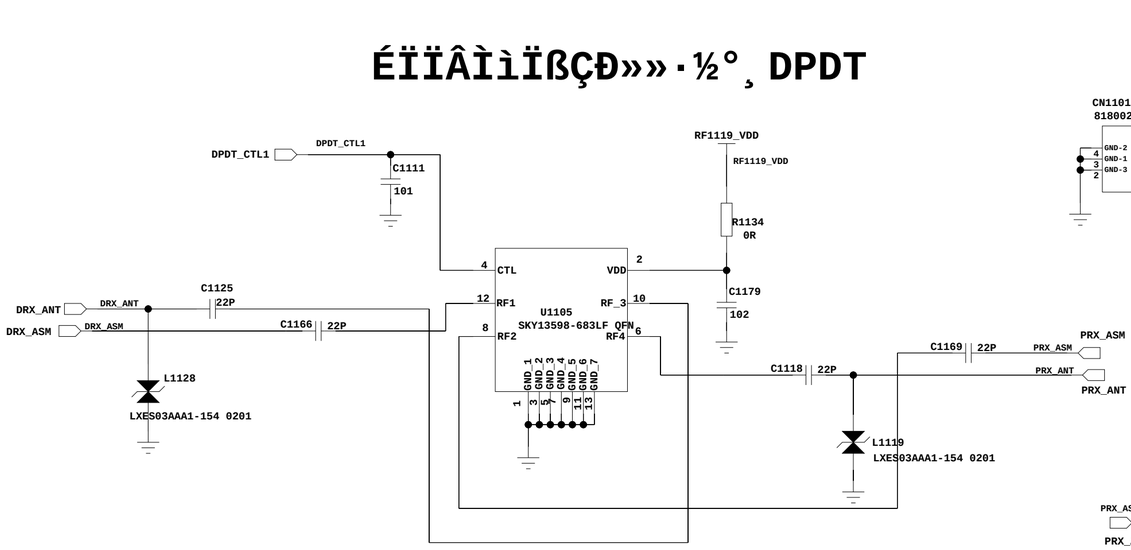
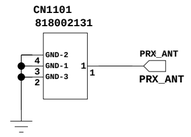
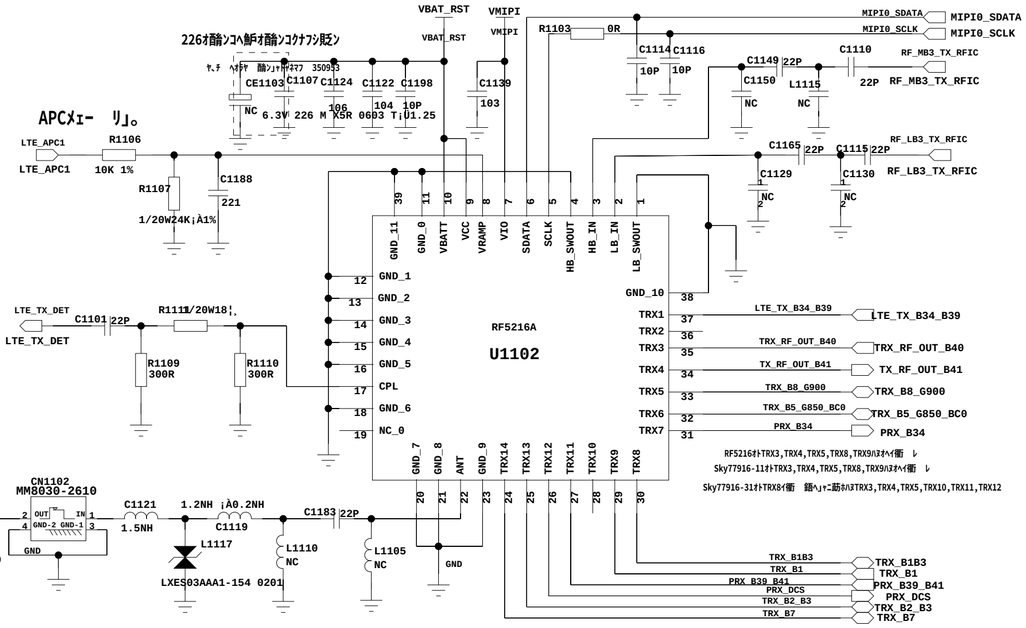
ÉÏÏÂÌìÏßÇÐ»»·½°¸ DPDT

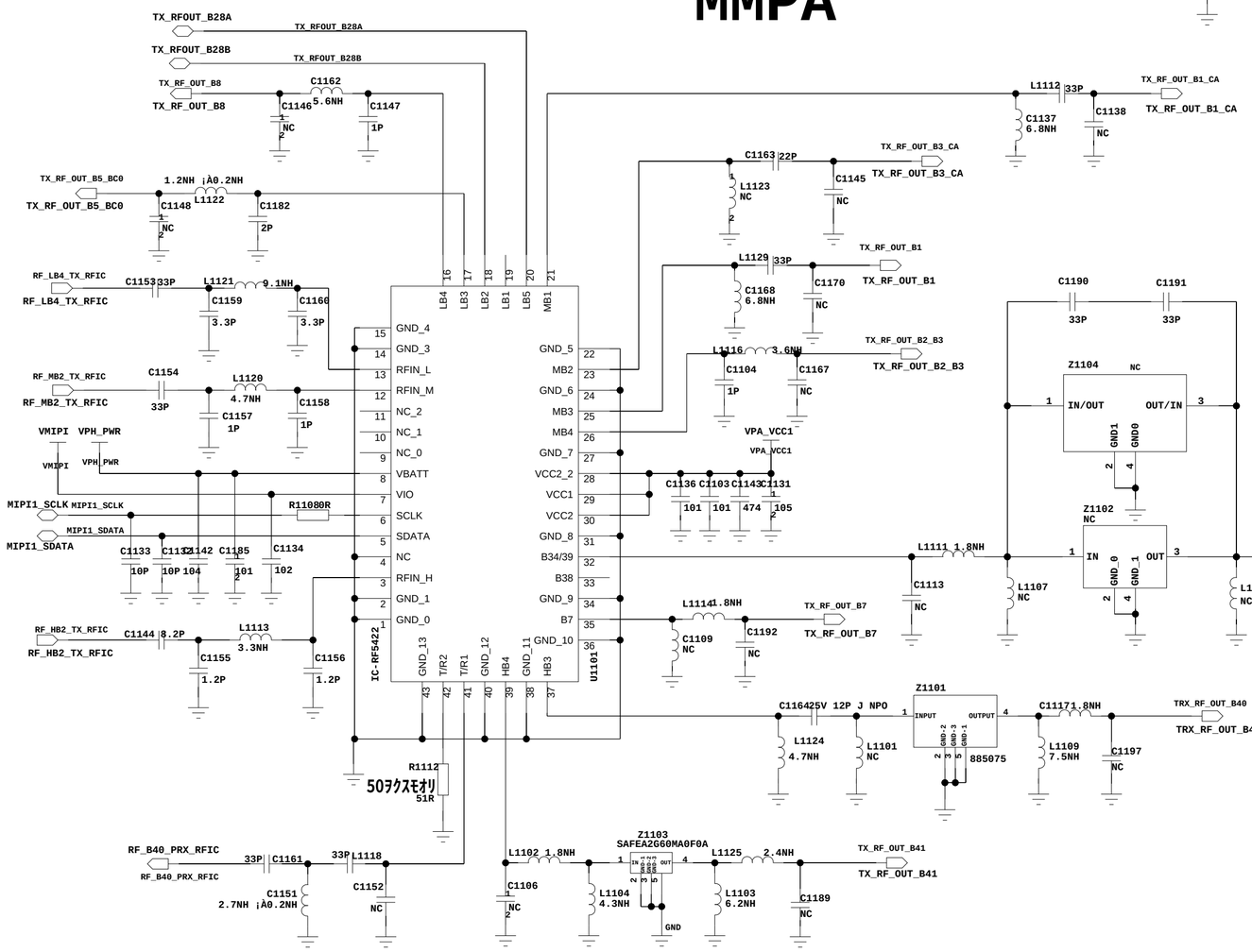
MMPA

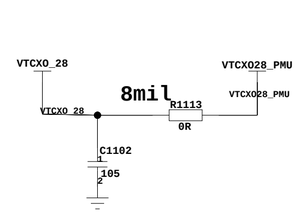
ソソス　KY77643キナヨテ

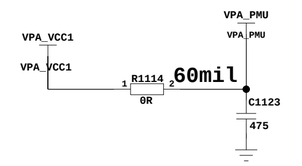


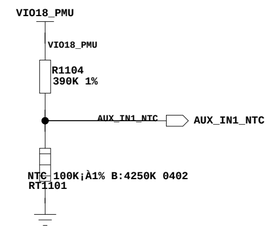


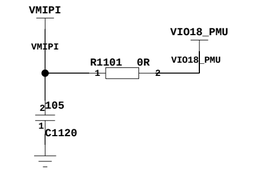




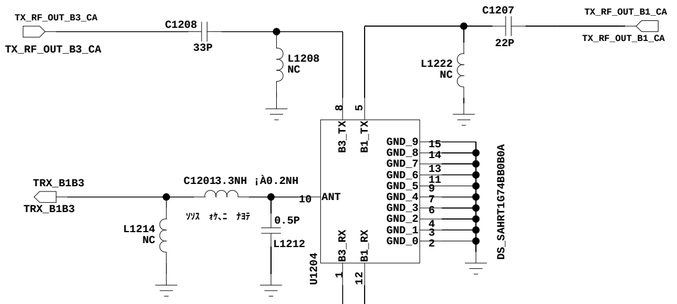




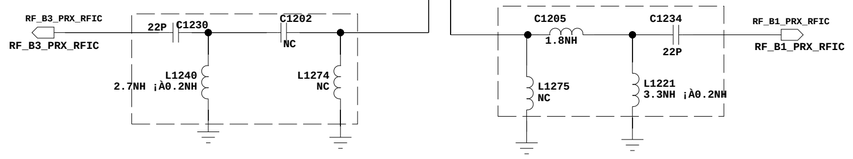




B1/B3 CA TRX

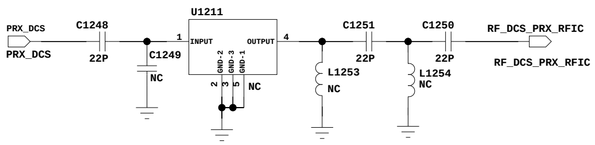


Place LNA matching components close to MT6176

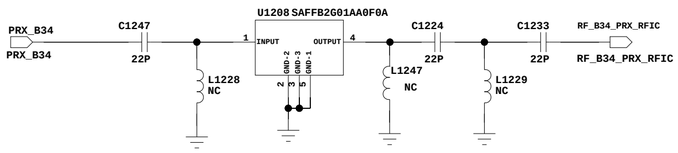


Place LNA matching components close to MT6176

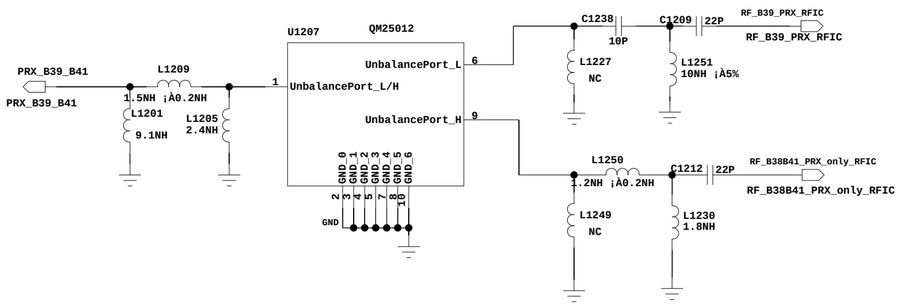
ヒトケ、ニ　CSヘィツキイ鋼　　ャシ貶乏ントレマｖCS RX SAW」ャマネNC



トレマ撃　34 SAW 9050469」ャへ簪撃　CS SAW 9050497

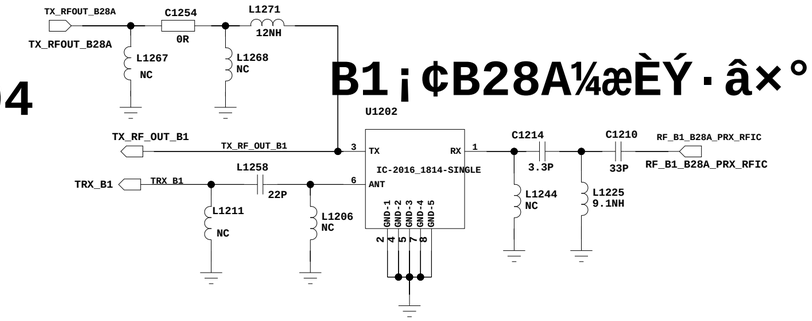


B39B41 CA



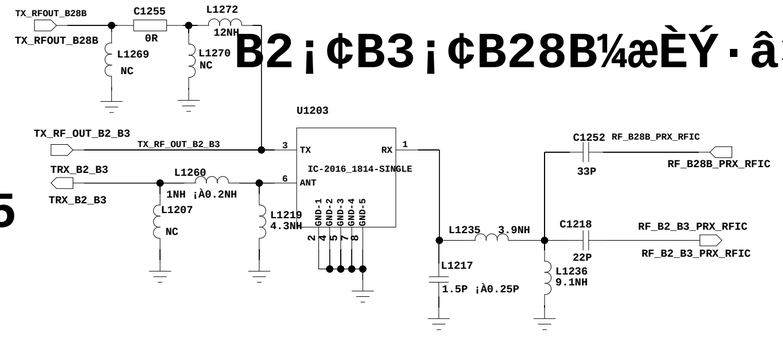
B1 9040144
B28A 9040104

B1¡¢B28A¼æÈÝ·â×°

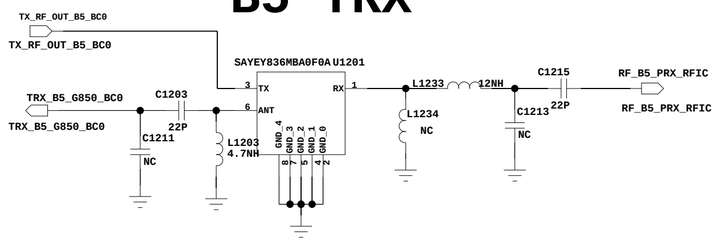


B2 9040172
B3 9040139
B28B 9040105

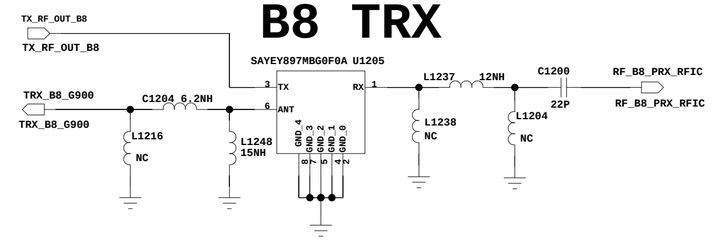
B2¡¢B3¡¢B28B¼æÈÝ·â×°



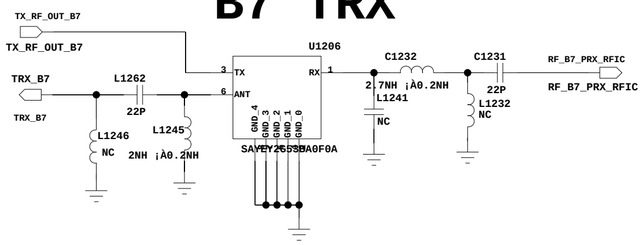
B5 TRX



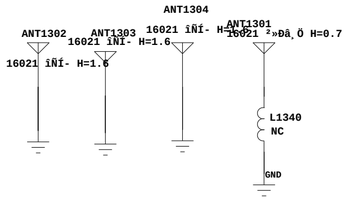
B8 TRX

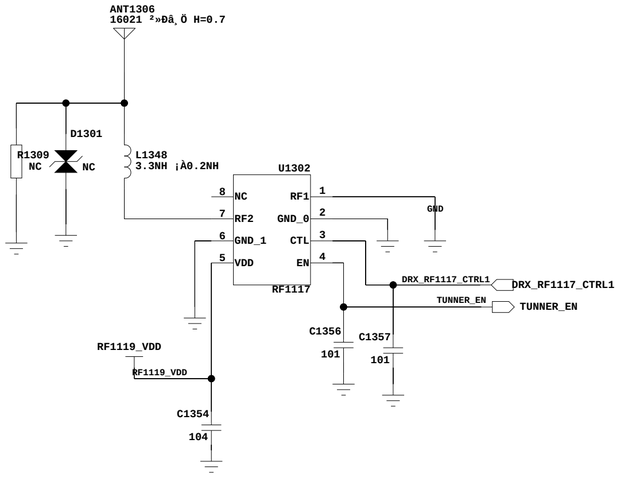


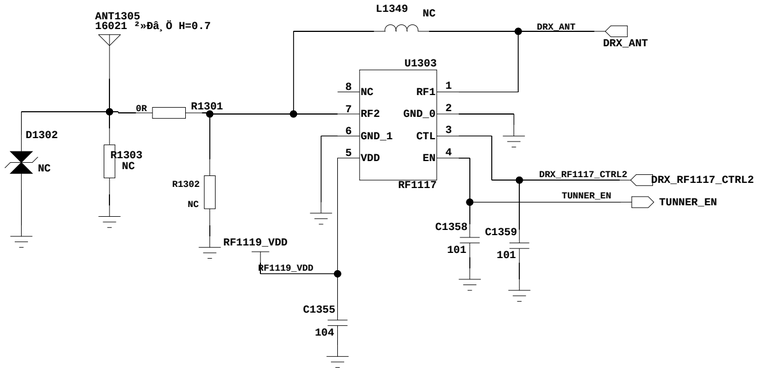
B7 TRX



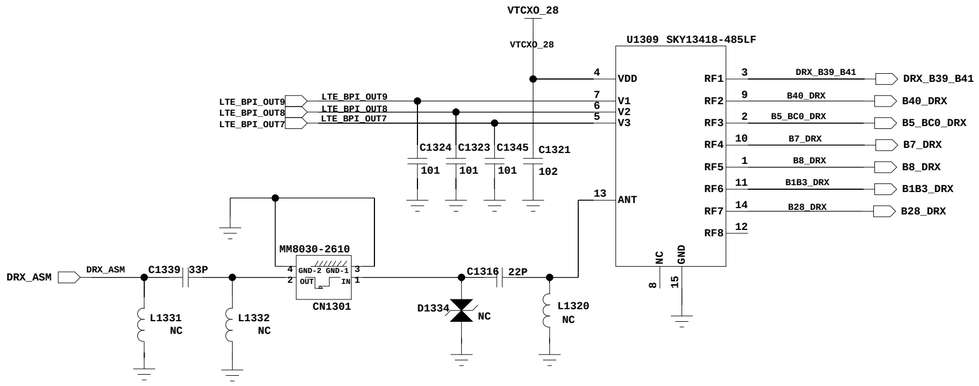
ANT_DRX



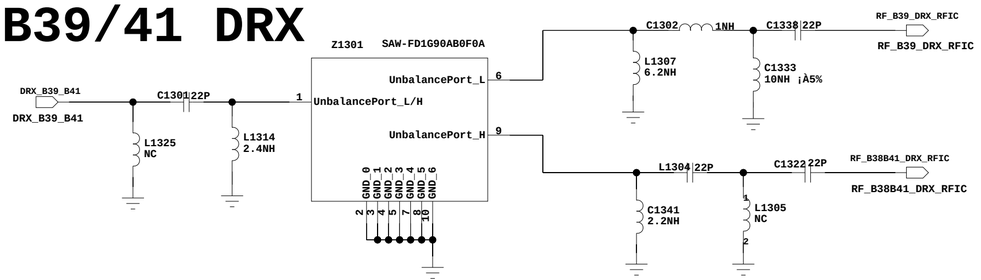




LTE DRX

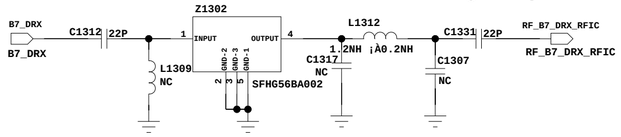


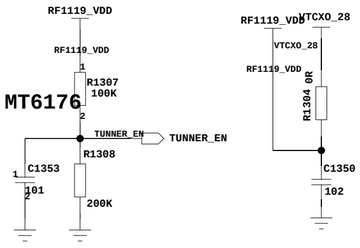
B39/41 DRX



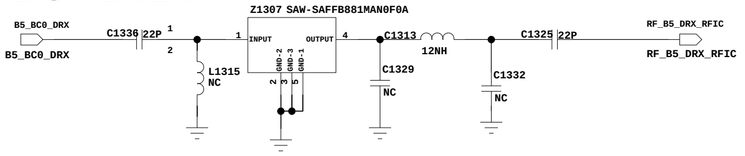
B7 DRX

Place LNA matching components close to MT6176



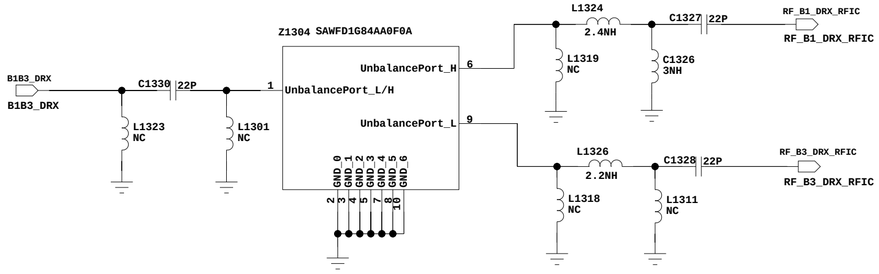


B5 DRX

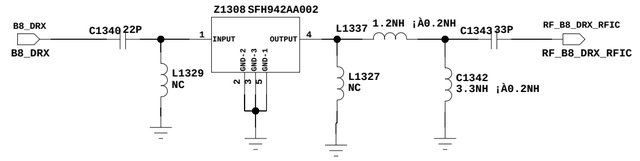


B1_B3 DRX

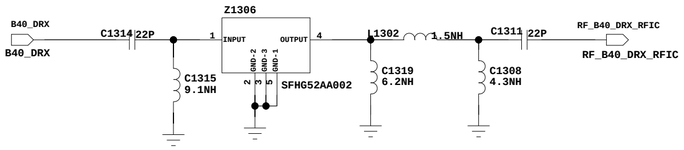
Place LNA matching components close to MT6176



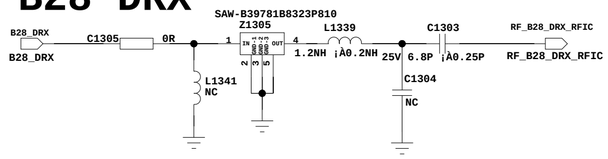
B8 DRX



B40 DRX



B28 DRX



MT6176

U1401

RF_B3_DRX_RFIC
RF_B38B41_DRX_RFIC
RF_B7_DRX_RFIC
RF_B40_DRX_RFIC
RF_B1_DRX_RFIC
RF_B39_DRX_RFIC
RF_B28_DRX_RFIC
RF_B5_DRX_RFIC
RF_B8_DRX_RFIC

RF_B7_PRX_RFIC
RF_B2_B3_PRX_RFIC
RF_B40_PRX_RFIC
RF_DCS_PRX_RFIC
RF_B38B41_PRX_only_RFIC
RF_B34_PRX_RFIC
RF_B3_PRX_RFIC
RF_B28B_PRX_RFIC
RF_B39_PRX_RFIC
RF_B1_PRX_RFIC
RF_B1_B28A_PRX_RFIC
RF_B5_PRX_RFIC
RF_B8_PRX_RFIC

VTCXO23

RFIC_CLK_BB
RFIC_CLK_PMU

MT6176V/A FBGA

Group4 Group3 Group2 Group1 Group1 Group2 Group3 Group4
DRX PRX

RX Port	Band	Min. freq (MHz)	Max. freq (MHz)
Group1 (PRX14, 13, 12)	HB,MB	MB: 1475	HB: 2,690
Group2 (PRX11, 10, 9, 8)	HB,MB	MB: 1475	HB: 2,690
Group3 (PRX7, 6, 5, 4)	MB,LB	LB: 703	MB: 2,170
Group4 (PRX3, 2, 1)	MB,LB	LB: 703	LB:960

R1401 0R
C1403 103
C1410 104
C1405 102
C1401 104
C1402 102
R1402 0R
C1404 104
R1400 0R
C1406 104
C1408 104
C1409 104
C1411 NC
C1412 NC
C1413 104
C1414 104
C1415 104
R1408 2K
R1409 0R
R1410 0R
R1411 0R
R1412 0R
C1416 104
C1417 104
C1418 475
RT1401 NC

VRF12 VRF18

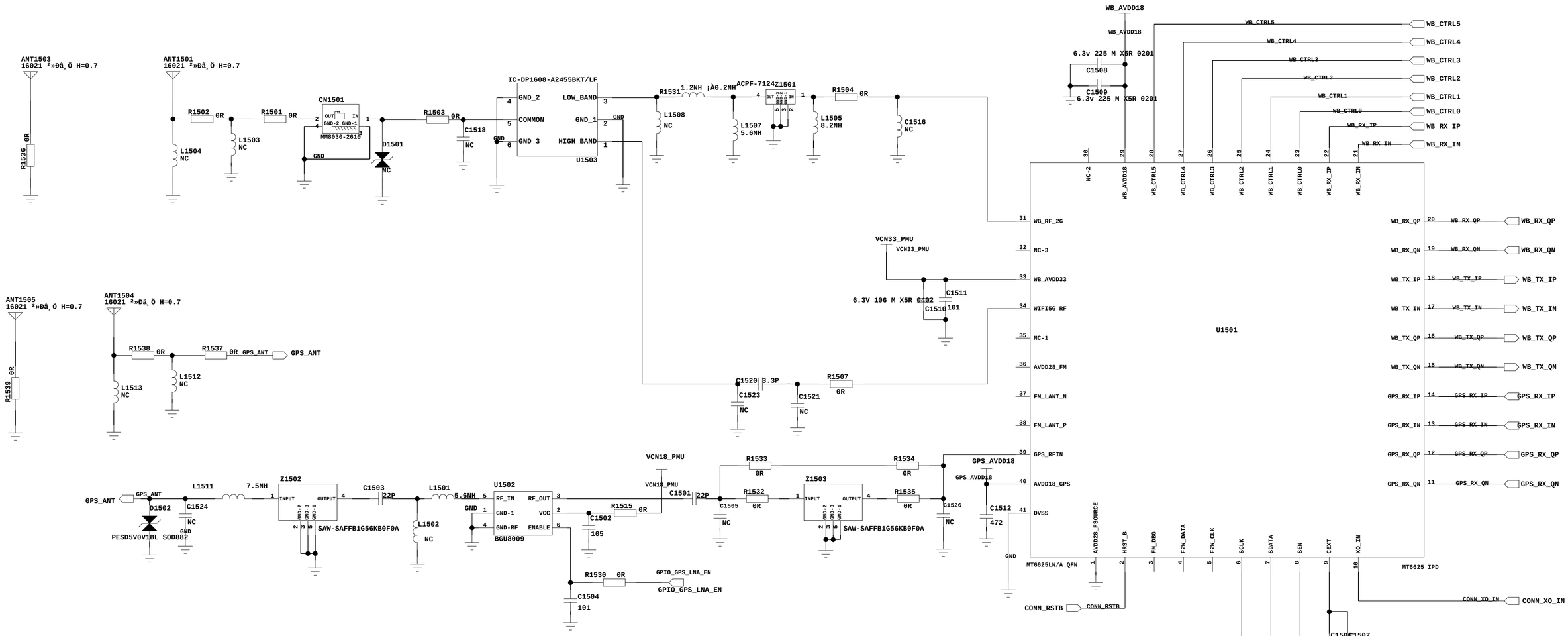
SRCLKENA0
LTE_DET_BB_IP
LTE_DET_BB_IN
LTE_DET_BB_QP
LTE_DET_BB_QN
RFIC0_BSI_EN
RFIC0_BSI_CK
RFIC0_BSI_D0
RFIC0_BSI_D1
RFIC0_BSI_D2

DRX(I/Q) PRX(I/Q) TX(I/Q)

LTE_TX_DET
RF_HB2_TX_RFIC
RF_MB2_TX_RFIC
RF_MB3_TX_RFIC
RF_LB3_TX_RFIC
RF_LB4_TX_RFIC

LTE_TX_BB_IP
LTE_TX_BB_IN
LTE_TX_BB_QP
LTE_TX_BB_QN
LTE_PRX_BB1_IP
LTE_PRX_BB1_IN
LTE_PRX_BB1_QP
LTE_PRX_BB1_QN
LTE_PRX_BB2_IP
LTE_PRX_BB2_IN
LTE_PRX_BB2_QP
LTE_PRX_BB2_QN
LTE_DRX_BB1_IP
LTE_DRX_BB1_IN
LTE_DRX_BB1_QP
LTE_DRX_BB1_QN
LTE_DRX_BB2_IP
LTE_DRX_BB2_IN
LTE_DRX_BB2_QP
LTE_DRX_BB2_QN

I Qミナコナゲ クコヤリオ酋ンメェヌ コ
Non-CAキヌーク」ャBandwitho72OMHz」ャクコヤリオ酋ン」シ2OpF
CAキヌーク」ャBandwith」セ2OMHz」ャクコヤリオ酋ン」シ13pF



Êµ¼Ê×ßÏß¿í¶È²Î¿¼15011

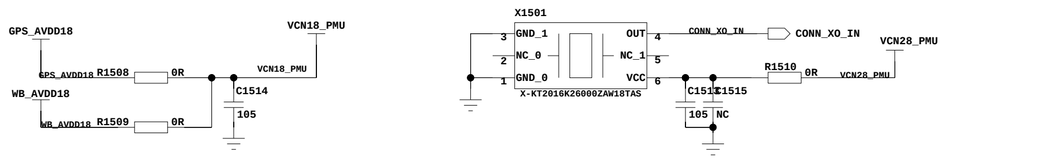
GPS_AVDD18	20mA£º10mil
WB_AVDD18	50mA£º12mil
VCN18_PMU	80mA£º15mil
VCN33_PMU	300mA£º25mil
VCN28_PMU	20mA£º10mil

IQÏß³É¶Ô°üµØ£¬£¨7£¬40£©mm

VCN33ÐèÒª20mil¿í£¬³¤¿í±ÈÐ¡ÓÚ10£¬¹ý¿×Á½¸öÔÉÏ

VCN33ÐèÒª°´ÕÕ300mA PeakµçÁ÷À´ÆÀ¹À

VCN33µçÔ´¿í¶È²»Âú×ãÒªÇó»áµ¼ÖÂWIFI TX POWER²»×¼or EVM¶ñ»¯



¾§Õñ¾»¿Õ²Î¿¼150

U1701 MT6750V/C TFBGA

MT6750-SBS

MD1

GPU

MODEM

DVFS

SRAM

VCCK

VDDQ

GND

AVDD & MD_A

PLL

PERI_D

PERI_A

PDN requirement

Note1

Note2

Note3

Note4:

note5:

note6:

AP_SPI0_CSN and AUD_DAT_MOSI are JTAG feature in bootstrap.
note1:

PWRAP_SPI0_CSN	AUD_DAT_MOSI	JTAG
HI	LO	N/A£¨Default£©
HI	HI	SPI_CSB/SPI_CLK/SPI_MO/SPI_MI
LO	LO	CAM_CLK0/CAM_RST0/CAM_RST1/CAM_PDN0
LO	HI	MSDC1_CLK/MSDC1_CMD/MSDC1_DAT0/MSDC1_DAT1

note2」
de-coupling cap. of DRAM VREF have to be placed as close to BB as possible.

U1701 MT6750V/C TFBGA

MT6750-SBS

PMU_IF

GND

PLLs Test Pin

DRAM_IF

GND

SIM

ABB_IF

RFI_C

RF MIPI

BPI

AUX IN

REF POWER

CLK should be shielded by GND

CLK should be shielded by GND

DVDD18_IOLT

DVDD18_IOLT

DVDD18_IOBL

DVDD18_IOBR

DVDD18_IOBL

DVDD18_IOBR

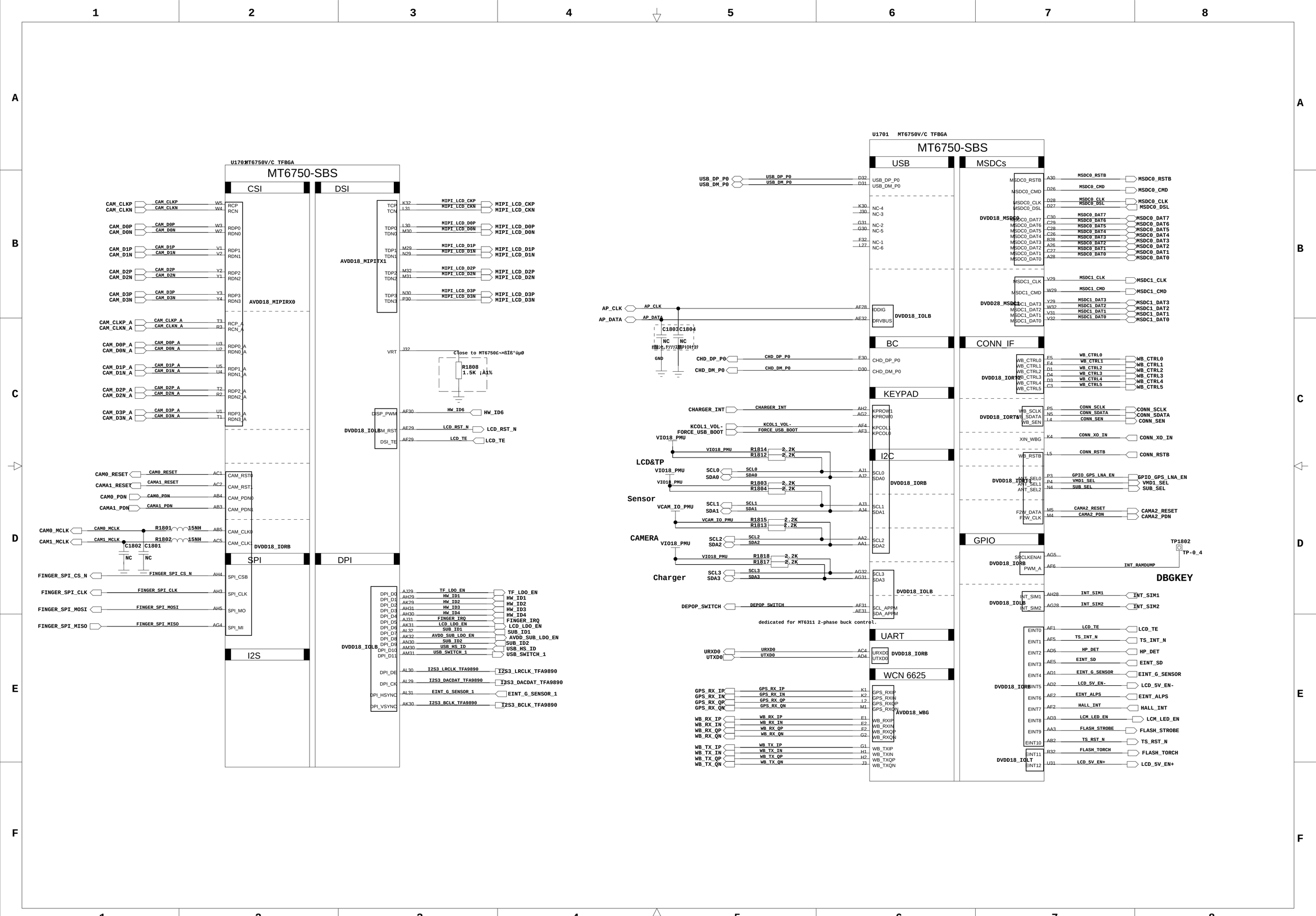
DVDD28_SIM1

DVDD28_SIM2

AVDD18_MD

Close to MT6750

Close to MT6755

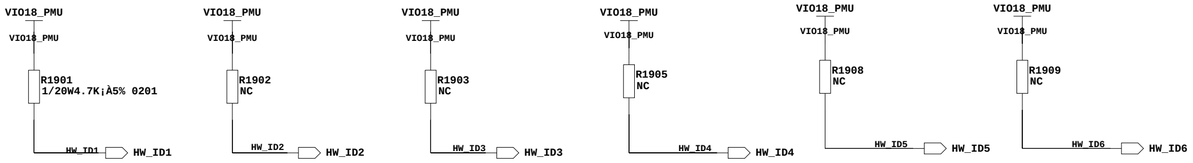

U1701 MT6750V/C TFBGA
MT6750-SBS
CSI
DSI
CAM_CLKP
CAM_CLKN
CAM_D0P
CAM_D0N
CAM_D1P
CAM_D1N
CAM_D2P
CAM_D2N
CAM_D3P
CAM_D3N
CAM_CLKP_A
CAM_CLKN_A
CAM_D0P_A
CAM_D0N_A
CAM_D1P_A
CAM_D1N_A
CAM_D2P_A
CAM_D2N_A
CAM_D3P_A
CAM_D3N_A
AVDD18_MIPIRX0
AVDD18_MIPITX1
MIPI_LCD_CKP
MIPI_LCD_CKN
MIPI_LCD_D0P
MIPI_LCD_D0N
MIPI_LCD_D1P
MIPI_LCD_D1N
MIPI_LCD_D2P
MIPI_LCD_D2N
MIPI_LCD_D3P
MIPI_LCD_D3N
VRT
Close to MT6750
R1808
1.5K
DSP_PWM
DVDD18_IOLB
LCD_RST_N
DSI_TE
LCD_TE
HW_ID6
CAM0_RESET
CAMA1_RESET
CAM0_PDN
CAMA1_PDN
CAM0_MCLK
CAM1_MCLK
R1801
R1802
15NH
C1802
C1801
NC
DVDD18_IORB
SPI
DPI
FINGER_SPI_CS_N
FINGER_SPI_CLK
FINGER_SPI_MOSI
FINGER_SPI_MISO
I2S
DPI_D0
DPI_D1
DPI_D2
DPI_D3
DPI_D4
DPI_D5
DPI_D6
DPI_D7
DPI_D8
DPI_D9
DPI_D10
DPI_D11
DPI_DE
DPI_CK
DPI_HSYNC
DPI_VSYNC
TF_LDO_EN
HW_ID1
HW_ID2
HW_ID3
HW_ID4
FINGER_IRQ
LCD_LDO_EN
SUB_ID1
AVDD_SUB_LDO_EN
SUB_ID2
USB_HS_ID
USB_SWITCH_1
I2S3_LRCLK_TFA9890
I2S3_DACDAT_TFA9890
EINT_G_SENSOR_1
I2S3_BCLK_TFA9890
U1701 MT6750V/C TFBGA
MT6750-SBS
USB
MSDCs
BC
CONN_IF
KEYPAD
I2C
UART
WCN 6625
GPIO
USB_DP_P0
USB_DM_P0
AP_CLK
AP_DATA
C1803
C1804
CHD_DP_P0
CHD_DM_P0
CHARGER_INT
KCOL1_VOL-
FORCE_USB_BOOT
VIO18_PMU
LCD&TP
Sensor
CAMERA
Charger
DEPOP_SWITCH
dedicated for MT6311 2-phase buck control.
URXD0
UTXD0
GPS_RX_IP
GPS_RX_IN
GPS_RX_QP
GPS_RX_QN
WB_RX_IP
WB_RX_IN
WB_RX_QP
WB_RX_QN
WB_TX_IP
WB_TX_IN
WB_TX_QP
WB_TX_QN
AVDD18_WBG
MSDC0_RSTB
MSDC0_CMD
MSDC0_CLK
MSDC0_DSL
MSDC0_DAT7
MSDC0_DAT6
MSDC0_DAT5
MSDC0_DAT4
MSDC0_DAT3
MSDC0_DAT2
MSDC0_DAT1
MSDC0_DAT0
DVDD18_MSDC0
MSDC1_CLK
MSDC1_CMD
MSDC1_DAT3
MSDC1_DAT2
MSDC1_DAT1
MSDC1_DAT0
DVDD28_MSDC1
DVDD18_IOLB
WB_CTRL0
WB_CTRL1
WB_CTRL2
WB_CTRL3
WB_CTRL4
WB_CTRL5
DVDD18_IORT
CONN_SCLK
CONN_SDATA
CONN_SEN
CONN_XO_IN
CONN_RSTB
GPIO_GPS_LNA_EN
VMD1_SEL
SUB_SEL
CAMA2_RESET
CAMA2_PDN
TP1802
TP-0_4
SRCLKENAI
PWM_A
INT_RAMDUMP
DBGKEY
INT_SIM1
INT_SIM2
EINT0
EINT1
EINT2
EINT3
EINT4
EINT5
EINT6
EINT7
EINT8
EINT9
EINT10
EINT11
EINT12
LCD_TE
TS_INT_N
HP_DET
EINT_SD
EINT_G_SENSOR
LCD_5V_EN-
EINT_ALPS
HALL_INT
LCM_LED_EN
FLASH_STROBE
TS_RST_N
FLASH_TORCH
LCD_5V_EN+
DVDD18_IOLT

ｳ荘	HW_ID1 GPIO14
ｷヌﾉﾁｳ	1
ﾉﾁｳ	0

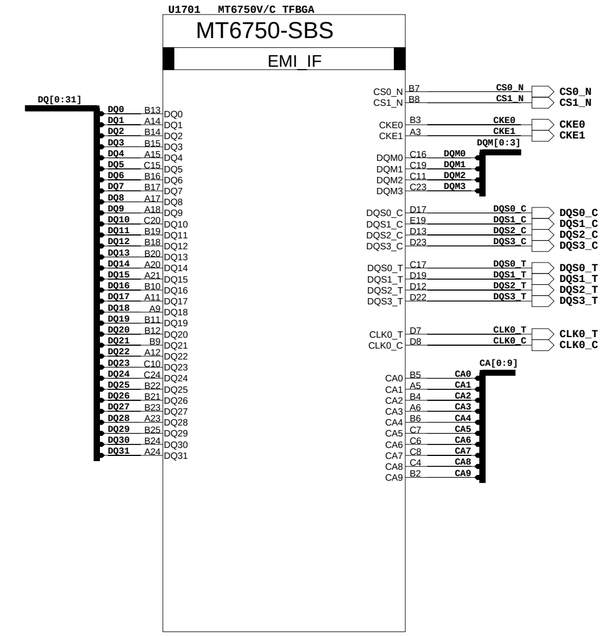
ﾖﾆﾊｽ	HW_ID2 GPIO15	HW_ID3 GPIO16	HW_ID4 GPIO17
ﾑヌﾌｫｰ	0	0	0
ﾌｨﾍ蟆	0	0	1
ﾒﾆｶｯﾎ蠹」	0	1	0
ﾈｫﾍ　ｨ	1	0	0

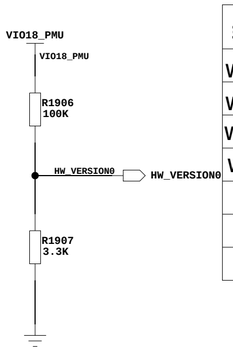
	HW_ID5 GPIO78	HW_ID6 GPIO157
RFMD	0	0
SKY	0	1

GPIOﾅ葷ﾃﾊ菠　ﾂﾀｭ

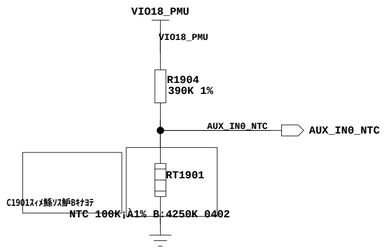


ﾗ　OMﾊｱﾗ「ﾒ筌ｬﾒｪNCｲｻﾍｬｵﾄｵ釋





ﾖ　蟆豎ｾ	R1907	ｾｫｶﾈ	min(V)	typ(V)	max(V)	R1907ﾁﾏｺﾅ
V1.0(T1)	3.3k	5%	0.0491	0.0575	0.0669	8241075
V1.1(EVT)	10k	5%	0.1414	0.1636	0.1885	8241005
V1.2(DVT)	15k	5%	0.2039	0.2348	0.2691	8241082
V1.3(PVT)	47k	5%	0.5098	0.5755	0.6465	8241091



Distance to AP is 5-7mm and away form other heat resource 10-12mm

Regulator	Output Voltage Range(V)	Output Current(mA£©)	Line width(mile)
VCORE	0.6-1.31 (0.9)	3500	>88
VCORE2	0.6-1.31 (1.0)	3500	>88
VPROC	0.6-1.31 (1.0)	5000	>125
VS1	1.9-2.2 (2.0)	1900	>48
VPA	0.5-3.4	800	>30
VMD1(EXT)	0.7/0.9	1200	>30
VCAMA	2.5/2.8	200	L/W:2800/8
VTCXO28	2.8	40	L/W:2800/6
VCN28	2.8	40	L/W:2800/6
VAUD28	2.8	40	L/W:2800/6
VAUX18	1.8	40	L/W:2800/6
VXO22	2.2	20	L/W:2800/10
VTCXO24	2.375	40	L/W:2800/6
VCN33	3.3/3.4/3.5/3.6	350	L/W:2800/8
VLDO28	2.8	300	L/W:2800/8
VSIM1	1.7/1.8/1.86/2.76/3/3.3	50	L/W:2800/6
VSIM2	1.7/1.8/1.86/2.76/3.0/3.3	50	L/W:2800/6
VIBR	1.2/1.3/1.5/1.8/2.5/2.8/3.0/3.3	100	L/W:2800/8
VMC	1.8/2.9/3.0/3.3	200	L/W:2800/8
VMCH	2.9/3.0/3.3	800	L/W:2800/20
VIO28	2.8	200	L/W:2800/8
VEMC33	2.9/3.0/3.3	800	L/W;2800/20
VUSB33	3.3	50	L/W:2800/6
VRTC28	2.8	2	L/W:2800/6
DVDD18_DIG	1.8	20	L/W:2800/6
VDRAM	1.24	1000	L/W:1500/30
VRF18	1.825	400	L/W:2800/10
VRF12	1.2	150	L/W:2800/10
VCN18	1.8	150	L/W:2800/8
VIO18	1.8	800	L/W;2800/20
VCAMD	0.9/1.0/1.1/1.22/1.3/1.5/1.8	500	L/W:2800/8
VCAMIO	1.8	200	L/W:2800/8
VSRAM_PROC	1.1	400	L/W:1500/18
TREF	1.8	1	-
/			
/			

PDN requirement
VCORE: 0.9V/1.15V, 3.5A

PDN requirement
VCORE2: 1.0V/1.15V, 3.5A

PDN requirement
VPROC: 1.0V/1.15V, 5A

VS1: 2.0V, 1.9A

VPA:0.5V~3.4V, 0.6A

PDN requirement

PDN requirement

Close to MT6353

Close to MT6353

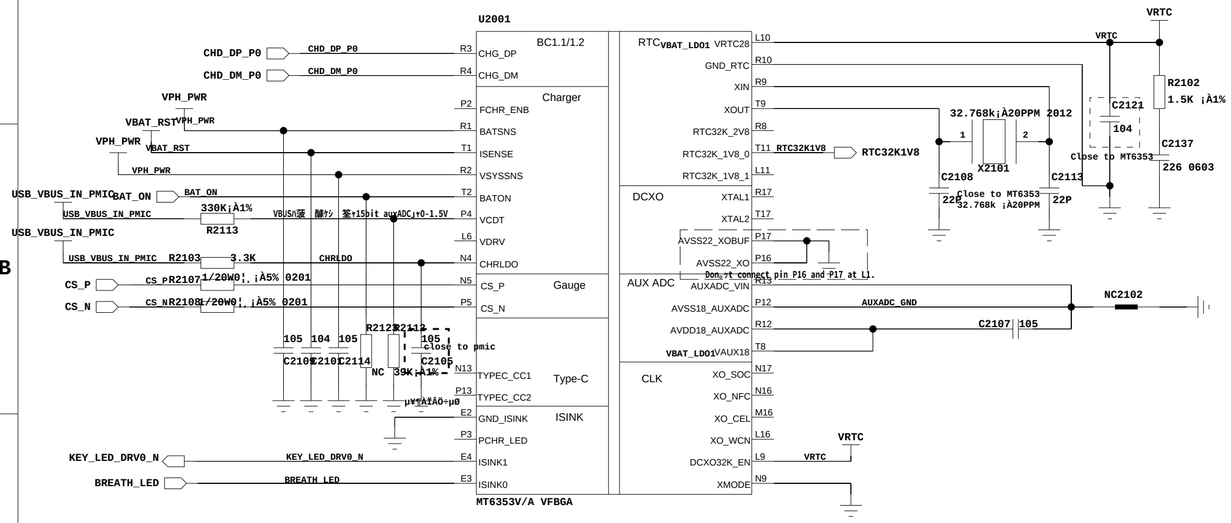
Close to MT6353

Close to MT6353

Close to MT6353

VMD1_SEL	
H£º	0.7V
L:	0.9V

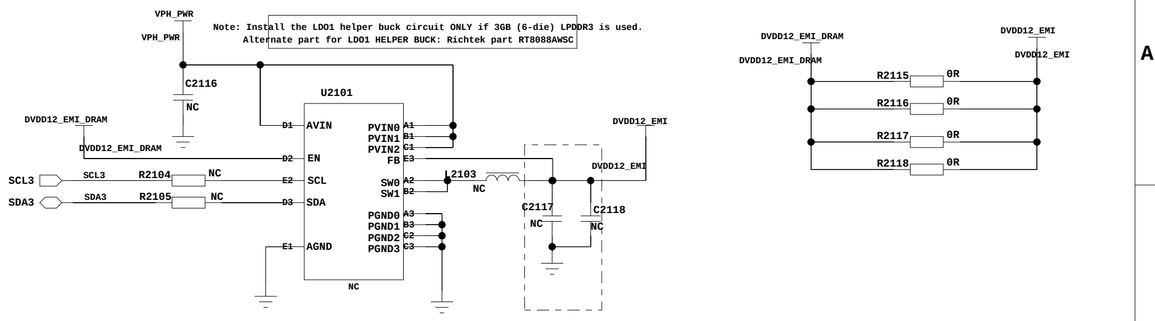
MT6353 HS KEEP



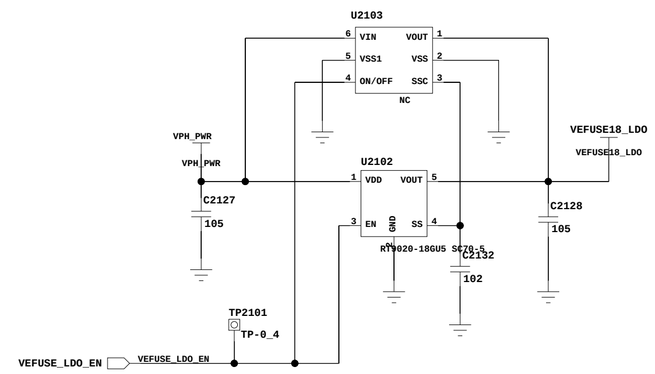
Charger	R2103
Ext. Switching Charger	3.3K
Pulse charger + MTK Pump Express	1.5K

DCXO32K_EN	XMODE	CLKOUT
1	0	VTCXO on MT6176 OFF XO in MT6353

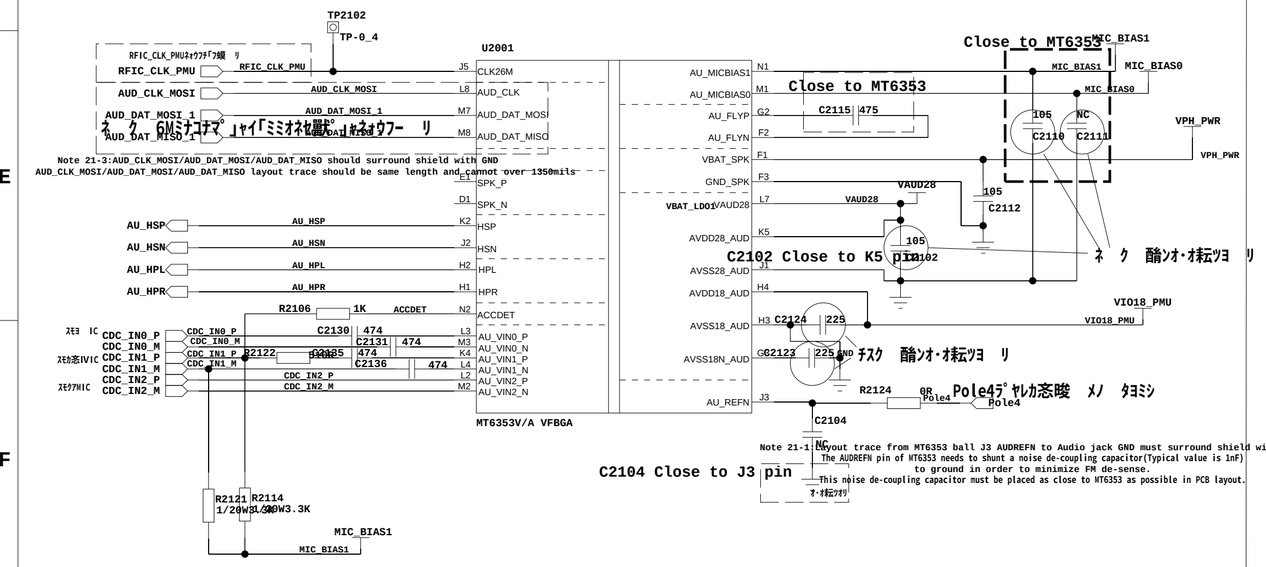
DCXO32K_EN	XMODE	CLK OUT
0	0	TCXO on MT6353
1	0	VTCXO on MT6176 (OFF XO in MT6353)
0	1	TSX on MT6353, w/ RTC
1	1	TSX on MT6353, w/o RTC



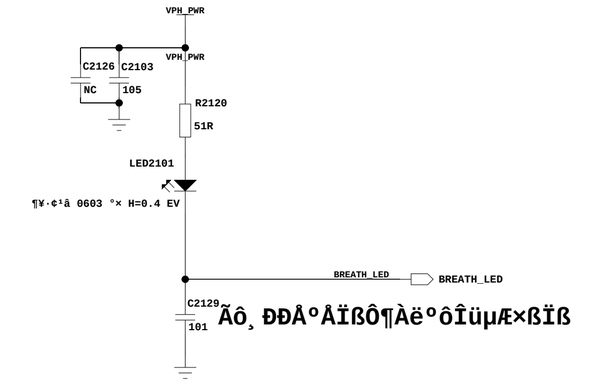
NCP6343B slave Address is 0x1C

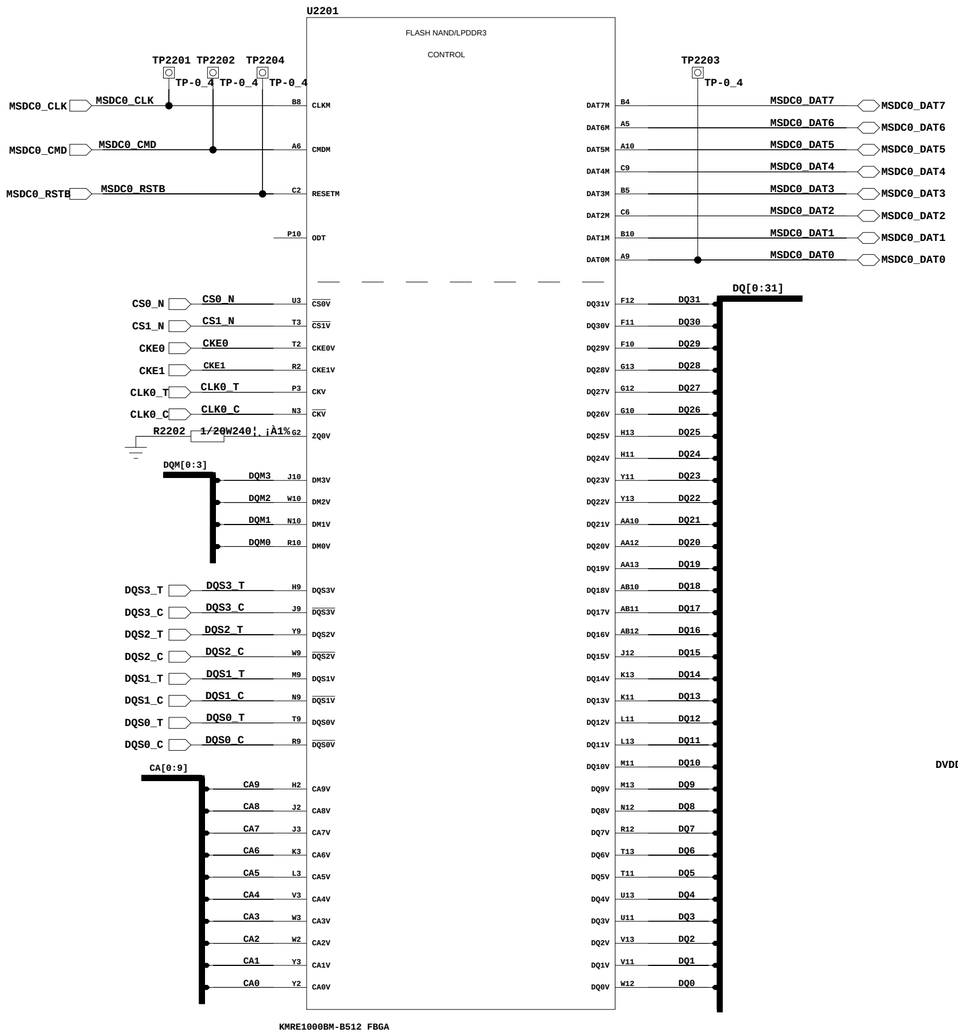


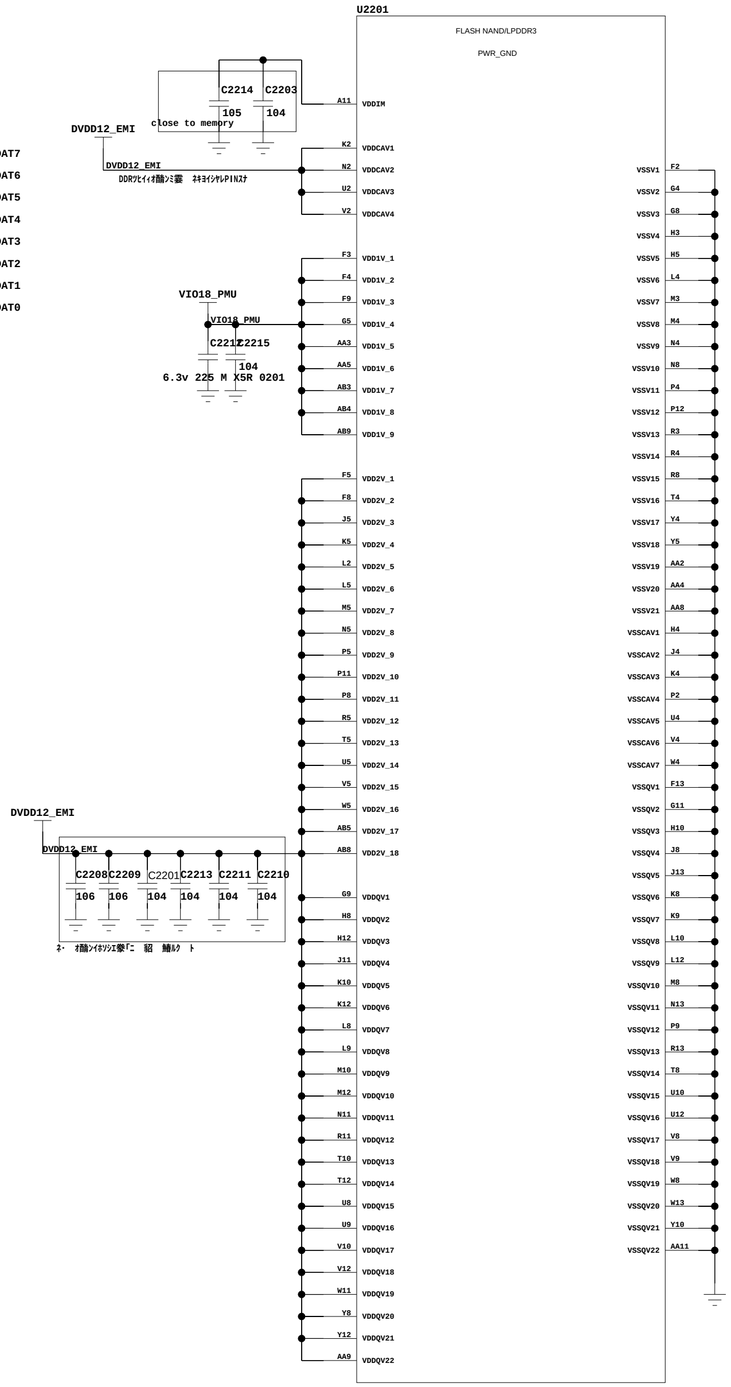
MT6353 Audio

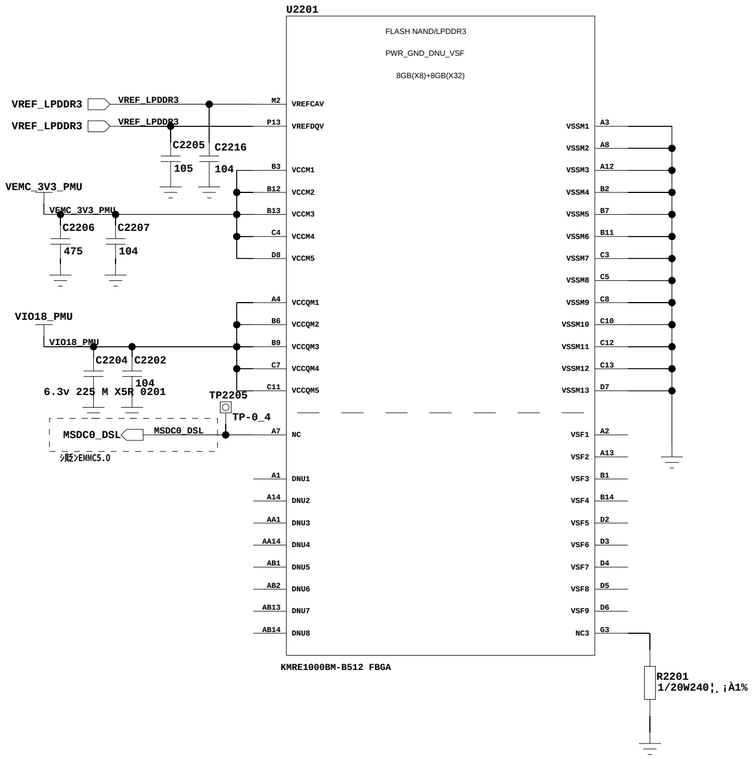


Breath LED



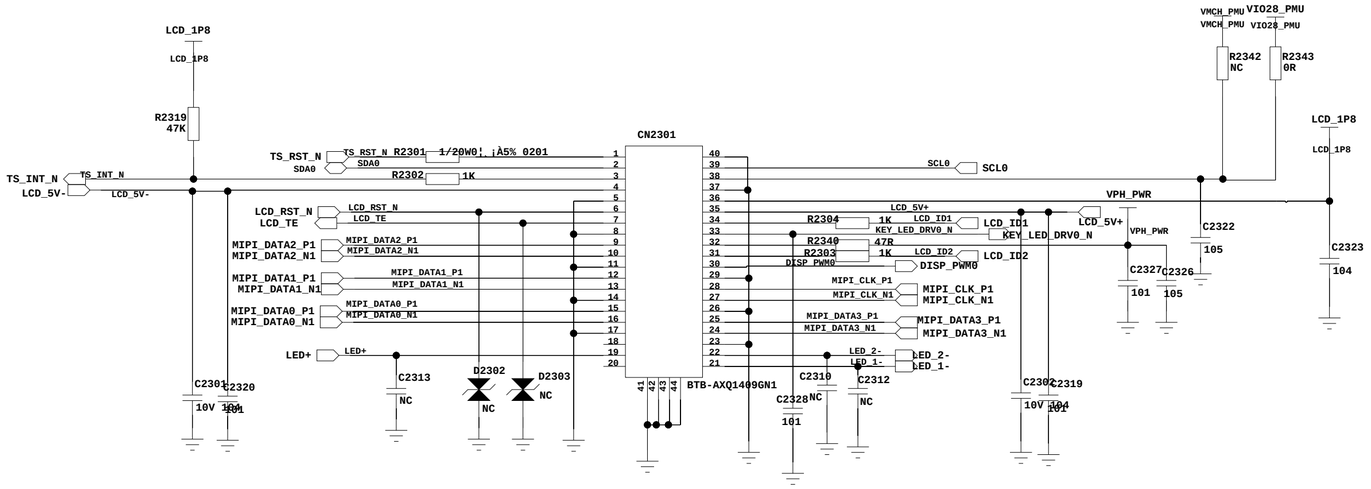




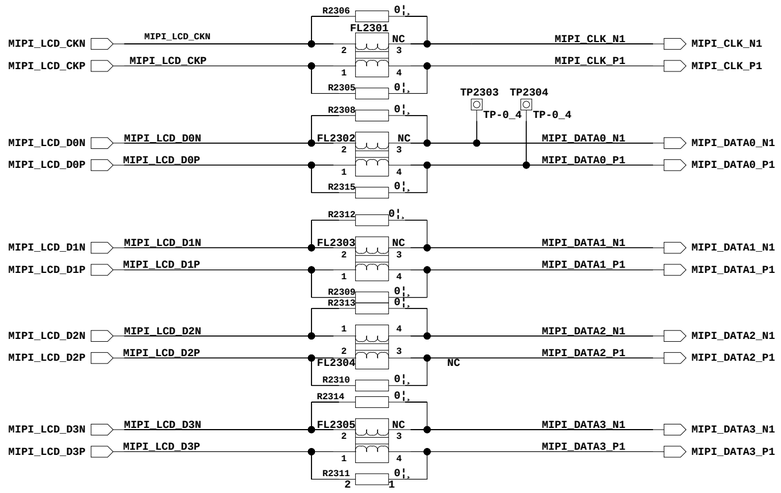


オ テｸﾞｶﾈ1.2mmｷ簧ｰ

LCM Connector

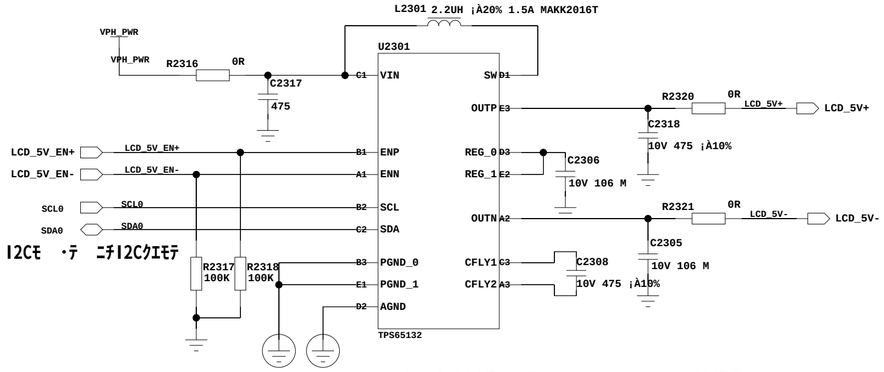


DSI CMF



LCD 。ﾀ5V Driver

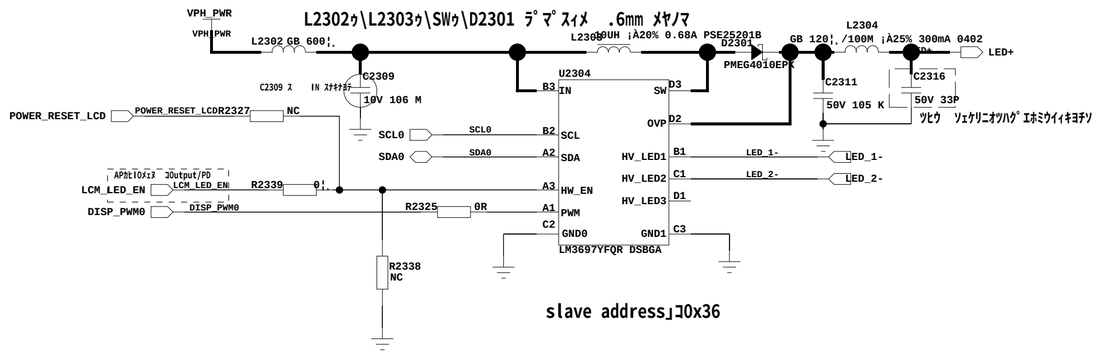
ツ嬴ァIC」ャラ「メ笥シセヨホサヨテモヲチヲ



I2Cモ ・テ ニチI2Cクエモテ

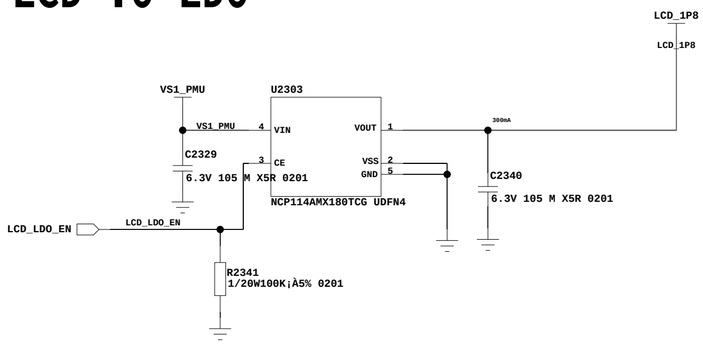
ｵ醸ｴｵリト」ト箏リキヨツェマツヨ ﾄps65132 slave address 0X3E

LCD BL

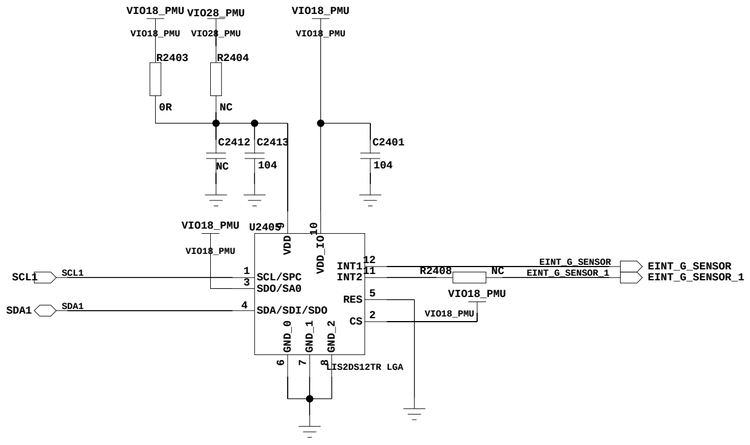


slave address」ｺ0x36

LCD IO LDO



G-Sensor

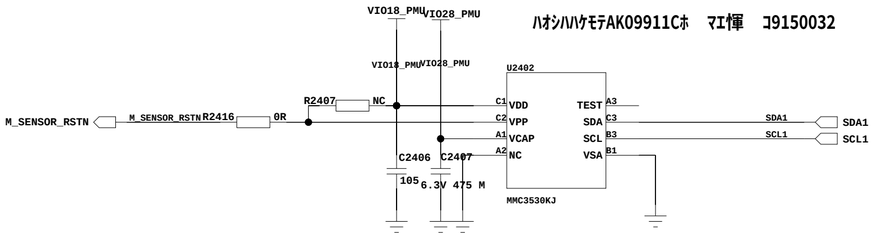


I2CµØÖ·£¬¶Á0x3B£¬Ð´0x3A

LIS2DS12 slave Address is 0x1D

SA0	slave ADDR
0	0x1E
1(VDD)	0x1D

M Sensor

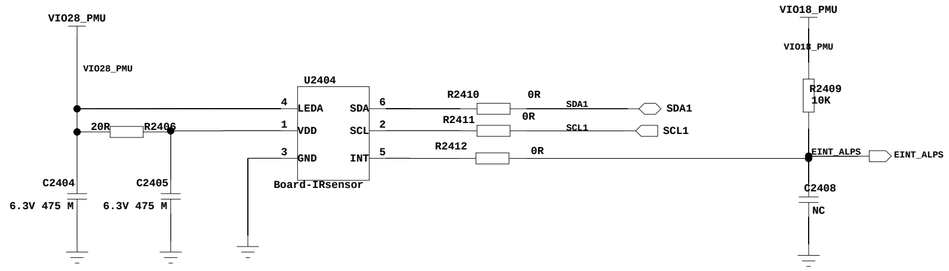


ﾊｵｼﾊﾊｹﾓﾃAK09911Cﾎ ﾏｴ揮 ｺ9150032

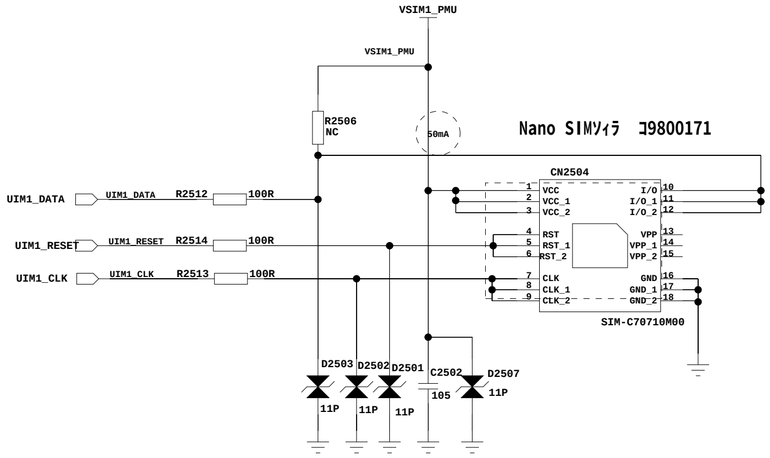
AK09911 slave Address is 0x0C

CAD	slave ADDR
0	0x0C
1(VDD)	0x0D

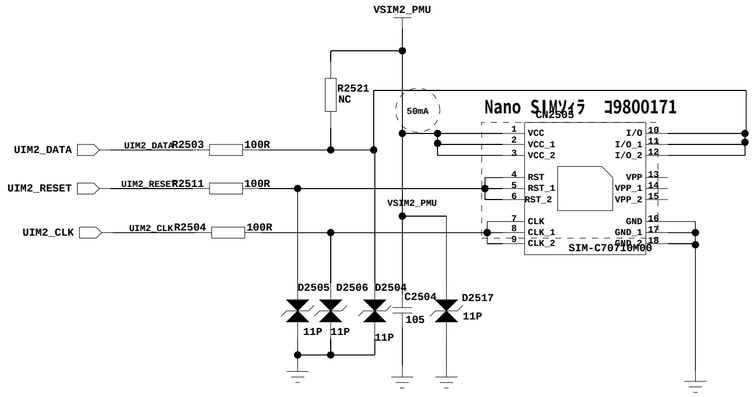
A.L.S.+P.S sensor



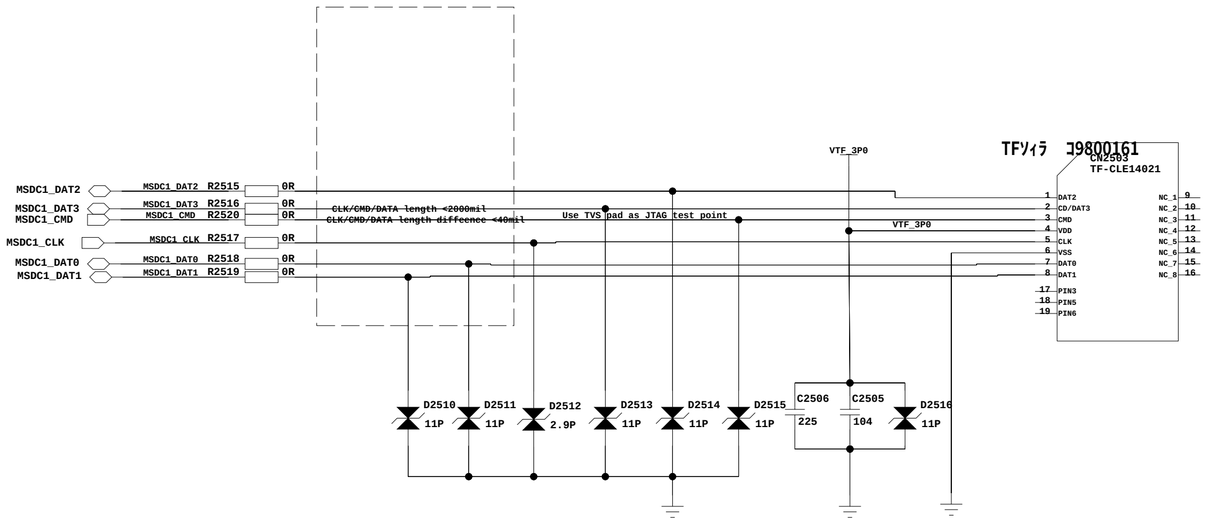
SIM1 Card



SIM2 Card



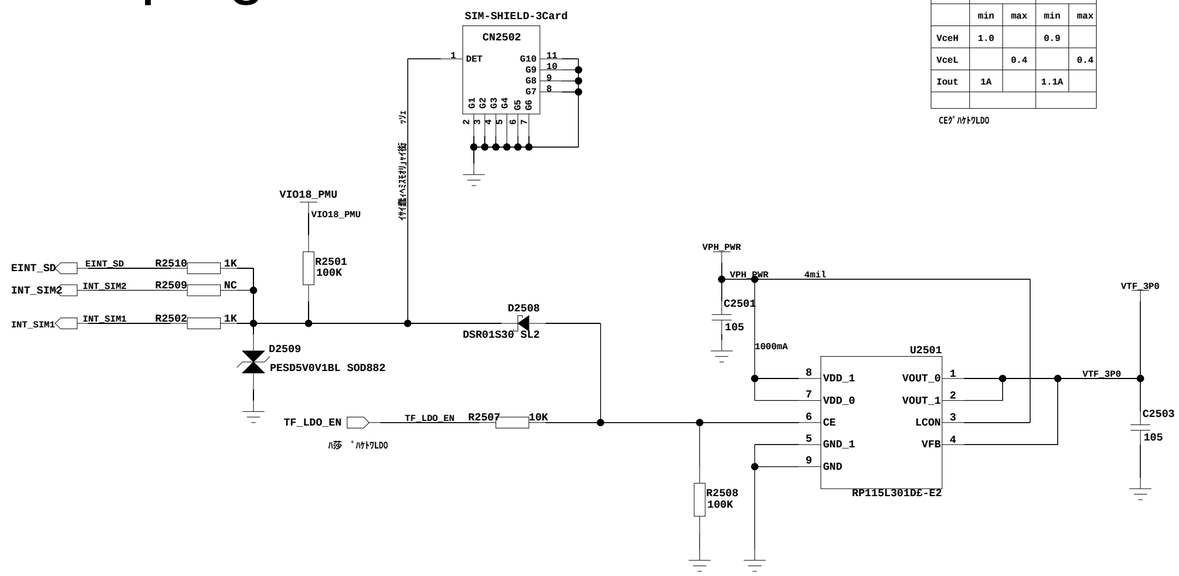
TF_CARD



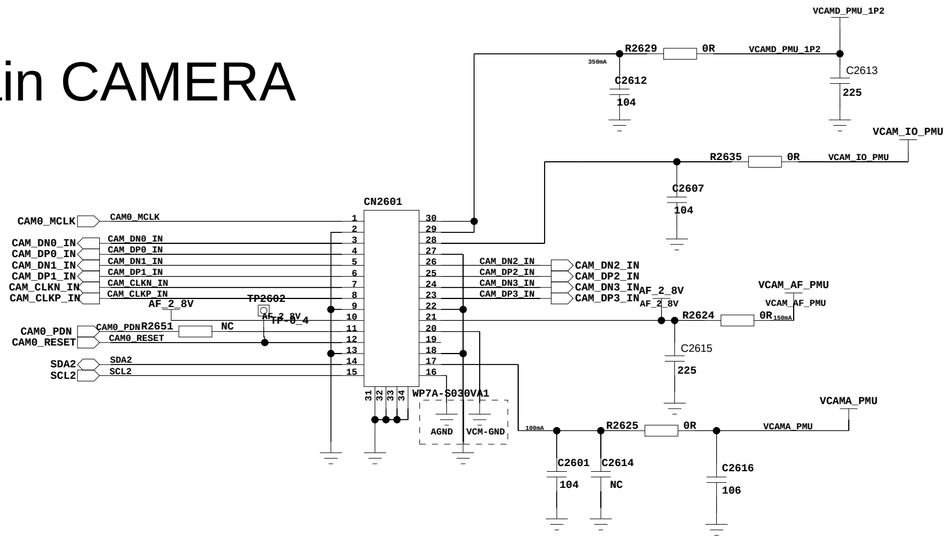
Hot plugｿ¨ Ext 2.95V Supply

	RP115L301D 9170125		NCP706A 9170224	
	min	max	min	max
VceH	1.0		0.9	
VceL		0.4		0.4
Iout	1A		1.1A	

CEﾋﾟﾊﾄｳLDO

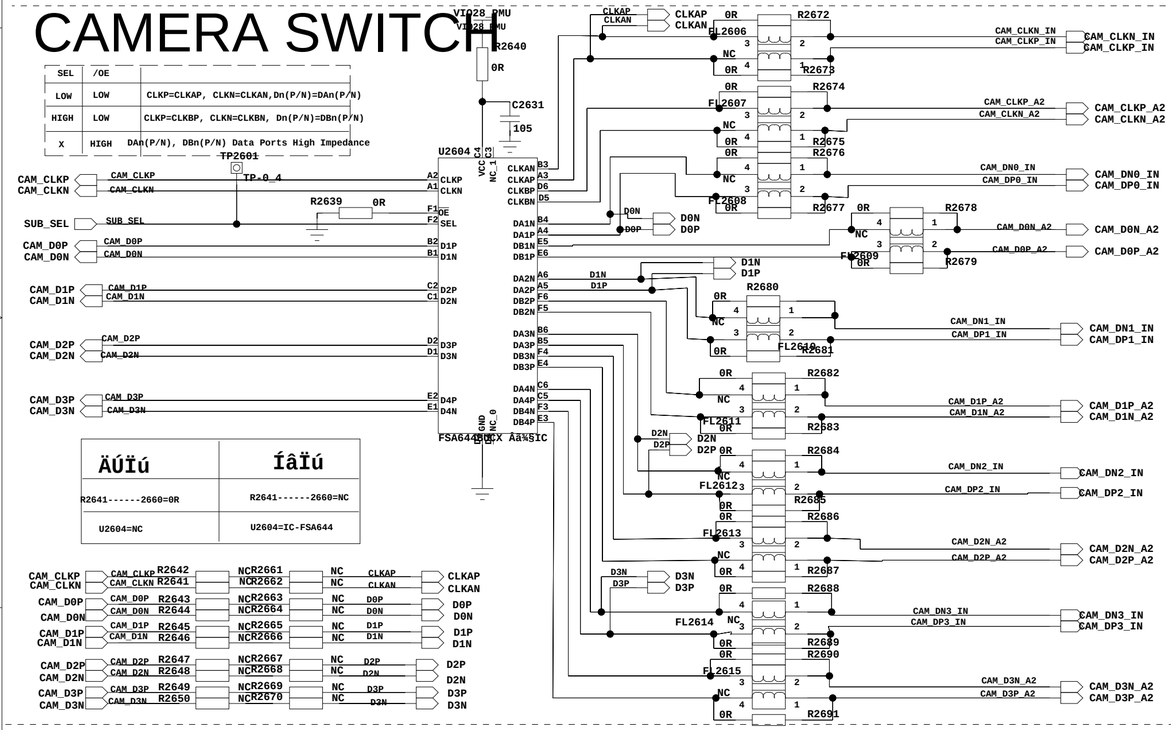


Main CAMERA



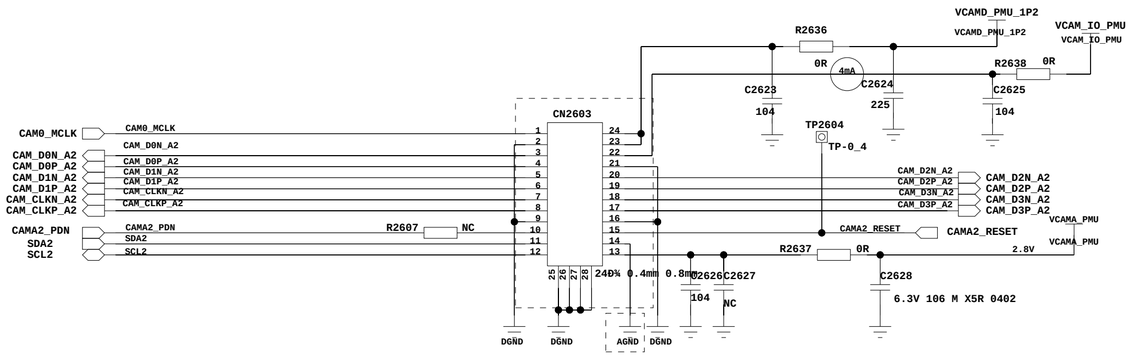
CAMERA SWITCH

SEL	/OE	
LOW	LOW	CLKP=CLKAP, CLKN=CLKAN,Dn(P/N)=DAn(P/N)
HIGH	LOW	CLKP=CLKBP, CLKN=CLKBN, Dn(P/N)=DBn(P/N)
X	HIGH	DAn(P/N), DBn(P/N) Data Ports High Impedance

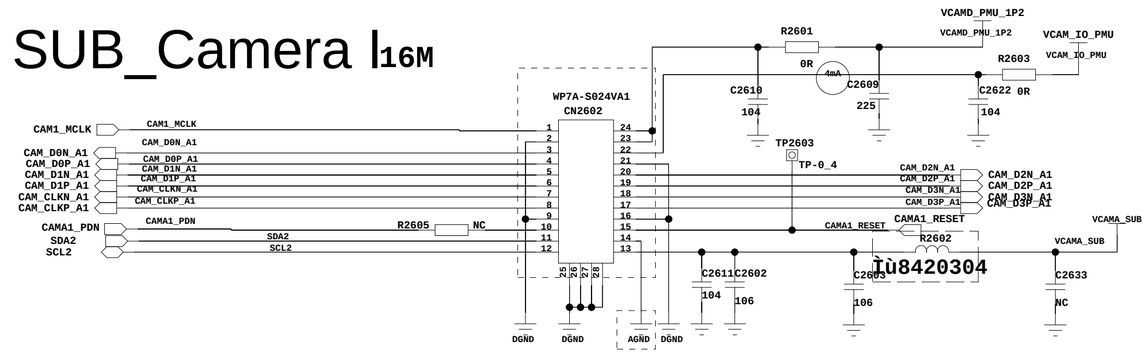


ÄÚÏú	Íâ Ïú
R2641------2660=0R	R2641------2660=NC
U2604=NC	U2604=IC-FSA644

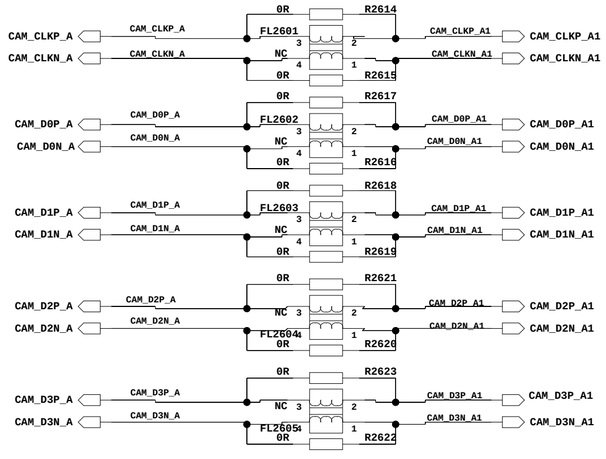
SUB_Camera I 8M



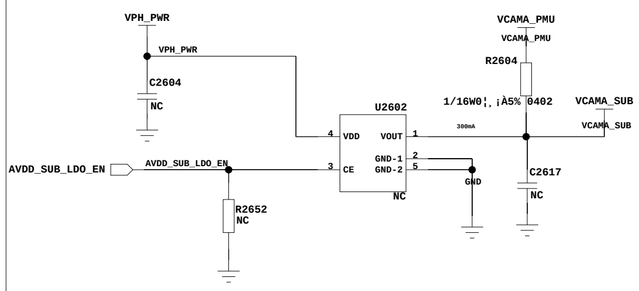
SUB_Camera I 16M



CSI CMF

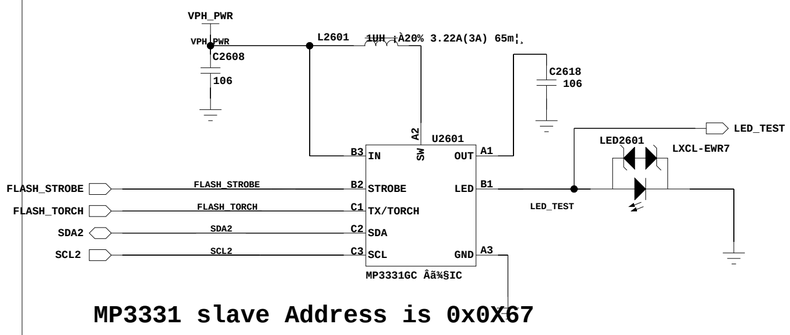


SUB Camera I AVDD(3V)



SUB Camera I DVDD(1.2V)

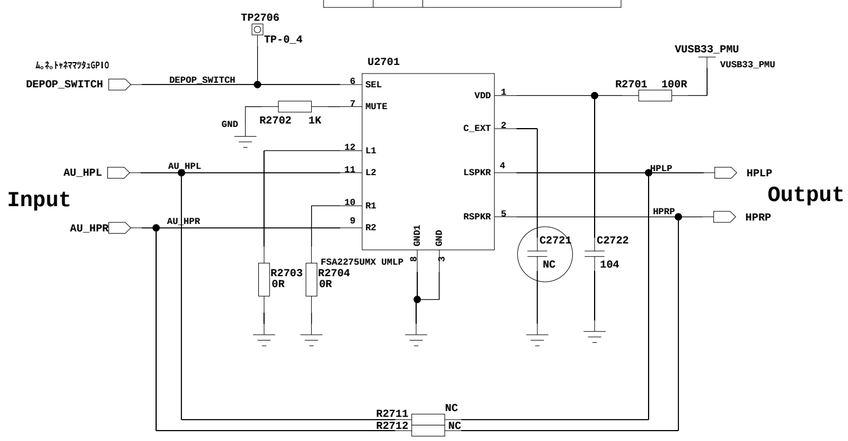
Flash LED Driver



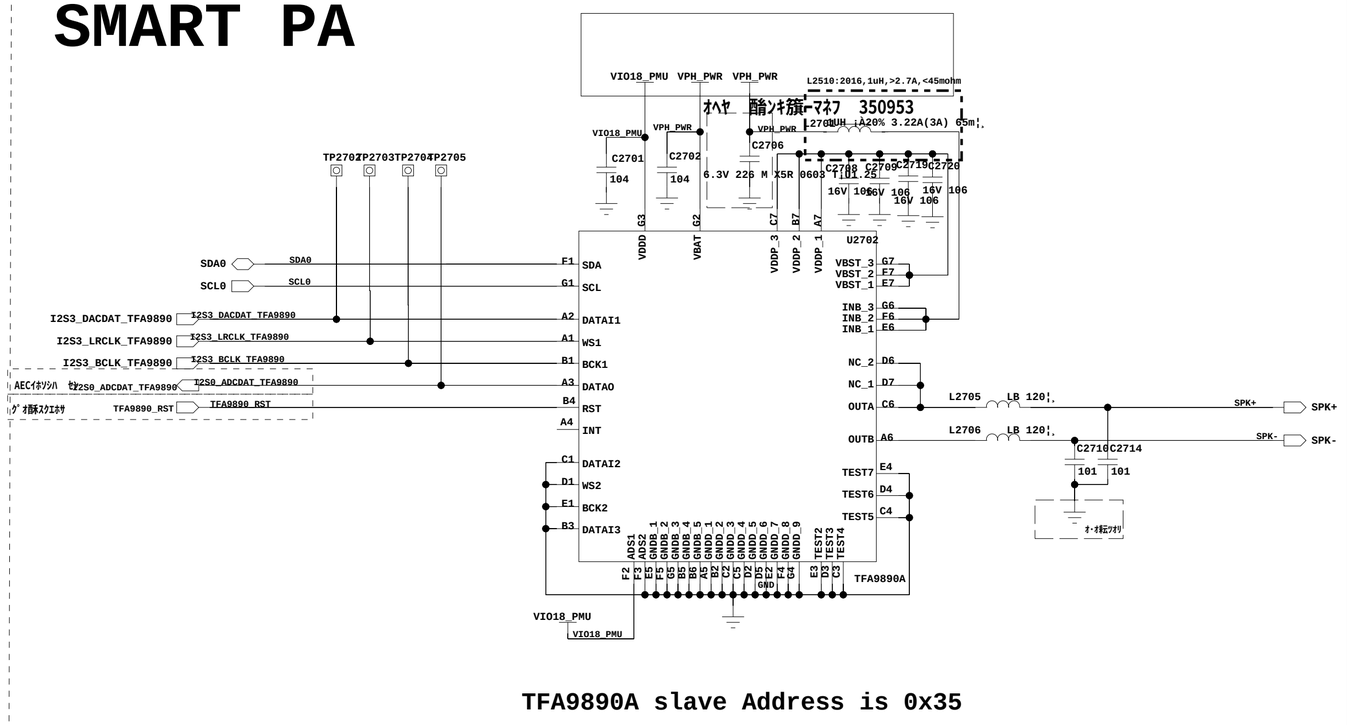
MP3331 slave Address is 0x0X67

CODEC

MUTE	SEL	FOUNCTION
0	0	L1=LSPKR; R1=RSPKR
0	1	L2=LSPKR; R2=RSPKR

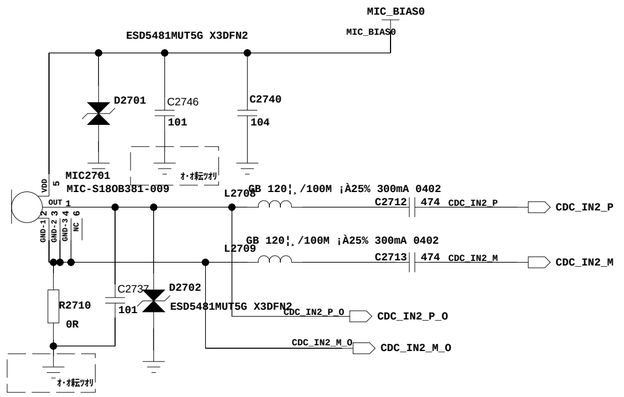


SMART PA

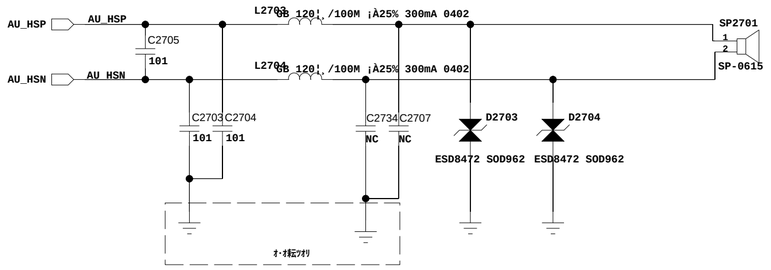


TFA9890A slave Address is 0x35

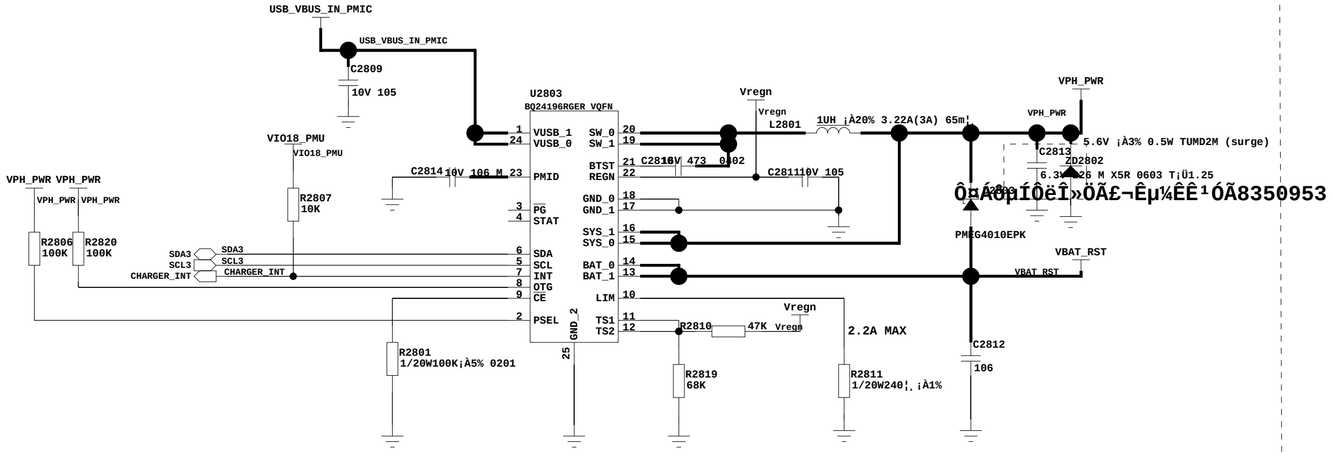
Ant-Noise MIC



Receiver

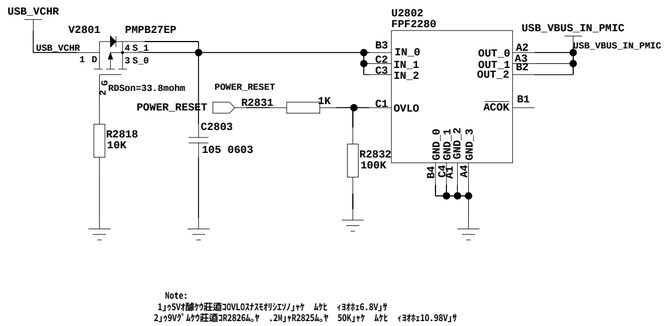


ternal Switching Charge

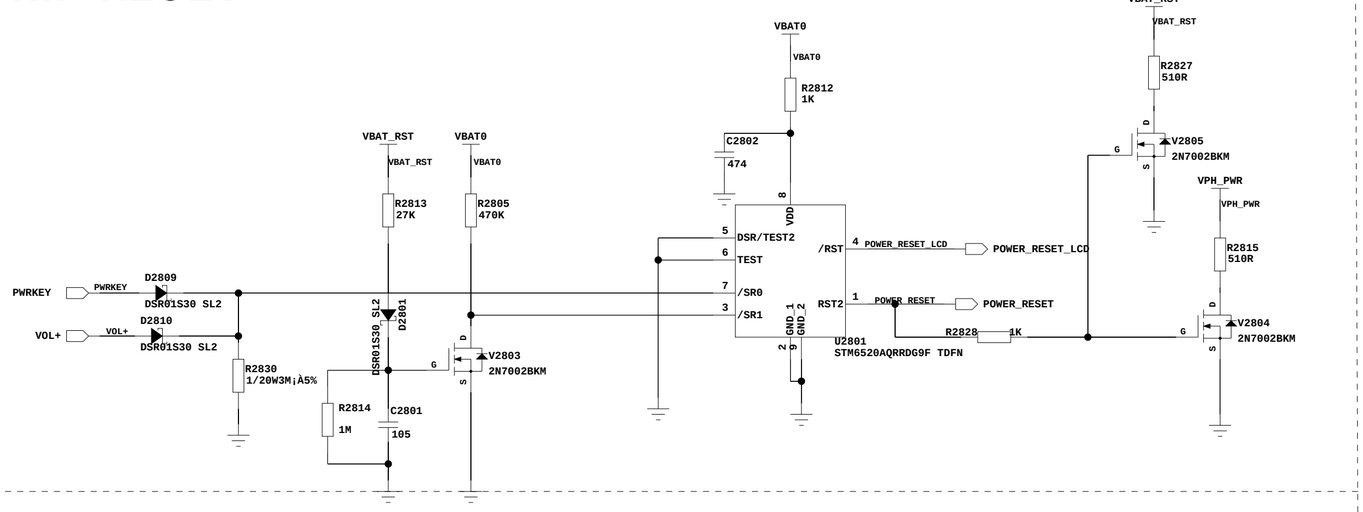


BQ24196 slave Address is 0x6B

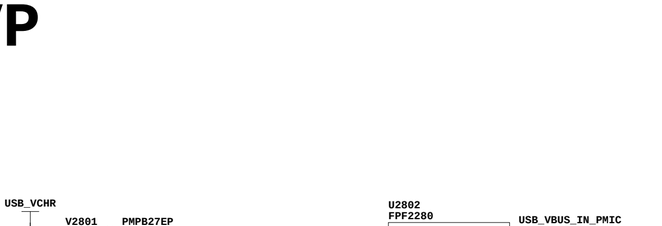
NVP&OVP



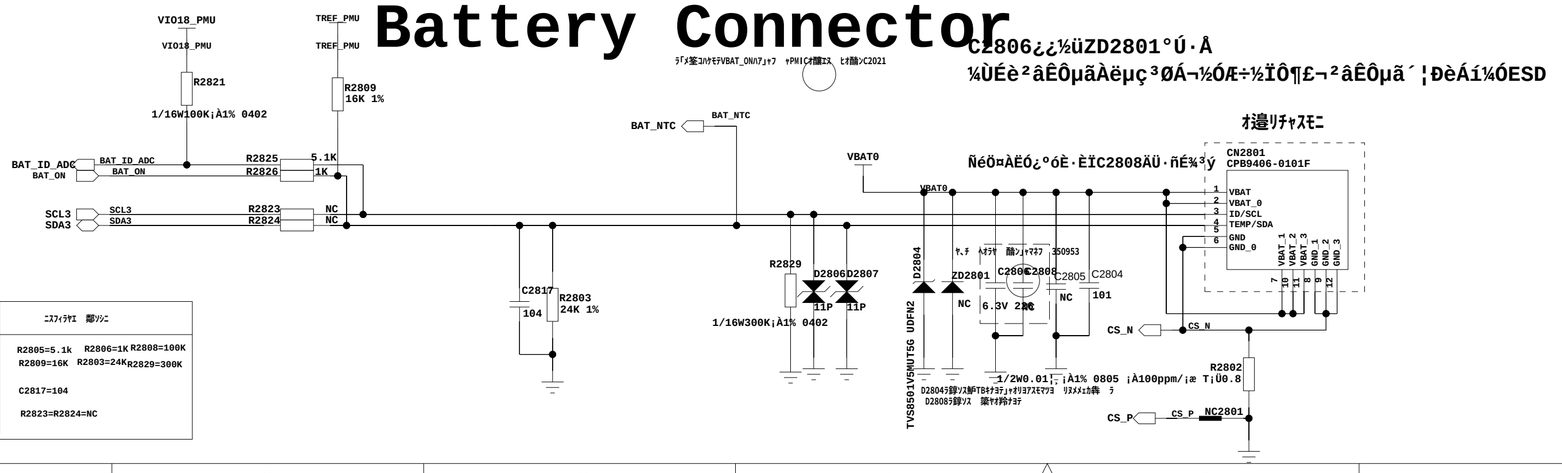
HW RESET



BAT_MOSFET



Battery Connector



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R2805=R2806=R2829=NC	R2805=5.1k R2806=1K R2808=100K
R2808=R2809=R2803=NC	R2809=16K R2803=24K R2829=300K
C2817=NC	C2817=104
R2823=R2824=100¦¸	R2823=R2824=NC

C2806¿¿½üZD2801°Ú·Å
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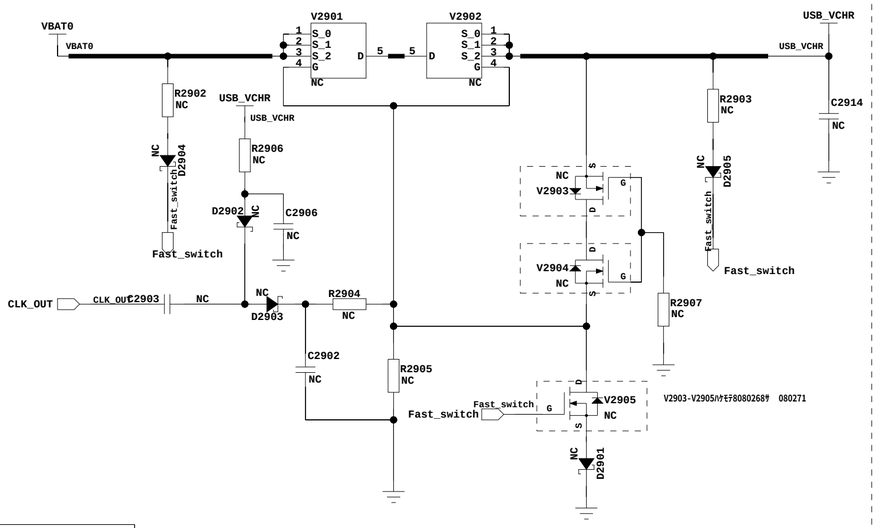
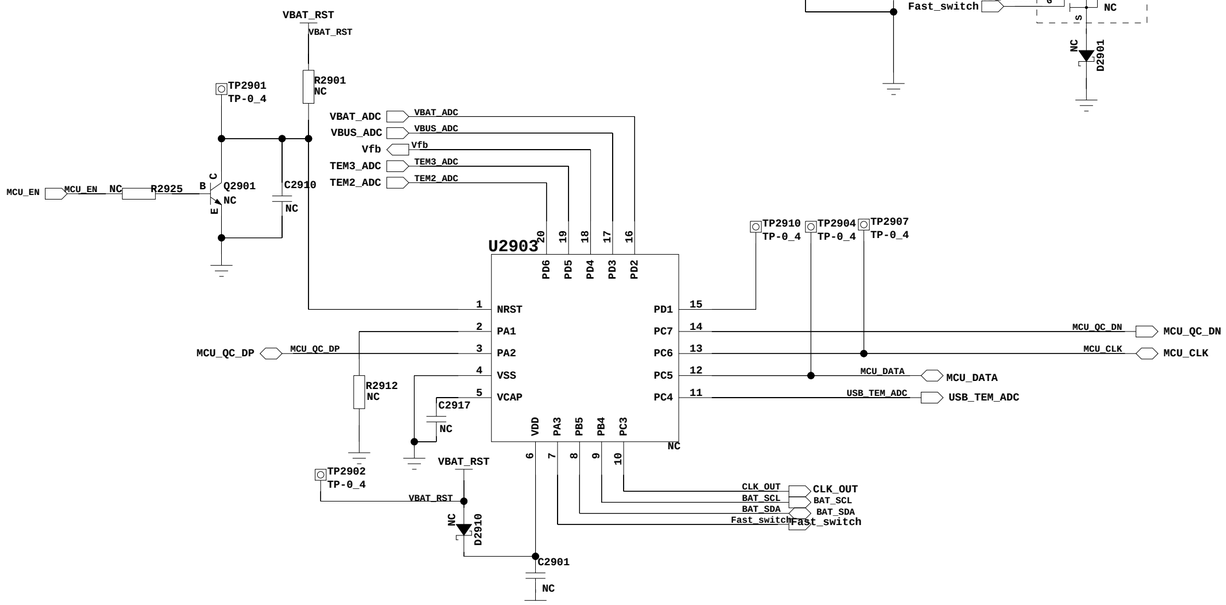
ÔçÁóµÍÔëÎ»ÖÃ£¬Êµ¼ÊÊ¹ÓÃ8350953

FAST CHARGE





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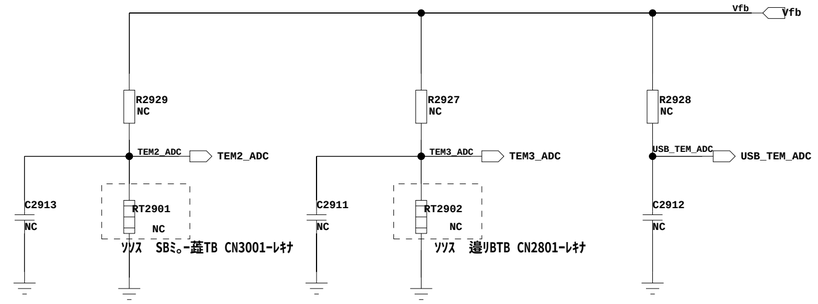
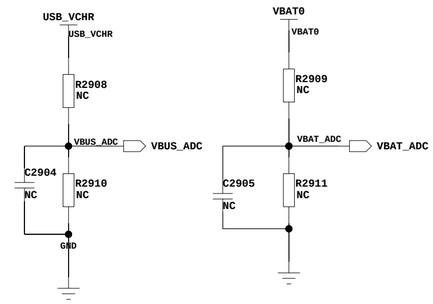
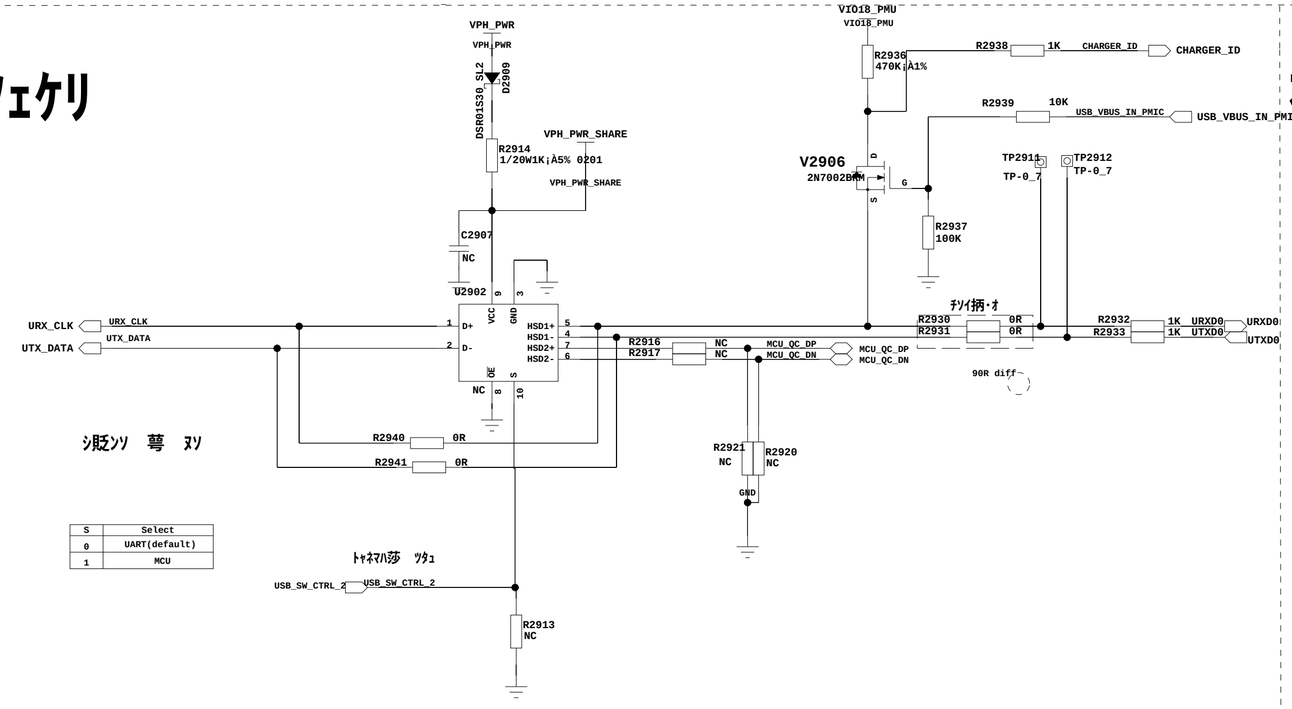




USBｿｪｹﾘ



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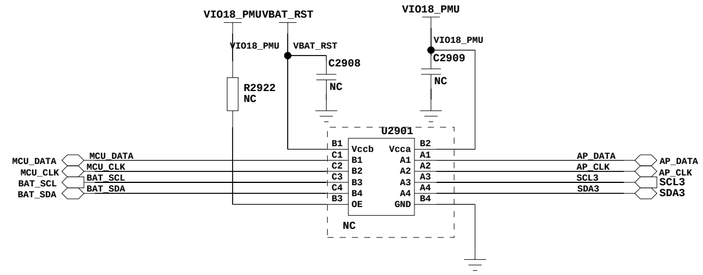
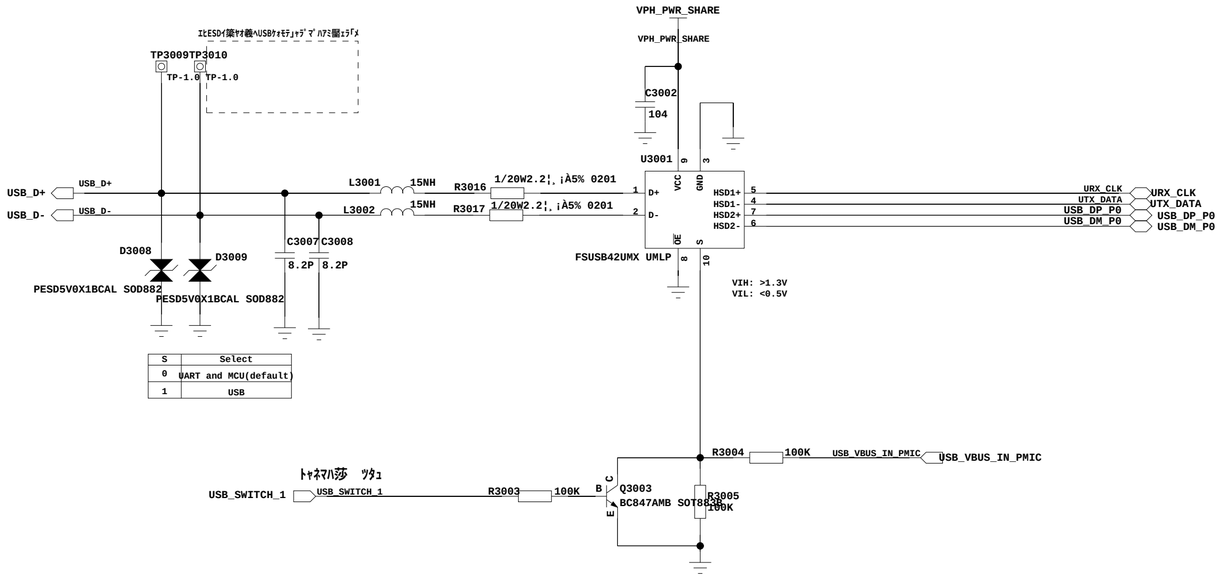
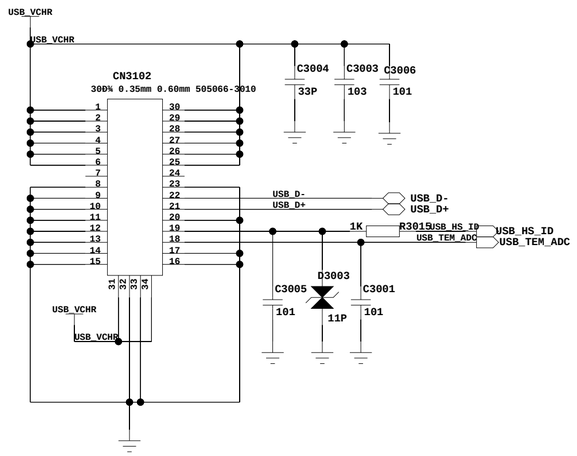


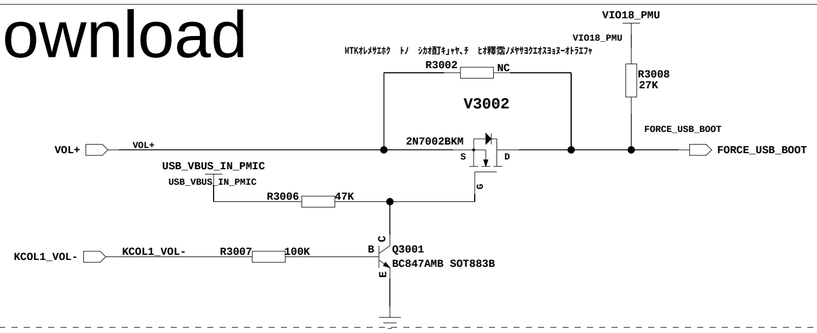
USB Switch



USB_BTB



FORCE USB Download



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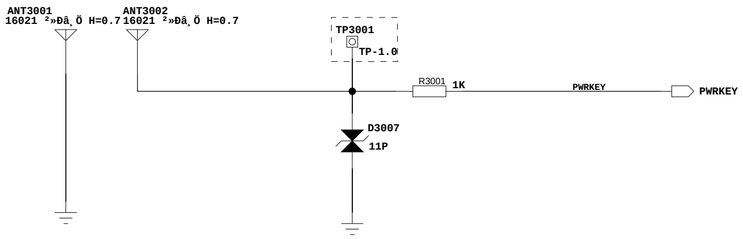
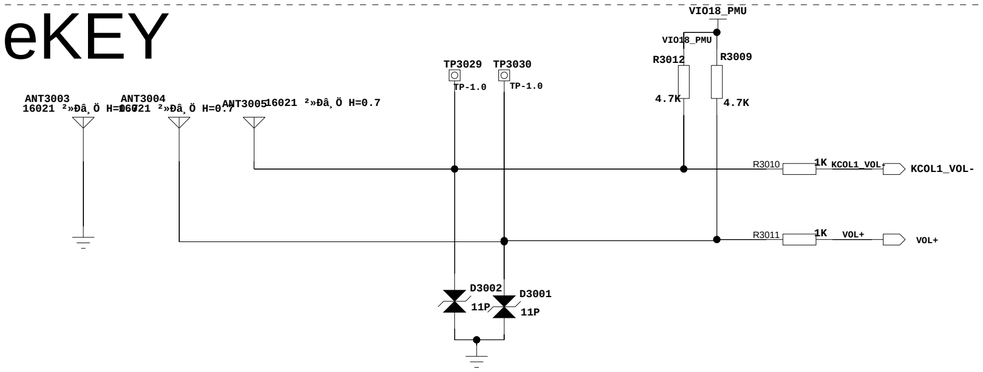
POWERKEY

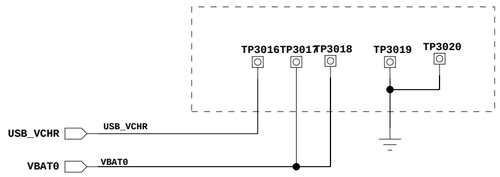
MTKニスフィヌソヨニマツヤリオ酉丁キ



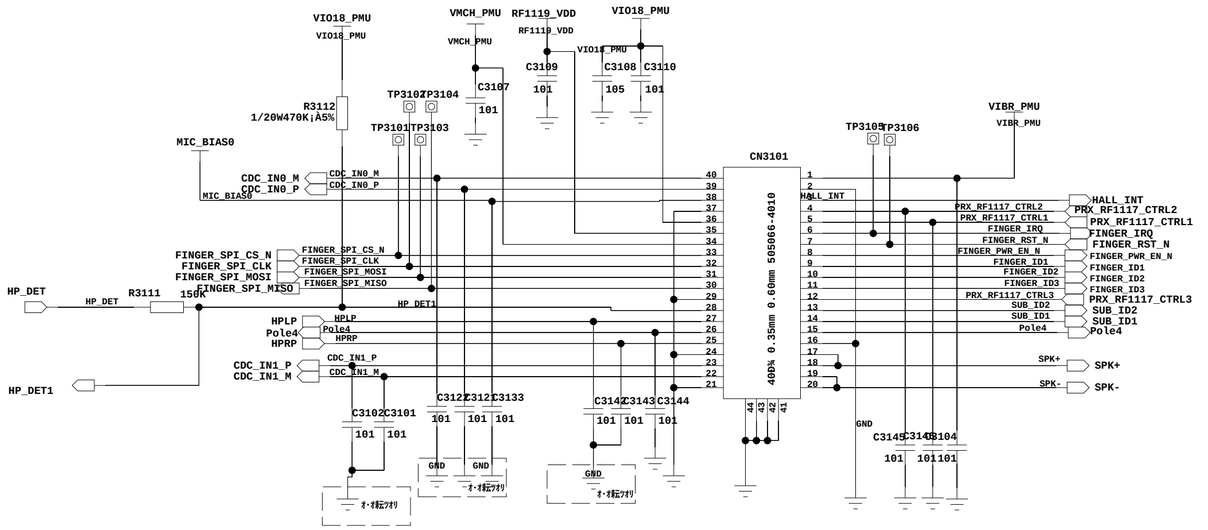
VolumeKEY



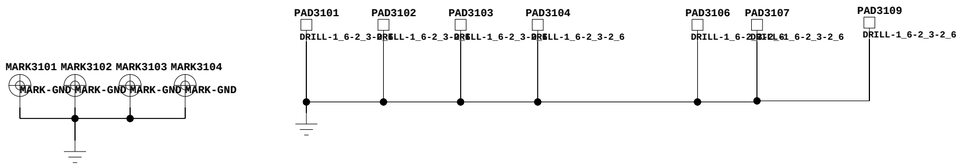
TEST POINT

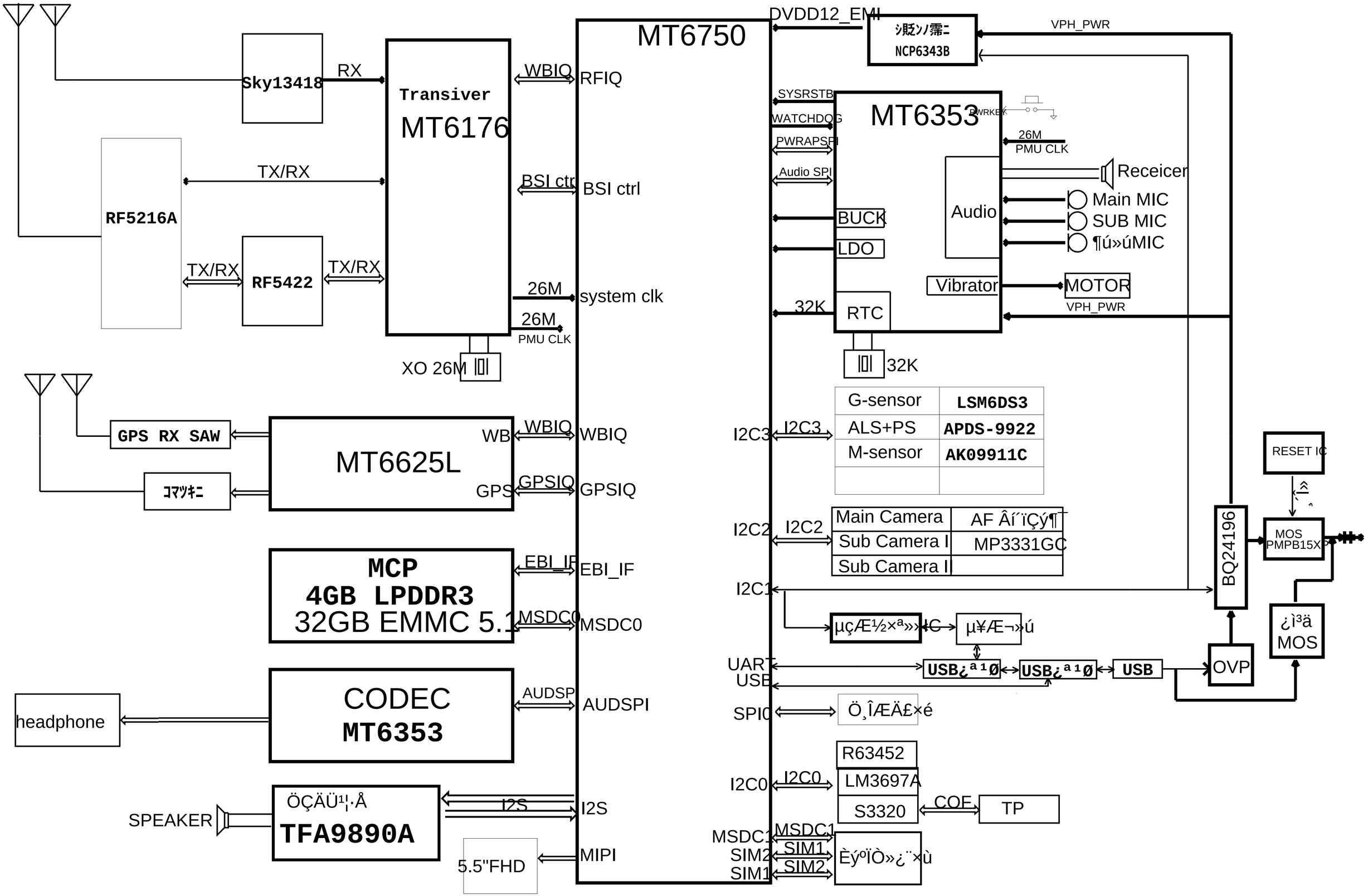


FPC CONNECT BTB



VBIR




MT6750
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Transiver
MT6176
WBIQ
RFIQ
RF5216A
TX/RX
BSI ctr
BSI ctrl
TX/RX
RF5422
TX/RX
26M
system clk
26M
PMU CLK
XO 26M
DVDD12_EMI
NCP6343B
VPH_PWR
SYSRSTB
WATCHDOG
PWRAPSPI
Audio SPI
MT6353
PWRKEY
26M
PMU CLK
BUCK
LDO
Audio
Receicer
Main MIC
SUB MIC
¶ú»úMIC
Vibrator
MOTOR
VPH_PWR
32K
RTC
32K
GPS RX SAW
MT6625L
WBIQ
WBIQ
GPS
GPSIQ
GPSIQ
MCP
4GB LPDDR3
32GB EMMC 5.1
EBI_IF
EBI_IF
MSDC0
MSDC0
CODEC
MT6353
AUDSP
AUDSPI
headphone
SPEAKER
TFA9890A
I2S
I2S
5.5"FHD
MIPI
I2C3
I2C3
G-sensor
LSM6DS3
ALS+PS
APDS-9922
M-sensor
AK09911C
I2C2
I2C2
Main Camera
AF
Sub Camera I
MP3331GC
Sub Camera II
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I2C0
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LM3697A
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RESET IC
BQ24196
MOS
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MOS