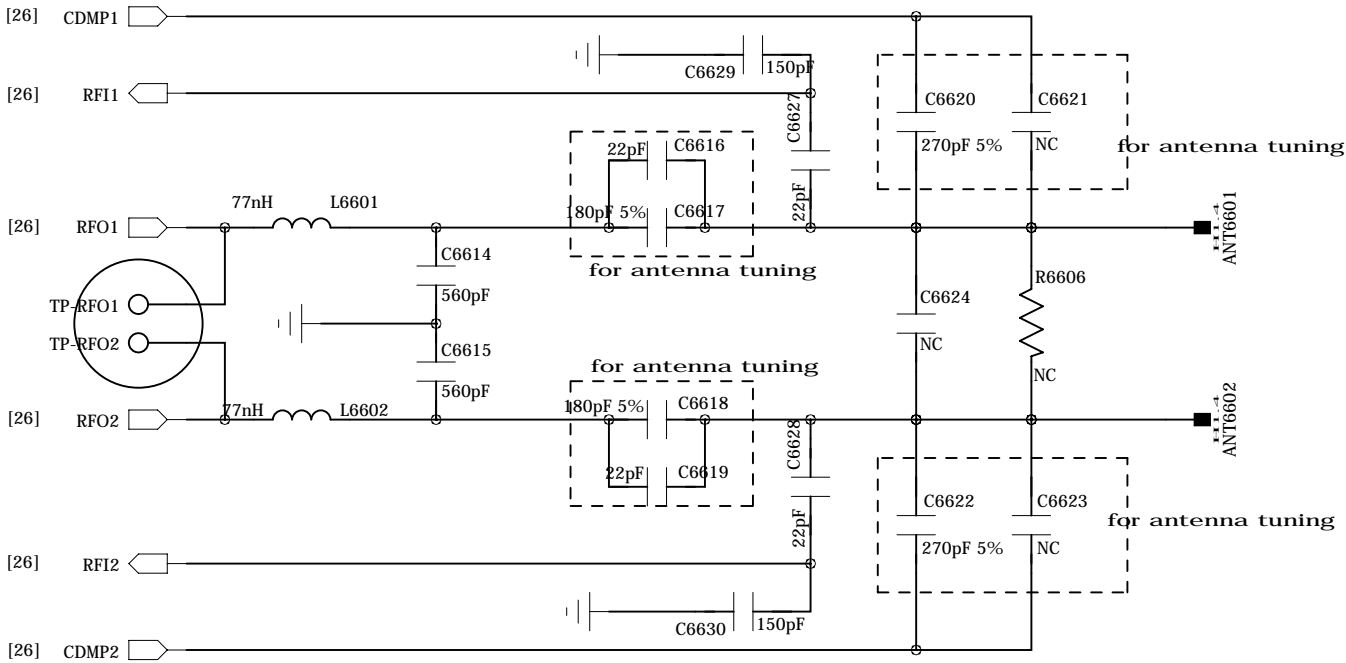
PERI_NFC

ST21NFCD:I2C address: Write:0x08, Read:0x09

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



- R6606 is damping resistor. The purpose of R6606 is to get network Q~15
Recommended NFC antenna spec. below
1. La @ 13.56MHZ is 0.2uH ~ 0.6uH
 2. Fra_ant > 30MHZ
 3. Antenna Q> 20
 4. Antenna turns: 2~6 turns



COMPANY: TRANSSION HOLDINGS				MODEL: H81X		Modified Date: 2021/8/5	
DRAWN	LJJ/DLA	DATED	2021/03/17	TITLE: 66_NFC		VERSION: V1.0	SHEET: 26 OF 26
CHECKED	<CHECKED>	DATED	< >	Confidentiality	CONFIDENTIAL		