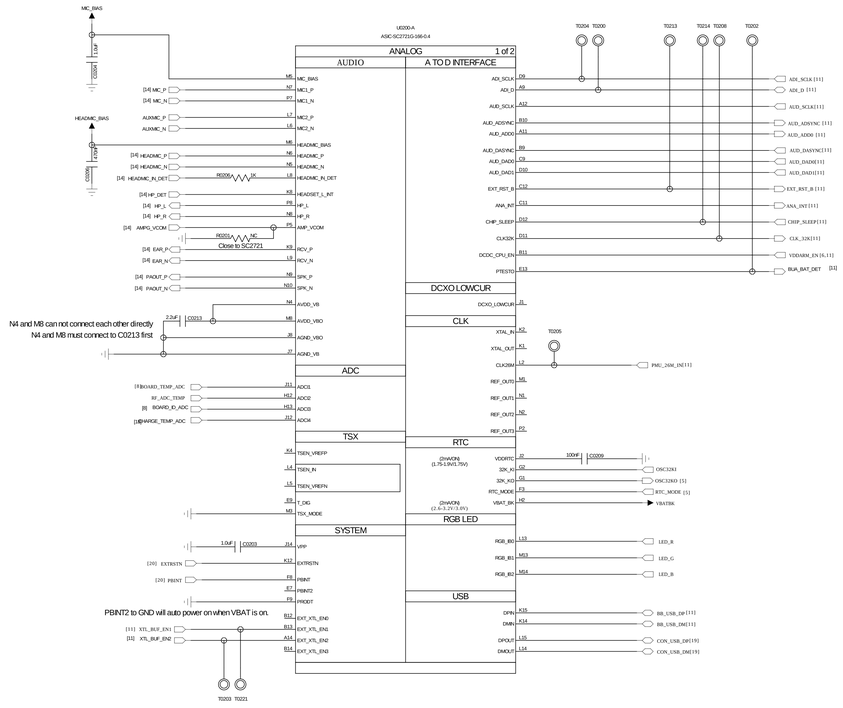
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LTR	ECO NO.	APPROVED:	DATE:

PMU_ANALOG



BKBT



RTC



RTC MODE	
HIGH	32K-LESS
LOW	32K Crystal

RTC Mode	Type	R0202	R0205	X0200	C0201	C0202	R0203	R0204	
32K Crystal	Option	0R	NF	Crystal	8.2pF	8.2pF	0R	NF	
32K-less	Default	NF	0R	NF	NF	NF	NF	10K	

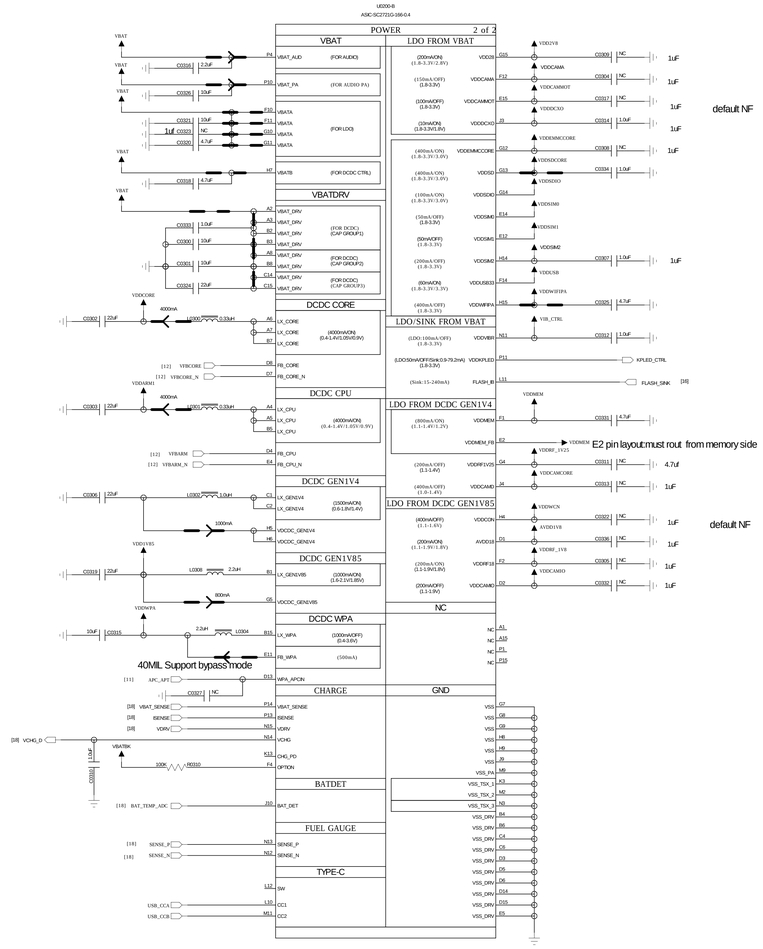
Note:32K-less only use in TSX mode,32K crystal is only use in TCXO mode.

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PMU_POWER

INPUT	Description
VBAT_AUD	VBAT power input for audio
VBAT_PA	VBAT power input for audio speaker PA
VBATA	VBAT power input for LDO
VBATB	VBAT power input for KP_LED,VIB,VBATBK,Flash LED
VBATC	VBAT power input for LDO
VBAT_DRV	VBAT power input for DCDC



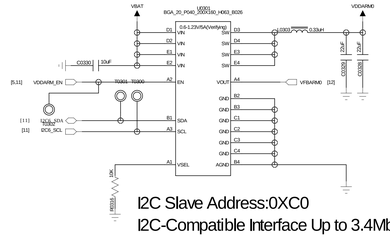
SC2721 DCDC output

Input Power	Power Name	Output Voltage (V)	Output Current	Default Voltage	Default
VBAT	DCDCCPU	0.4-1.4/1.05/0.9	4000mA	0.9V	ON
	DCDCCORE	0.4-1.4/1.05/0.9	4000mA	0.9V	ON
	DCDCGEN1V4	0.6-1.8	1500mA	1.4V	ON
	DCDCGEN1V85	1.6-2.1	1000mA	1.85V	ON
	DCDCWPA	0.4-3.6	1000mA		OFF

SC2721 LDO output

Input Power	Power Name	Output Voltage (V)	Output Current	Default Voltage	Default
LDO from VBAT	VDDCAMA	1.8-3.3	150mA	2.8V	OFF
	VDDCAMMOT	1.8-3.3	100mA	2.8V	OFF
	VDDSIM0	1.8-3.3	50mA	1.8V	OFF
	VDDSIM1	1.8-3.3	50mA	1.8V	OFF
	VDDSIM2	1.8-3.3	200mA	1.8V	OFF
	VDD28	1.8-3.3	200mA	2.8V	ON
	VDDEMMCCORE	1.8-3.3	400mA	3.0V	ON
	VDDSDCORE	1.8-3.3	400mA	3.0V	ON
	VDDSDIO	1.8-3.3	100mA	3.0V	ON
	VBATBK	2.6-3.2	2mA	3.0V	ON
	VDDVIB	1.8-3.3	100mA	3.3V	OFF
	VDDKPLED	1.8-3.3	LDO:50mA/Sink:0.9-79.2mA		
	VDDWIFIPA	1.8-3.3	400mA	3.3V	OFF
	VDDDCXO	1.8-3.3	10mA	1.8V	ON
	VDDUSB33	1.8-3.3	60mA	3.3V	ON
LDO from DCDC GEN1V4	VDDCAMD	1.0-1.4	400mA		OFF
	VDDRF1V25	1.1-1.4	200mA		OFF
	VDD_MEM	1.1-1.4	800mA	1.2V	ON
LDO from DCDC GEN1V85	VDDCAMIO	1.1-1.9	200mA		OFF
	AVDD18	1.1-1.9	200mA	1.8V	ON
	VDDRF18	1.1-1.9	200mA	1.8V	ON
	VDD_CON	1.1-1.6	400mA		OFF

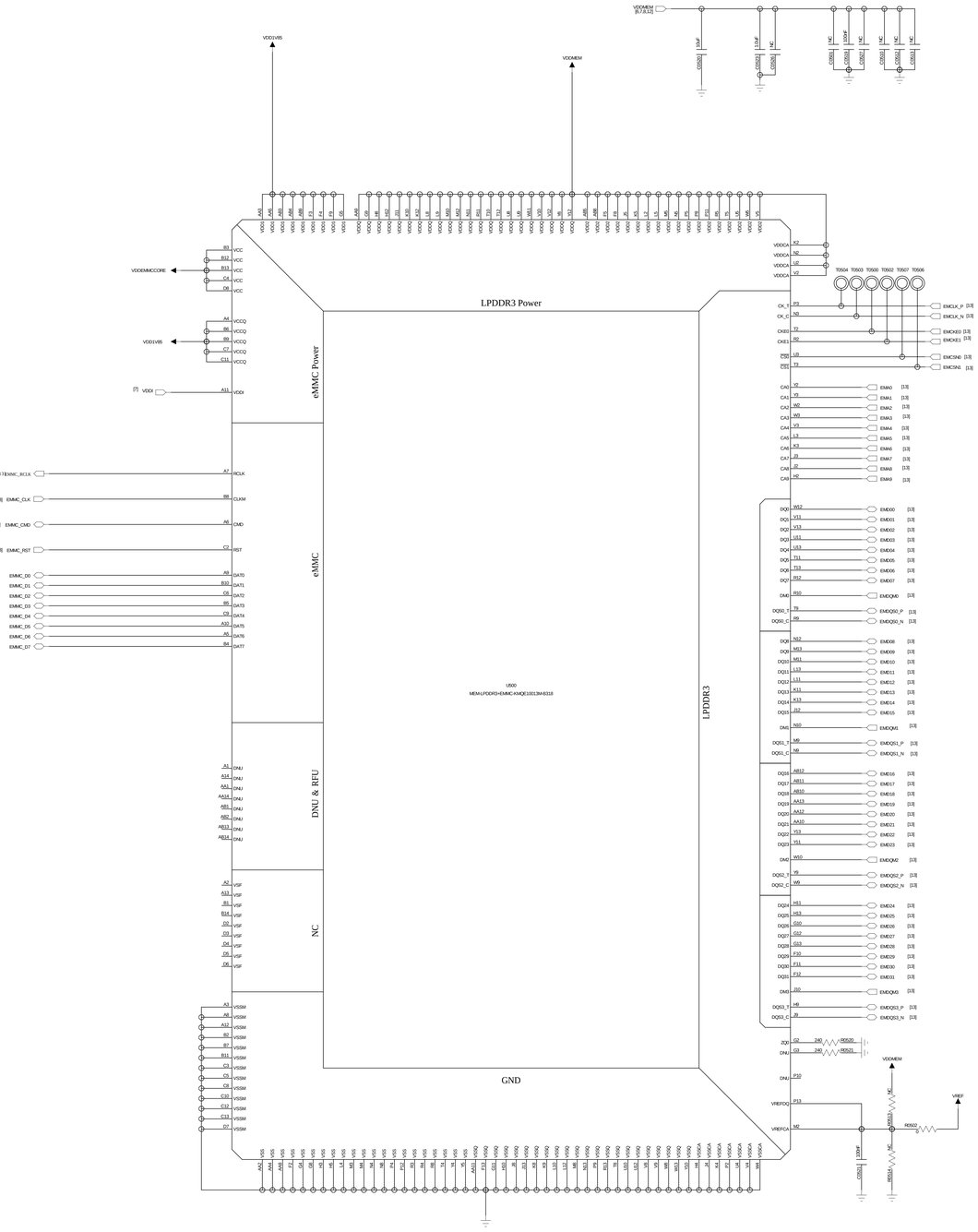
EXT DCDC ARM



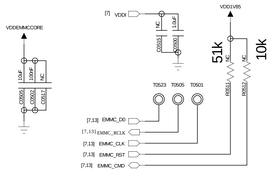
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eMMC+LPDDR4

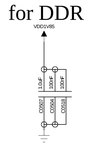
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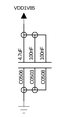
Common



for DDR



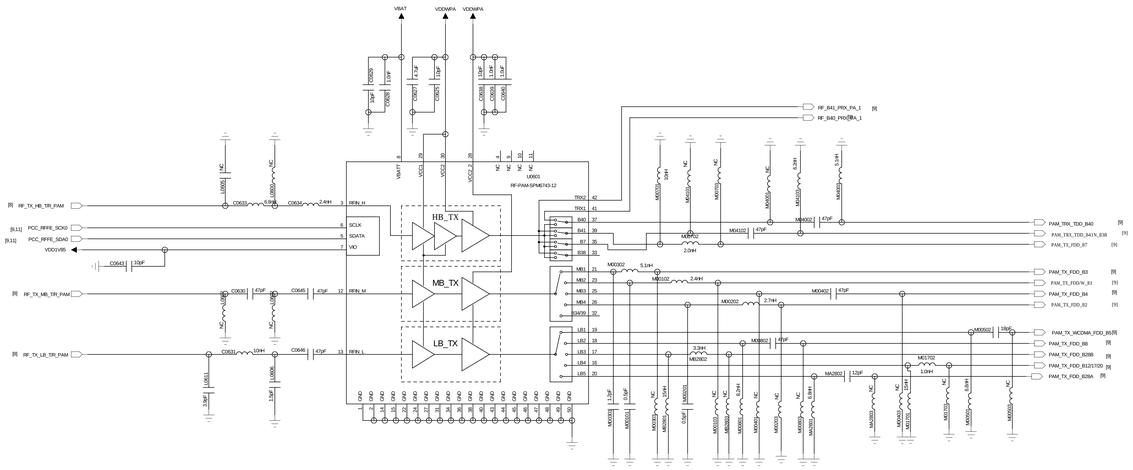
for EMMC



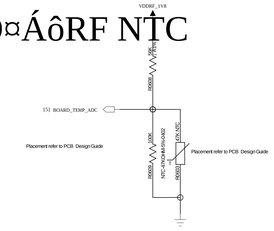
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LTE/WCDMA PAM



NTC

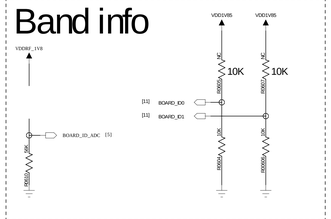


Clock Mode	BoardID0
TSX	0
TCXO +32K	1

LPDDR Type	BoardID1
LPDDR3	0
LPDDR4X	1

BoardID2 Backup

Band info



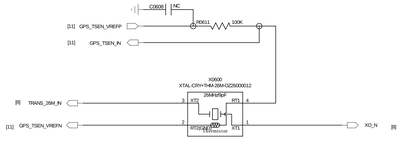
TSX/TCXO compatible part list

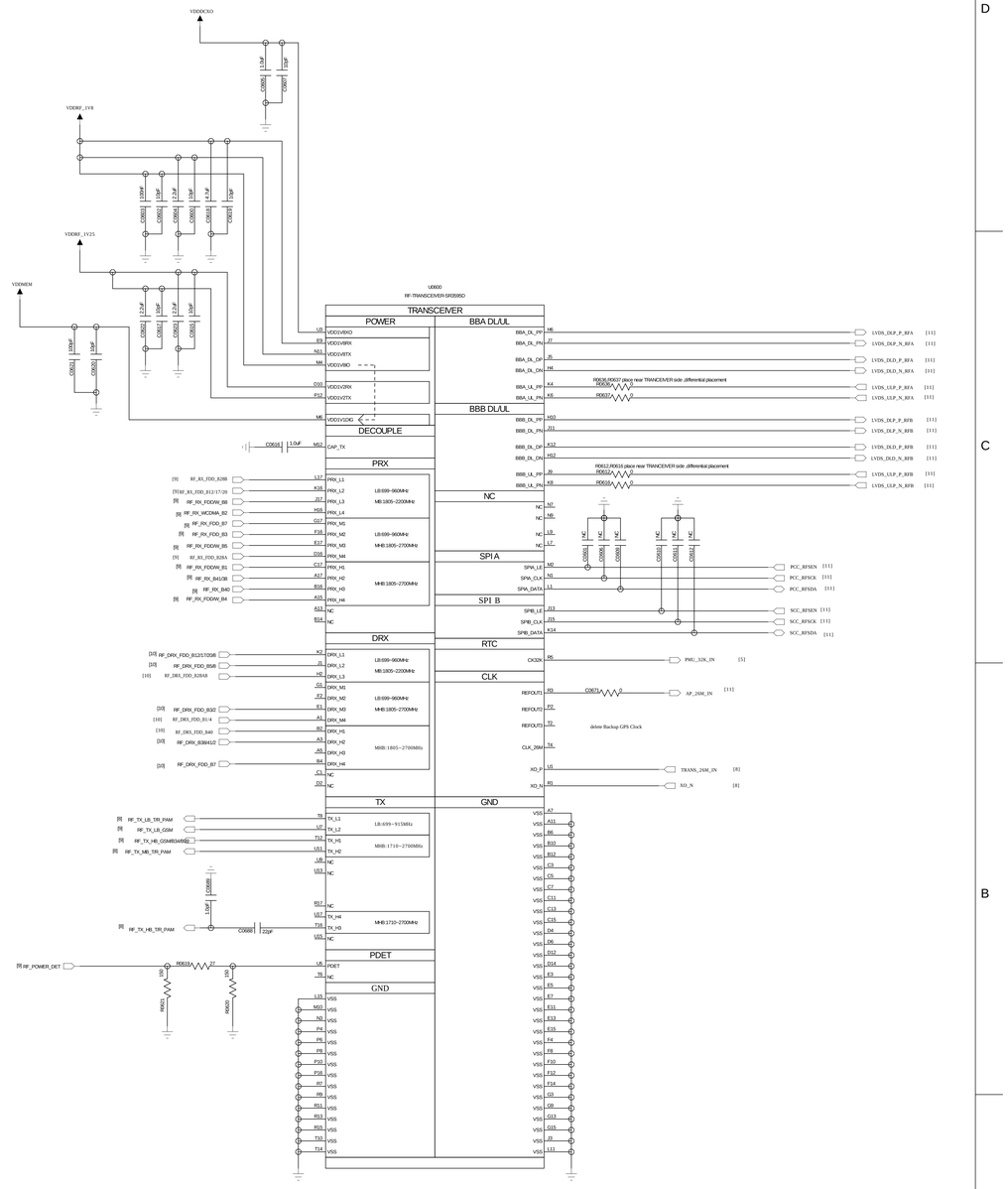
Priority	Mode	X0600	Y7200	C2106	C2105	R0611	C0606	R0629	R7203	C7200	C7201
1ST	TSX	TSX	NF	1UF	100PF	100K	0R	NF	NF	NF	NF
2RD	TCXO	NF	TCXO	NF	NF	NF	NF	1000PF	0R	1UF	22PF

1.TSX is the default 26M selection

2.If select TCXO,place it far away RF transceiver is recommended

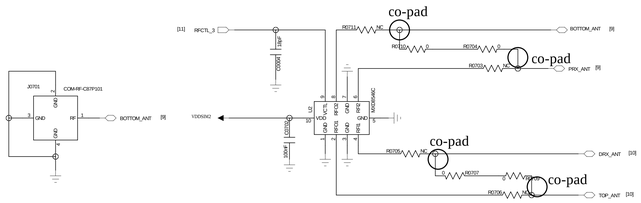
TSX 26M



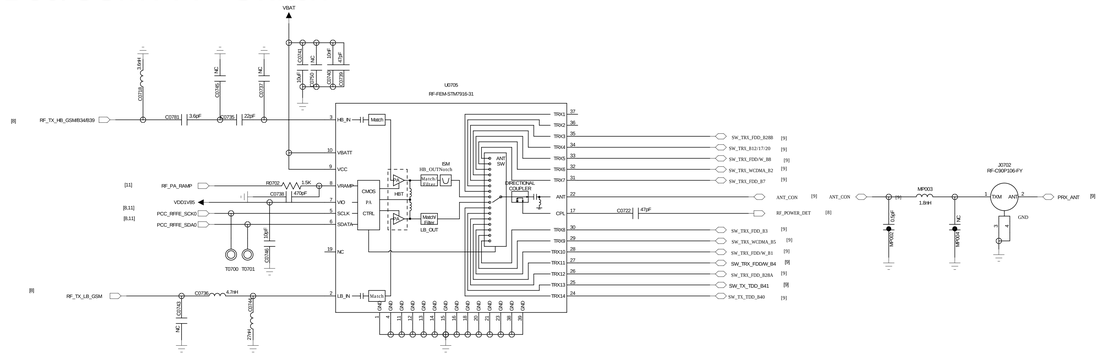


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Primary Antenna

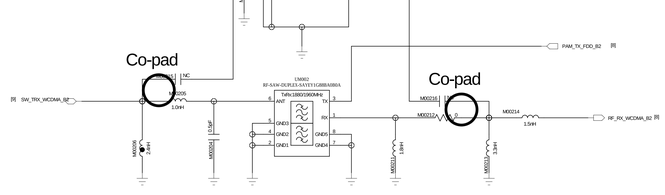


TDD B34/B39/GSM PA + Switch

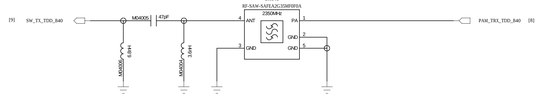


C0744 15nH change to 27nH,optimzie GSM TX noise

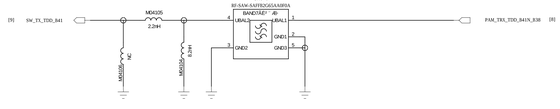
FDD_B2



Band40 TX Path



Band41/38 TX Path



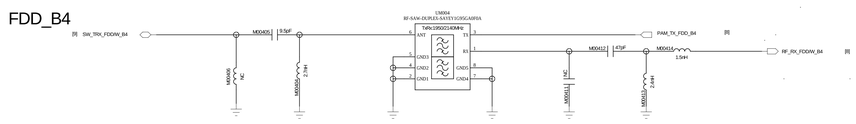
Band40 RX Path



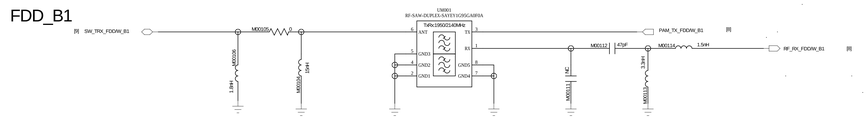
Band41/38 RX Path



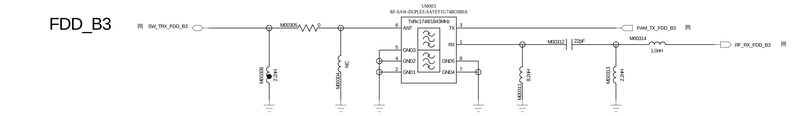
FDD_B4



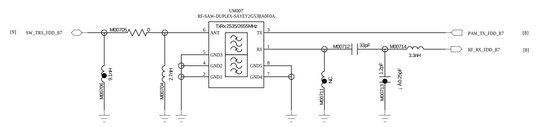
FDD_B1



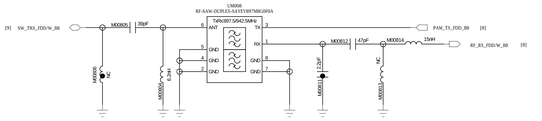
FDD_B3



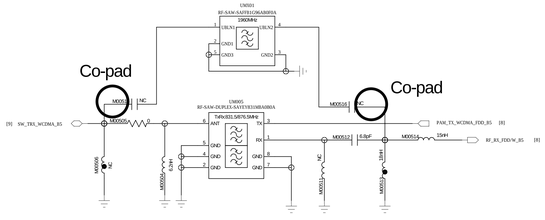
FDD LTE_B7



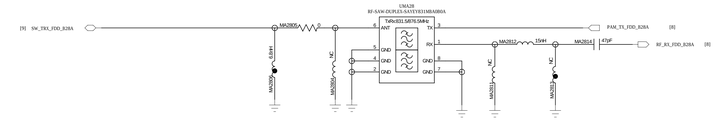
FDD_B8



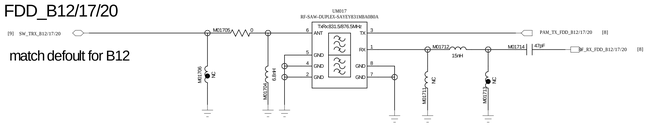
FDD_B5



FDD_B28A

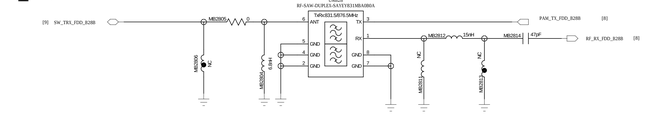


FDD_B12/17/20



match defoult for B12

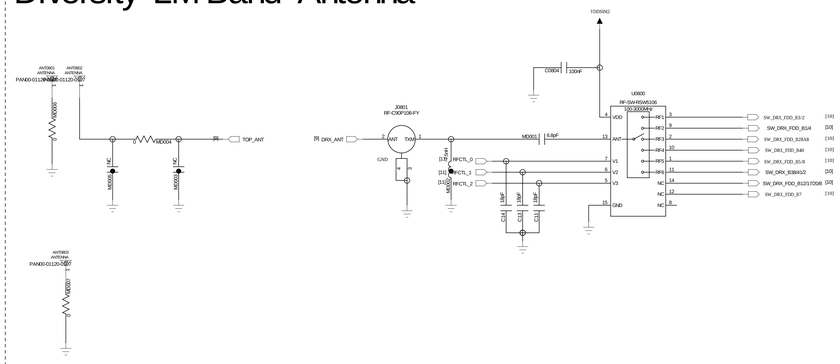
FDD_B28B



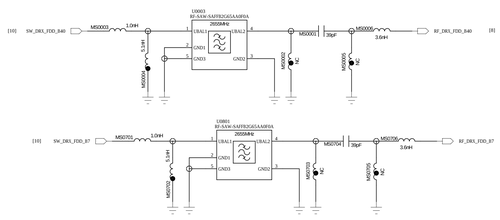
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Diversity LM Band Antenna

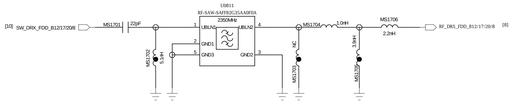


Diversity HB Antenna

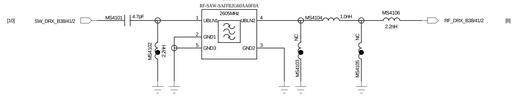


FDD_B7/40_Diversity Rx path

TDD_B12/17/20_Diversity RX path

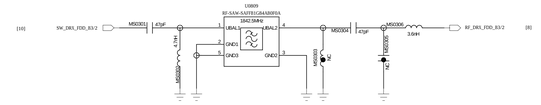


TDD_B41M/38_Diversity RX path

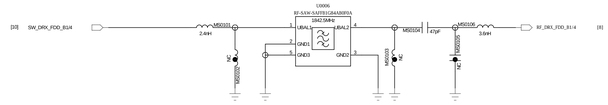


Diversity LTE RX Path

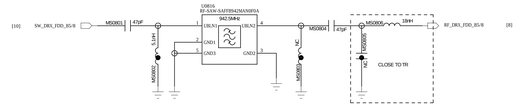
FDD_B3_Diversity RX path



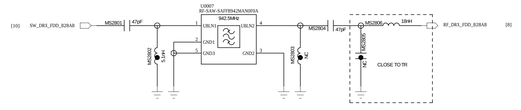
FDD_B1/4_Diversity Rx path



FDD_B8_Diversity Rx path



FDD_B28AB_Diversity Rx path



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DIGITAL

U2100-A
ASIC-SC9863A-774-0-4

DIGITAL 1 of 6

RF SPI 0 (VIO1V8)
- [8] PCC_RFSCK → RFSCK/GPIO2 (F17)
- [8] PCC_RFSDA → RFSDA/GPIO1 (C18)
- [8] PCC_RFSEN → RFSEN/GPIO3 (E18) [4]

RF SPI 1 (VIO1V8)
- [8] SCC_RFSCK → RFSCK/GPIO53 (B15) [NC]
- [8] SCC_RFSDA → RFSDA/GPIO52 (B16) [NC]
- [8] SCC_RFSEN → RFSEN/GPIO54 (A15) [NC] [8]

RF CTRL (VIO1V8)
- [10] RFCTL_0 → RFCTL1/GPIO19 (E11)
- [10] RFCTL_1 → RFCTL1/GPIO20 (B10)
- [10] RFCTL_2 → RFCTL2/GPIO21 (E12)
- [9] RFCTL_3 → RFCTL3/GPIO22 (D12)
- RFCTL_4 → RFCTL4/GPIO23 (E13)
- [15] RFCTL_5 → RFCTL5/GPIO24 (B11)
- [15] RFCTL_6 → RFCTL6/GPIO25 (E14)
- RFCTL_7 → RFCTL7/GPIO26 (A13)
- RFCTL_8 → RFCTL8/GPIO27 (C12)
- RFCTL9/GPIO28 (D11)
- RFCTL10/GPIO29 (E15)
- RFCTL11/OSC_T_D/GPIO30 (B12)

FOR LTE/WCDMA/TD/GSM

FOR LTE
- [18] CHG_STAT → RFCTL16/PWMCG1/GPIO7 (C15) [NC]
- RFCTL17/PSSI/GPIO8 (B14) (18) [NC]
- RFCTL18/LBTXD/GPIO53 (D15) (18) [NC]
- RFCTL20/LBRXD/GPIO51 (D16) (18) [NC]

GPIO (VIO1V8)
- SIM card 1 hot plug dedicated pin
- [21] SIM0_DET → GPIO10/BUA_SIM_DET1 (A12) via R2102 1K
- [18] CHG_EN_GPIO32 → GPIO32/PWMA (B13)
- SE_SPI_INT → GPIO33/PWMB/G1 (E16)
- [21] SIM1_DET → GPIO9/BUA_SIM_DET2 (A14) via R2111A 1K
- SIM card 2 hot plug dedicated pin

RFFE (VIO1V8)
- [8,9] PCC_RFFE_SCK0 → RFFE0_SCK/GPIO36 (F14)
- [8,9] PCC_RFFE_SDA0 → RFFE0_SDA/GPIO37 (F13)
- RFFE1_SCK/GPIO35 (F16) [NC]
- RFFE1_SDA/GPIO34 (F15) [NC]

IIC (VIO1V8)
- [17] I2C2_SCL → SCL2/GPIO127 (E29) (8)
- [17] I2C2_SDA → SDA2/GPIO128 (F29) (8)
- [6] I2C6_SCL → SCL6/GPIO80 (A31) [NC]
- [6] I2C6_SDA → SDA6/GPIO81 (A32) [NC]

CTP/EXTINT (VIO1V8)
- [15] CTP_SCL → SCL3/EXT_XTL_EN/GPIO146 (D31) [4]
- [15] CTP_SDA → SDA3/GPIO147 (C31) (8)
- [15] CTP_INT → EXTINT5/SE_GPIO143/GPIO144 (B30) [NC]
- [15] CTP_RST → EXTINT1/SE_GPIO15/GPIO145 (B31) [NC]

EXTINT (VIO1V8)
- EXTINT3/BUA_TF_DET/GPIO79 (A28) [NC]
- [9] BUA_BAT_DET → EXTINT2/BAT_DET/GPIO77 (A29) [NC]

ARM JTAG (VIO1V8)
- MTCK → TCK_ARM/GPIO82 (B21) [NC]
- MTMS → TMS_ARM/GPIO83 (A21) [4]

DSP JTAG (VIO1V8)
- [13] LCM_EN → RTCK_LTE/GPIO89 (D21) [NC]
- [8] BOARD_ID1 → TCK_LTE/GPIO87 (C21) [NC]
- [8] BOARD_ID0 → TDI_LTE/GPIO85 (B20) [NC]
- TDO_LTE/GPIO85 (B19) [NC]
- TMS_LTE/GPIO88 (A20) [4]

DSP JTAG
- VDD18V85
- T2106 T2105 T2101 T2102 T2104 T2103 T2107 T2108

MEMS (VIO1V8)
- CMC_CLKO/GPIO94 (A26) [NC]
- CMC_DAT0/GPIO95 (A29) [NC]
- CMC_CLKO1/GPIO96 (A27) [NC]
- CMC_DAT01/GPIO97 (A25) [NC]

SYSTEM (VIO1V8)
- CLK_NFC → CLK_AUX0/PRDBE_CLK/GPIO129 (C32)

NOTE:EXTINT0-7(DEINC MODE),EXTINT8-15(M.4 MODE),SE_GPIO0-7(ALL 4 MODE)

KEYPAD (VIO1V8)
- KEYOUT0/EXTINT0/1/GPIO115 (A9)
- KEYOUT1/EXTINT1/2/CMA_GPIO6/GPIO122 (A8)
- KEYOUT2/PWM6/GDCMA_GPIO7/GPIO123 (B9)
- KEYIN0 [20] (E10)
- KEYIN1 (D10)
- KEY_CAM [20] (D9)
- KEYIN2/EXTINT4/GPIO126 (C9) via R2101A 1K
- USBD_CRTL [18]

SPI 0 (VIO1V8)
- SPI0_DO/EXTINT5/GPIO90 (B18) FTID_SPI_MOSI [17]
- SPI0_DI/EXTINT7/GPIO92 (A18) FTID_SPI_MISO [17]
- SPI0_CLK/EXTINT6/GPIO91 (A17) FTID_SPI_CLK [17]
- SPI0_CS/WCDMA_GPIO5/GPIO93 (B17) FTID_SPI_CS [17]

SPI 2 (VIO1V8)
- SPI2_DO/EXTINT14/GCMA_GPIO0/GPIO51 (D19) EINT_HALL
- SPI2_DI/EXTINT15/GCMA_GPIO1/GPIO54 (E20) AG_INT1
- SPI2_CLK/CMA_GPIO2/GPIO55 (E19) AG_INT0 [17]
- SPI2_CS/WCMA_GPIO3/GPIO52 (D18) PROX_INT [17]

SDIO 0 (VSD0)
- SD0_CLK/GPIO150 (E2) 50ohm Close to BB
- SD0_CMD/GPIO151 (D2) TF_SD0_CLK0 [21]
- SD0_D0/EXTXOSC/GPIO152 (D3) TF_SD0_CMD [21]
- SD0_D1/EXTRSTO/GPIO153 (F5) TF_SD0_D0 [21]
- SD0_D2/GPIO149 (F1) TF_SD0_D1 [21]
- SD0_D3/GPIO148 (E1) TF_SD0_D2 [21]
- TF_SD0_D3 [21]

SDIO 1 (VIO1V8)
- SD1_CLK/GPIO64 (AC3)
- SD1_CMD/GPIO65 (AD2)
- SD1_D0/GPIO66 (AC2)
- SD1_D1/GPIO67 (AD3)
- SD1_D2/GPIO68 (AC1)
- SD1_D3/GPIO69 (AD1)

SDIO 2 (VSD2)
- SD2_CLK/SPI1_CLK/GPIO134 (L2) NFC_SPI_CLK
- SD2_CMD/SPI1_DI/GPIO135 (L1) NFC_SPI_MI
- SD2_D0/SPI1_DO/GPIO136 (M2) NFC_SPI_MO
- SD2_D1/SE_GPIO71/GPIO137 (M1) NFC_IRQ
- SD2_D2/SE_GPIO8/GPIO138 (L4) NFC_RSTB
- SD2_D3/SPI1_CS/NFC/GPIO139 (L3) NFC_SPI_CSB

SIM 0 (VSIM0)
- SIM0_CLK [21] (D7) SIM0CLK/GPIO157
- SIM0_DA [21] (A7) SIMDATA0/UTXD1/GPIO158
- SIM0_RST [21] (D6) SIMRST0/URXD1/GPIO159

ESIM (NC)
- NC_ESIM_CLK (C7)
- NC_ESIM_DAT (D5)
- NC_ESIM_RST (A6)

SIM 1 (VSIM1)
- SIM1_CLK [21] (B8) SIM1CLK/GPIO160
- SIM1_DA [21] (A7) SIM1DATA/GPIO161
- SIM1_RST [21] (C6) SIMRST1/GPIO162

SIM 2 (VSIM2)
- [15,18] DC4_SCL (E8) SIM2CLK/SCL4/SE_GPIO11/GPIO154
- [15,18] DC4_SDA (E9) SIM2DATA/SDA4/SE_GPIO12/GPIO155
- AUDIO_EN_GPIO156 [15] (C8) SIM2RST/CLK_AUX1/SE_GPIO13/GPIO156

IIS 0 (VIO1V8)
- IIS0DI/GPIO60 (AE30) GPIO56_RST
- IIS0DO/GPIO61 (AE29) [NC]
- IIS0CLK/GPIO59 (AF29) [NC]
- IIS0LRCK/GPIO62 (AF28) GPIO59_PWD [NC]

IIS 1 (VIO1V8)
- IIS1DI/SE_GPIO5/EXTINT13/GPIO130 (C29) FTID_INT [17]
- IIS1DO/SE_GPIO1/CMA_GPIO3/GPIO131 (D30) FTID_RSTN [17]
- IIS1CLK/SE_GPIO2/CMA_GPIO4/GPIO132 (E29) CAMERA_FLASH_EN [16]
- IIS1LRCK/SE_GPIO3/EXT_XTL_EN/GPIO133 (E30) CAMERA_TORCH_EN [16]

UART 0 (VIO1V8)
- U0TXD/EXT_XTL_EN/GPIO60 (AA31) BB_U0TXD [19]
- U0RXD/EXT_XTL_EN/GPIO62 (AA32) BB_U0RXD [19]
- U0CTS/PWMCG5/GPIO63 (AC31) VDDCAMCORE_EN
- U0RTS/SE_GPIO9/GPIO63 (AB31)

UART 1 (VIO1V8)
- U1TXD/GPIO63 (AA29) BB_U1TXD [19]
- U1RXD/GDPPSG1/GPIO71 (AA28) BB_U1RXD[,EB]OT1 [19]

UART 2 (VIO1V8)
- U2TXD/GDSE_GPIO4/GPIO72 (AA27)
- U2RXD/GDSE_GPIO5/GPIO73 (AB27)

UART 4 (VIO1V8)
- U4TXD/GPIO37 (AF32) [NC]
- U4RXD/GPIO38 (AG32) [NC]
- U4CTS/GPIO34 (AG30) [NC]
- U4RTS/GPIO35 (AH30) [NC]

UART 5 (VIO1V8)
- U5TXD/SCL5/GPIO36 (AH31) [NC] VDDCAMA_EN_GPIO38
- U5RXD/SDA5/GPIO39 (AG31) [NC] VDDCAMD_EN_GPIO39

FS175 ADDED

SC9863A Pin J4 must supply with power(such as VDD1V85) if want use SDIO2.

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A TO D INTERFACE (VIO1V8)
- [5] ADI_SCLK → ADI_SCLK (R4)
- [5] ADI_D → ADI_D (T2)
- [5] AUD_SCLK → AUD_SCLK/I2S2CLK (W2)
- [5] AUD_ADSYNC → AUD_ADSYNC (U1)
- [5] AUD_ADD0 → AUD_ADD0/I2SDI (V2)
- [5] AUD_DASYNC → AUD_DASYNC/I2S_RCK (T1)
- [5] AUD_DA0 → AUD_DA0/I2SDO (R1)
- [5] AUD_DAD1 → AUD_DAD1 (R5)
- [5,4]VDDAMA_EN → DCDCARM_EN (U2)
- [5] XTL_BUF_EN1 → XTL_BUF_EN1 (W1)
- [5] XTL_BUF_EN2 → XTL_BUF_EN2 [NC] (Y1)
- [5] EXT_RST_B → EXT_RST_B (V4)
- [5] ANA_INT → ANA_INT (U4)
- [5] CHIP_SLEEP → CHIP_SLEEP (V3)
- [5] CLK_32K → CLK_32K (U5)

D TO A CLK26M
- [5] PMU_26M_EN → CLK26M_OUT (C5)

CSI 0 M
- [16] MCS10M_DATA0_P → CSI0_DP0 [NC] (L31)
- [16] MCS10M_DATA0_N → CSI0_DN0 [NC] (L32)
- MCS10M_DATA1_P → CSI0_DP1 [NC] (N29)
- MCS10M_DATA1_N → CSI0_DN1 [NC] (N30)
- [16] MCS10M_CLK_P → CSI0_CKP0 [NC] (M31)
- [16] MCS10M_CLK_N → CSI0_CKN0 [NC] (M30)

CSI 0 S
- [16] MCS10S_DATA0_P → CSI0_DP2 [NC] (P32)
- [16] MCS10S_DATA0_N → CSI0_DN2 [NC] (N32)
- [16] MCS10S_DATA1_P → CSI0_DP3 [NC] (N30)
- [16] MCS10S_DATA1_N → CSI0_DN3 [NC] (N29)
- [16] MCS10S_CLK_P → CSI0_CKP1 [NC] (P30)
- [16] MCS10S_CLK_N → CSI0_CKN1 [NC] (P31)

CSI 1
- [16] MCS11_DATA0_P → CSI1_DP0 [NC] (T31)
- [16] MCS11_DATA0_N → CSI1_DN0 [NC] (T32)
- [16] MCS11_DATA1_P → CSI1_DP1 [NC] (U29)
- [16] MCS11_DATA1_N → CSI1_DN1 [NC] (U30)
- [16] MCS11_DATA2_P → CSI1_DP2 [NC] (V31)
- [16] MCS11_DATA2_N → CSI1_DN2 [NC] (V32)
- [16] MCS11_DATA3_P → CSI1_DP3 [NC] (W30)
- [16] MCS11_DATA3_N → CSI1_DN3 [NC] (W29)
- [16] MCS11_CLK_P → CSI1_CKP [NC] (T30)
- [16] MCS11_CLK_N → CSI1_CKN [NC] (U31)

CSI 2
- MCS2_DATA0_P → CSI2_DP0 [NC] (V30)
- MCS2_DATA0_N → CSI2_DN0 [NC] (V31)
- MCS2_DATA1_P → CSI2_DP1 [NC] (W28)
- MCS2_DATA1_N → CSI2_DN1 [NC] (V28)
- MCS2_CLK_P → CSI2_CKP [NC] (V29)
- MCS2_CLK_N → CSI2_CKN [NC] (V30)

CSI CTRL (VCAM)
- [16] CAM_MCLK0 → C2101 10pF → R2132 51 → CMMCLK0/SCLK_AUX2/GPIO42 (H31)
- [16] CAM_MCLK1 → C2102 10pF → R2133 51 → CMMCLK1/GPIO43 (H32)
- [16] CAM_PWDN0 → CMPD0/GPIO46 (J32)
- [16] CAM_PWDN1 → CMPD1/GPIO47 (H29)
- [16] CAM_PWDN2 → CMPD2/GPIO40 (G30)
- [16] CAM_RST0 → CMRST0/GPIO44 (J31)
- [16] CAM_RST1 → CMRST1/GPIO45 (H30)
- [16] CAM_RST2 → CMRST2/GPIO41 (G29)
- [16] I2C0_SCL → SCL0/GPIO48 (E32) [10]
- [16] I2C0_SDA → SDA0/GPIO49 (F32) [4]
- [16] I2C1_SCL → SCL1/EXTINT11/GDGPIO74 (F31) [10]
- [16] I2C1_SDA → SDA1/EXTINT15/GDGPIO75 (G31) [10]

RF
- RF_ISM_P [22] ← RF_ISM_P (C27)

FM
- FM_ANT [14] ← FM_LNAP (A24)
- FM_SAN (B25)

GPS
- GPS_RF_IN [22] ← GNSS_RF_IN (D22)
- GPS_LNA_EN [22] ← GPS_LNA_EN/CMA_GPIO6/GU1/ERXD/GLGPIO63 (D29)

TSEN
- [4] T_DIGCMA_GPIO3/GU1/ETXD/GLGPIO62 (E31)
- VDD18 TSEN_VREFP (F8) → GPS_TSEN_VREFP [8]
- TSEN_N (F9) → GPS_TSEN_IN [8]
- TSEN_VREFN (F10) → GPS_TSEN_VREFN [8]

LVDSRF
- LVDSRF0_DL_P/I_P → LVDS_DLP_P_RFA [8] (G2)
- LVDSRF0_DL_P/I_N → LVDS_DLP_N_RFA [8] (G3)
- LVDSRF0_DL_DA/_P → LVDS_DLD_P_RFA [8] (F4)
- LVDSRF0_DL_DA/_N → LVDS_DLD_N_RFA [8] (F3)
- [NC] LVDSRF1_DL_P/I_P → LVDS_DLP_P_RFB [8] (E2)
- [NC] LVDSRF1_DL_P/I_N → LVDS_DLP_N_RFB [8] (D2)
- [NC] LVDSRF1_DL_DA/_P → LVDS_DLD_P_RFB [8] (E5)
- [NC] LVDSRF1_DL_DA/_N → LVDS_DLD_N_RFB [8] (E4)
- LVDSRF0_UL_P → LVDS_ULP_P_RFA [8] (H2)
- LVDSRF0_UL_N → LVDS_ULP_N_RFA [8] (H3)
- [NC] LVDSRF1_UL_P → LVDS_ULP_P_RFB [8] (F1)
- [NC] LVDSRF1_UL_N → LVDS_ULP_N_RFB [8] (E1)
- LVDSRF_REXT (J2)

LVDSRF CTRL (VIO1V8)
- LVDSRF0_ADCON/SE_GPIO8/GPIO76 (F18)
- LVDSRF0_DACON/SE_GPIO10/GPIO77 (F19)

APCOUT
- APCOUT0 → RF_PA_RAMP [9] (C1)
- APCOUT1 → APC_APT [9] (C3)
- [NC] APCOUT2 (B2)

CLK TEST
- NC_CLKOUT_TEST_DFLL (AD25)
- CLKOUT_TEST_MPLL (M5)

CLK IN
- CLK26M_IN → AP_26M_IN [8] (A1)
- WCN_CLK26M_IN (A3)

USB20
- USB_DP → BB_USB_DP [5] (C1)
- USB_DM → BB_USB_DM [5] (C2)
- USB_REXT (J2)

DSI
- DSI_DP0 → MDSI_DATA0_P [15] (AC4)
- DSI_DN0 → MDSI_DATA0_N [15] (AC5)
- DSI_DP1 → MDSI_DATA1_P [15] (AC1)
- DSI_DN1 → MDSI_DATA1_N [15] (AC2)
- DSI_DP2 → MDSI_DATA2_P [15] (AA4)
- DSI_DN2 → MDSI_DATA2_N [15] (AA5)
- DSI_DP3 → MDSI_DATA3_P [15] (Y2)
- DSI_DN3 → MDSI_DATA3_N [15] (Y3)
- DSI_CKP → MDSI_CLK_P (AA1)
- DSI_CKN → MDSI_CLK_N [15] (AA2)

DSI CTRL (VIO1V8)
- LCM_RSTN/GPIO76 → LCM_RSTN [15] (W5)
- LCM_FMARK/GPIO83 → LCM_FMARK [15] (J6)

LC Close to BB
- C2106 NC
- L2103 27nH → C2103 27pF

PI Close to BB
- C2102 1.5pF
- C2101 1.5nF
- C2105

1.04G/Lane For LVDSRF
- C2104 1.5nF
- C2107 1.5nF

Main GND

DESIGNER:	DATED:	TITLE & REV:	
		DOCUMENT NO.:	
EQA:	DATED:	DEPARTMENT: Hardware DEPT.	
APPROVED:	DATED:	COMPANY: Spreadtrum communications, Inc.	
		CONFIDENTIAL AND PROPRIETARY	

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LTR	ECO NO.	APPROVED:	DATE:

POWER

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POWER 4 of 6

VDDCORE

Back side of BB placement
C2092 2.2uF
C2093 4.7uF
C2033 1.5uF
C2034 100nF
C2035 100nF
C2036 4.7uF
C2037 2.2uF

R2218 VFBCORE
R2207 VFBCORE_N

VDDCORE: HS5 HS6 HS9 J15 J16 J19 K8 K9 K12 K13 K15 K16 K19 L11 L15 L17 L19 M16 M19 M22 M25 N16 N19 N22 N25 P16 P17 P19 P20 P22 P23 R16 R19 R22 T16 T19 T22 U16 U17 U19 U20 U22 U23 V6 V16 V19 V22 V25 V26 W16 W19 W22 W25 Y25 AA23 AA25 AB9 AB11 AB21 AB24 AB26 AC9 H8 H12 J8 J12 L20 L22 P25 R25 T25 U25 AA19 AA21 AB12 AB13 AB14 AB15 AC11 AC26 AD9 AD11 VDDCORE

VDDARM

VDDARM0: M7 M8 N9 N11 P9 P11 P13 P15 L13 L15 M11 M13 M15 N7 N13 N15 P7 VDDARM

VDDARM1: R11 R13 R15 T11 T13 T15 U11 U13 U15 V11 V13 V15 W11 W13 W15 V7 V9 W7 W9 Y7 Y9 AA8 AA11 AA13 R9 T9 U7 U9 V5 W5 AA7 VDDARM

VDDARM0
Back side of BB placement
C2215 2.2uF
C2210 1.5uF
C2214 4.7uF
C2224 100nF
R2224 VFBARM0 [6]
R2225 NC
R2226 NC
VDDARM1
Back side of BB placement
C2155 2.2uF
R2209 VFBARM [6]
R2219 VFBARM_N [4]
C2204 2.2uF
C2205 100nF
C2206 4.7uF
C2208 2.2uF
C2196 1.5uF
C2215 1.5uF

VDDWCN

POWER INPUT

AVDD1V2_APE J28 — 2.2uF C2255
AVDD1V2_FM B24 — 1.0uF C2253
AVDD1V2_GNSS E21 — 2.2uF C2254
AVDD1V2_TRX_ISM G28
NC_AVDD1V8_BB J11
AVDD1V8_BB K11 — C2255 2.2uF; C2254 100nF; C2211 NC 2.2UF
AVDD1V8_BB J7
AVDD1V8_CSI P26
AVDD1V8_CSI L26 — C2247 100nF
AVDD1V8_DSI A27 — C2218 100nF
AVDD1V8_DPLL AC25
AVDD1V8_DPLL AA17 — C2220 100nF
AVDD1V8_MPLL N6 — C2221 100nF
AVDD1V8_USB K5 — C2256 2.2uF
AVDD3V3_USB J3 — C2216 2.2uF
AVDD3V3_PA B26 — C2260 NC; C2262 2.2uF
VSD0 L5 — C2030 1.0uF
VSD2 H4 — C2031 1.0uF
VCAM M27 — C2223 100nF
VSIM1 J26 — C2228 100nF
VSIM2 A5 — C2227 100nF
VSIM3 A6 — C2245 100nF
VDD1V8 L27
VDD1V8 V28
VDD1V8 R6 — C2242 1.0uF
VDD1V8 U6 — C2225 100nF
VDD1V8 F12 — C2244 100nF
VDD1V8 E17
VBMMC0 AD7 — C2257 100nF
VD_NAND AC7 — C2241 100nF

Pin J11&K11:compatible with SC9832E
SC9863A:Pin J11&K11 NC,Pin G7&J7 AVDD1V8
SC9832E:Pin J11&K11 AVDD1V8,Pin G7&J7 NC

Pin AA17:
SC9863A:Pin AA17 connect to AVDD1V8
SC9832E:Pin AA17 NC

VSD2 must supply with power if SDIO2.IO is used.

VDDMEM/VDDMEMQ

VDDMEM
Back side of BB placement
C2107 4.7uF
C2108 100nF
C2109 2.2uF
C2110 100nF
C2111 4.7uF
C2112 100nF
C2113 2.2uF
C2114 100nF
C2115 4.7uF
C2116 100nF
C2117 2.2uF
C2118 100nF

VDDMEM: AC16 AC22 AC12 AC14 AC18 AC20 Y24 Y26 Y28 Y22 Y20 VDDMEM
NC_VDDMEM

VDDMEMQ
C2119 4.7uF
C2120 100nF
C2121 2.2uF
C2122 100nF
C2123 4.7uF
C2124 100nF
AB16 AB22 AC23 AB18 AB20 AC13 AC15 AC17 AC19 AC21 VDDMEMQ

NC: A1 A2 A30 A32 B1 B32 A63 B63 F63 H62 J62 K63

GND

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GND 5 of 6
GND GND

VSS: HE3 HE4 HE7 HE8 J5 J13 J14 J17 J18 K3 K14 K17 K18 L8 L9 L14 L18 M1 M10 M12 M14 M17 M18 M20 M21 M23 M24 M26 N8 N20 N21 N23 N24 N26 P3 P6 P10 P12 P14 P18 P21 P24 P26 R6 R10 R12 R14 R17 R18 R20 R21 R23 R24 T8 T10 T12 T14 T17 T18 T20 T21 T23 U8 U10 U12 U14 U18 U21 V8 V10 V12 V14 V17 V18 V20 V21 VSS
VSS: V22 W8 W10 W12 W14 W17 W18 W20 W21 W23 W24 Y17 Y21 Y23 Y24 AA12 AA14 AA15 AA24 AB10 AB24 AC8 AC10 AC24 AD2 AD4 AD6 AD8 AD10 AD12 AD13 AD14 AD15 AD16 AD18 AD19 AD20 AD21 AD22 AD23 AD24 AD25 AE17 AF7 AF11 AF14 AF20 AF24 AF27 AG4 AG7 AG14 AG15 AG18 AG20 AG24 AH6 AH8 AH11 AH14 AH20 AH23 AH26 AH28 AH29 AJ3 AJ5 AJ8 AJ11 AJ14 AJ16 AJ17 AJ20 AJ23 AJ29 AJ27 AJ30 AK4 AK6 VSS

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ASC-SC9863A-774-0-4
GND 6 of 6
GND GND

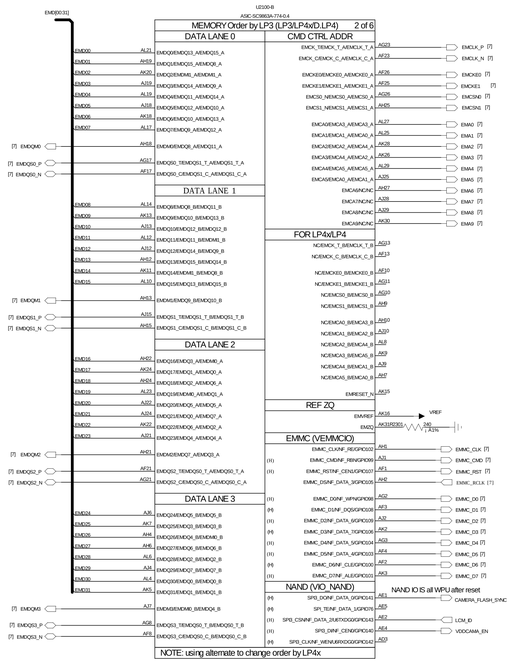
VSS: AK9 AK10 AK12 AK14 AK17 AK18 AK21 AK23 AK26 AK27 AK28 AL30 B3 B4 B5 C2 C4 C5 E3 F2 F5 G5 H5 H6 HS0 J6 J10 K10 L10 A28 B22 B26 B28 B29 C22 C24 C28 D24 D28 E22 E23 E24 E25 E26 E28 F28 G20 G22 G27 H25 H21 H22 H23 H24 H25 VSS
VSS: H28 H27 J21 J26 J27 K20 K21 K22 K23 K24 K25 K26 K27 L21 L23 L24 L25 L26 AD26 M6 K31 L30 M29 M32 N31 P27 P29 R28 R31 R32 T24 U24 U27 U28 V24 V29 V30 W26 W31 Y26 Y4 Y10 AA3 AB2 AB3 AB5 AC3 M8 Y8 Y17 AA6 AA26 V5 AVSS_PM A25 VSS

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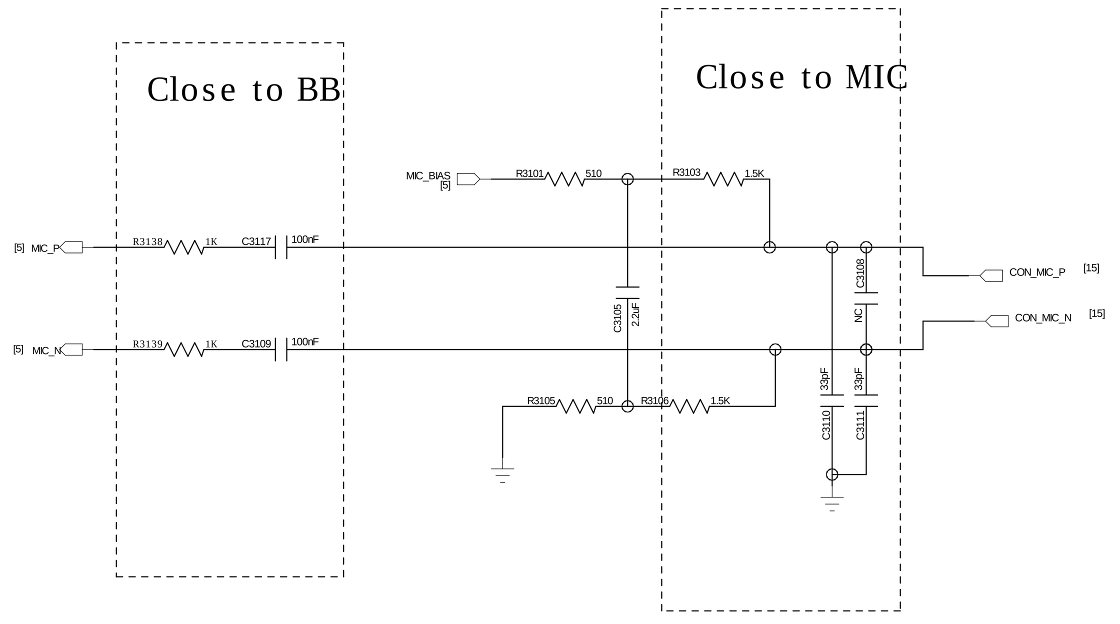
MEMORY



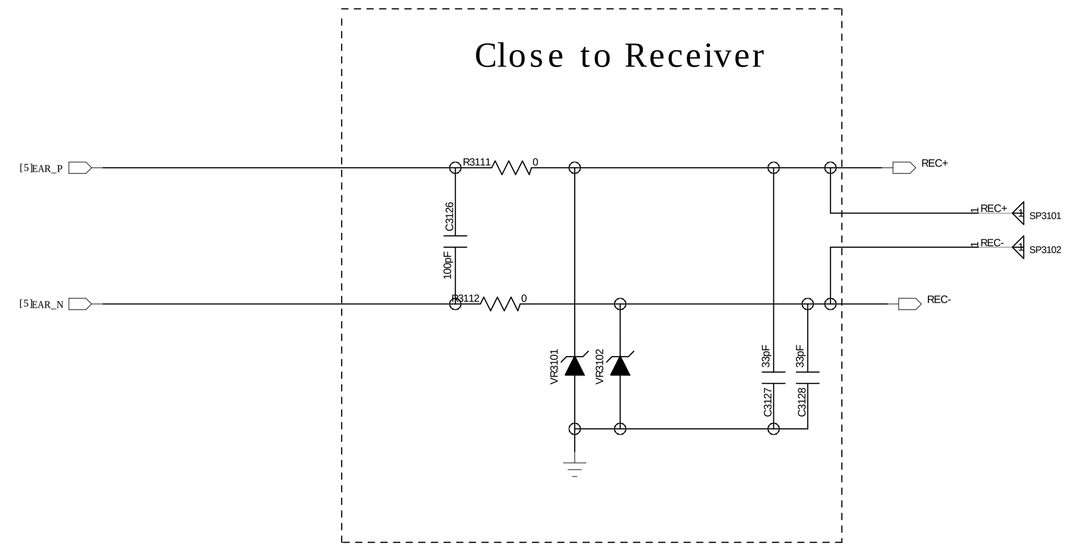
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DESIGNER:	DATED:	DEPARTMENT: Hardware DEPT.	
EQA:	DATED:	COMPANY: Spreadtrum communications, Inc.	
APPROVED:	DATED:	CONFIDENTIAL AND PROPRIETARY	

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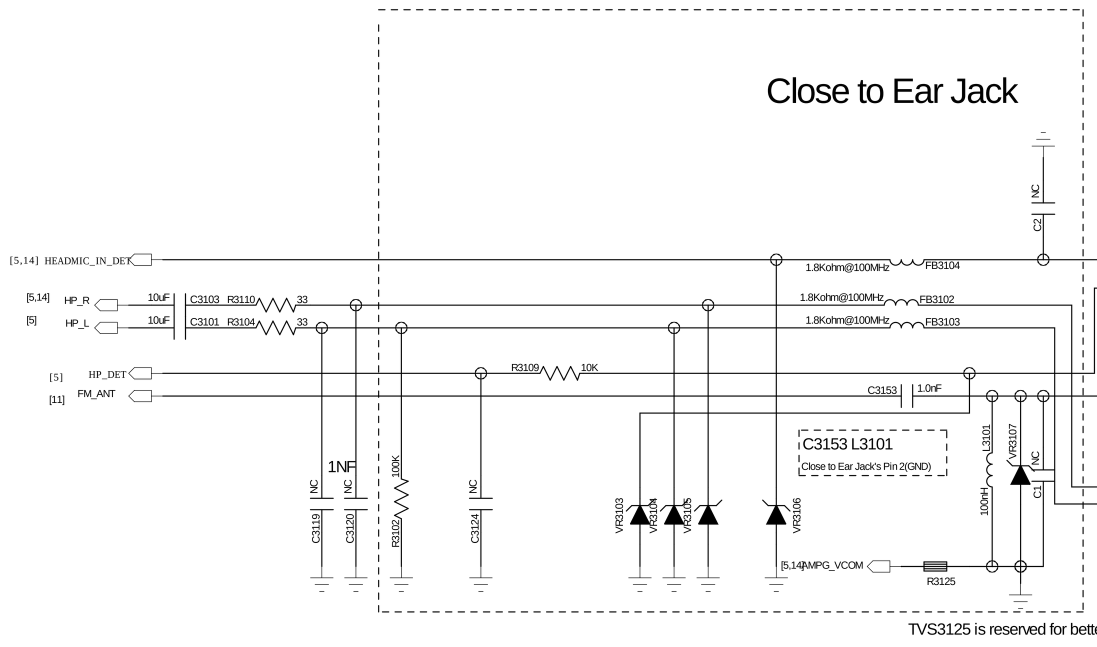
MAIN MIC



RECEIVER



3.5mm Ear Jack



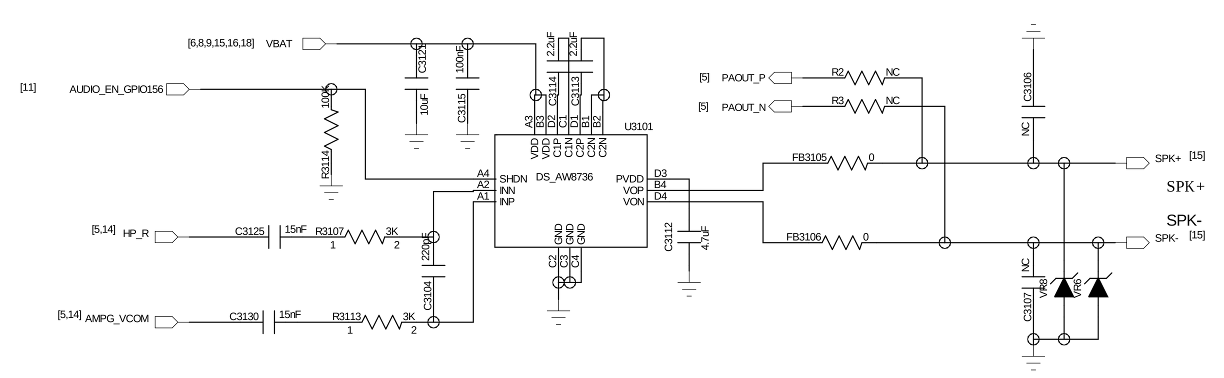
Ear Jack suggest support:

Earphone	Pin 4 & Pin 5
Plug in	Connect
Pull out	Disconnect

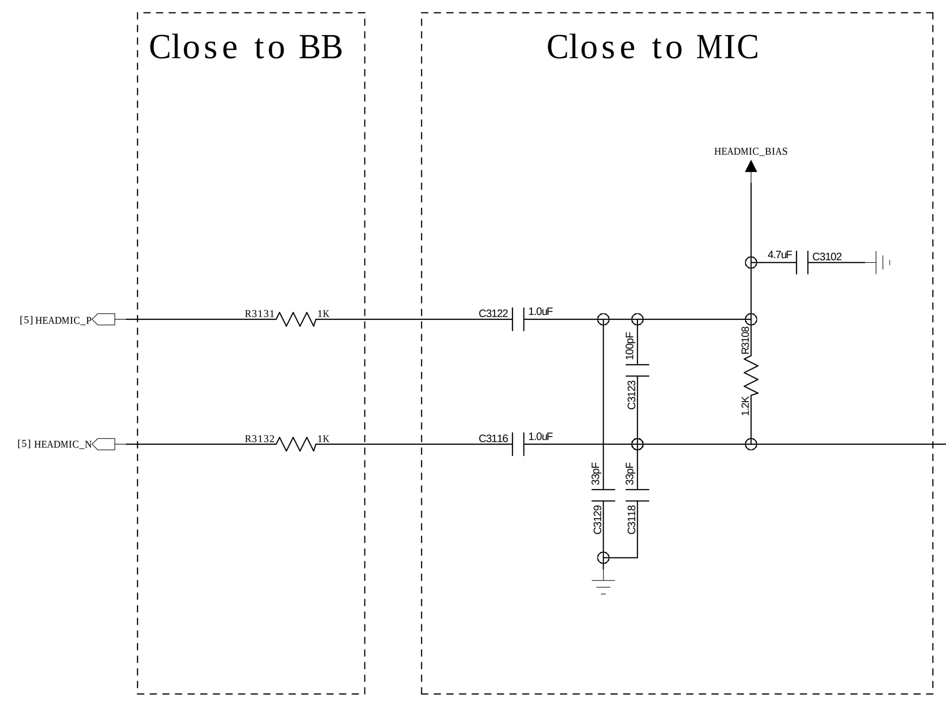
L,R,GND,MIC **CTIA**

TVS3125 is reserved for better ESD defense of FM_ANTIO

SPEAKER



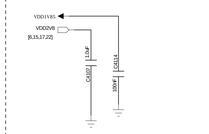
HEAD MIC

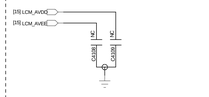


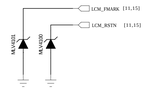
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DESIGNER:	DATED:	DEPARTMENT:	Hardware DEPT.
EQA:	DATED:	COMPANY:	Spreadtrum communications, Inc.
APPROVED:	DATED:	CONFIDENTIAL AND PROPRIETARY	

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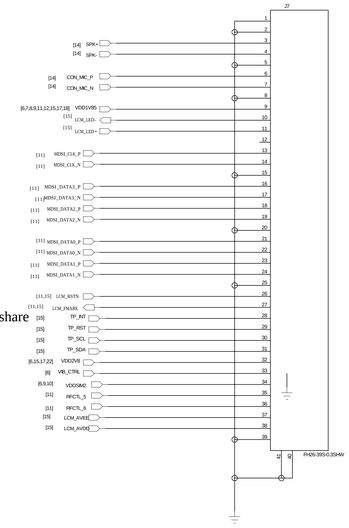
5.5"FHD LCM(4lane MIPI)



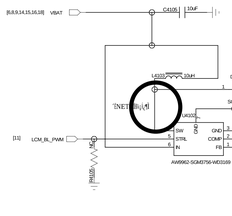




LCD & TP share



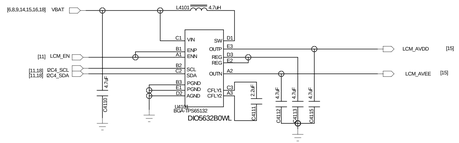
Pin	NET
01	LED_A
02	LED_K1
03	LED_K2
04	GND
05	PWM
06	TE
07	TE1
08	RESET
09	ID PIN (0V)
10	IOVCC(1.8V)
11	NC(MTP)
12	VSP(+5V)
13	VSN(-5V)
14	GND
15	GND
16	DATA_3P
17	DATA_3N
18	GND
19	DATA_2P
20	DATA_2N
21	GND
22	CLK_P
23	CLK_N
24	GND
25	DATA_1P
26	DATA_1N
27	GND
28	DATA_0P
29	DATA_0N
30	GND



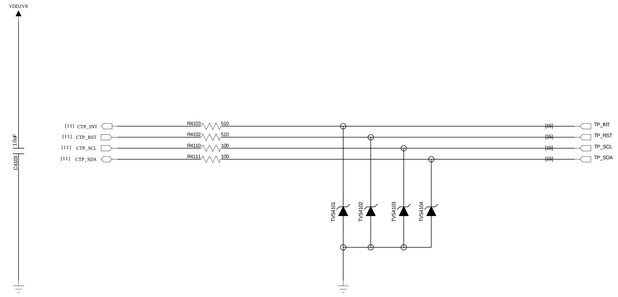
Rated voltage >=50V
X5R or X7R

Iled=0.2V/4.7ohm=42mA

Notice:
2x7LED
SGM3732 :VFB=200mV
ALL:Iout=VFB/Rsense



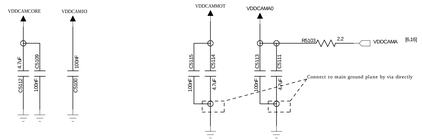
5.5" COF CTP



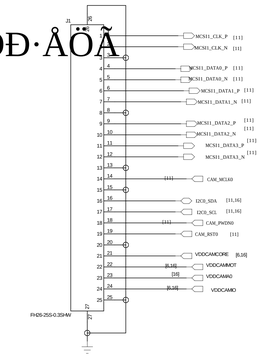
	FT5346DQQ
SIZE	1.0 x 6.0 x 4.2
1	GND
2	CTP_SDA
3	CTP_SCL
4	CTP_RST
5	CTP_INT
6	VCC
7	VCCIO
8	GND

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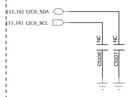
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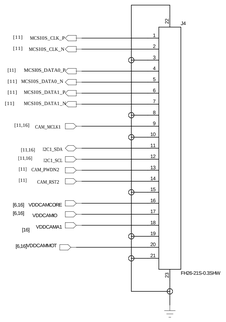
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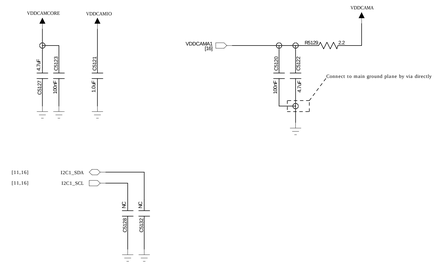
ZIF ÐÂ¶¨Òå



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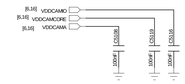
ZIF ÐÂ¶¨Òå

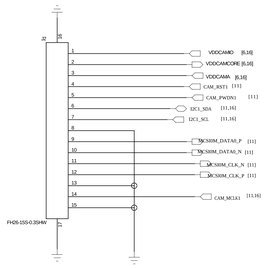


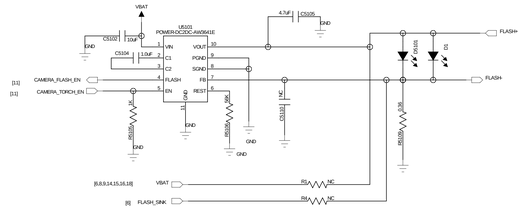
8M Sensor(OV8856-GA4A)

Pin	NET	Pin	NET
01	DGND	30	NC-AFGND
02	DOVDD	29	NC-AFVDD
03	DVDD	28	AVDD
04	DGND	27	AGND
05	MDP0	26	NC-PWDN
06	MDN0	25	RESET
07	DGND	24	SCL
08	MCP	23	SDA
09	MCN	22	DGND
10	DGND	21	NC-FLASH
11	MDP1	20	MCLK
12	MDN1	19	DGND
13	DGND	18	NC-MDN3
14	NC-MDP2	17	NC-MDP3
15	NCMDN2	16	DGND

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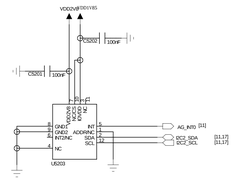
Torch mode: Vfb=47mV,,,Itorch=47mV/0.36ohm=130mA

Flash mode: Vfb=1.26*10.2K/56k=0.2295V,,,Iflash=0.2295V/0.36ohm=637mA

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Accelerometer&GYRO: ICM-20600



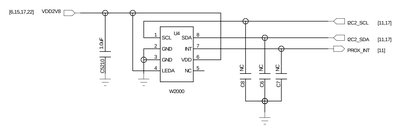
7bit IIC ADDRESS

7A20: 0X18(pin1½ÓµØ)
DA218-B£º0X27
MC3416-P£º0X4C(pin1½ÓµØ)
STK8BA53£º0X18

7bit IIC ADDRESS

ICM20600: 0X69(pin1½Ó¸ß)

ALS & PROX

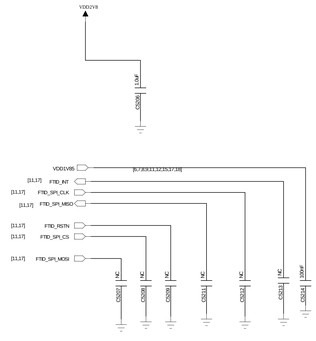


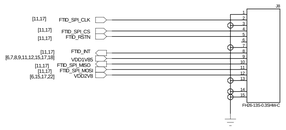
7bit IIC ADDRESS

STK series: 0X47

HALL

FingerPrint ID

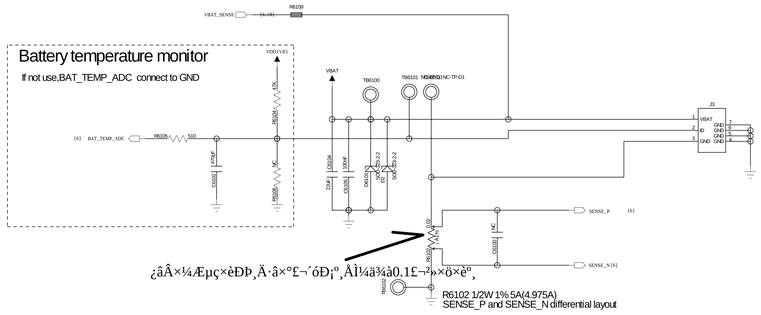




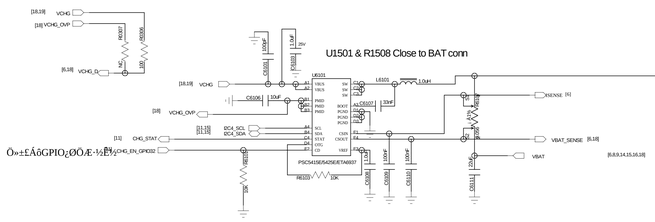
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BATTERY

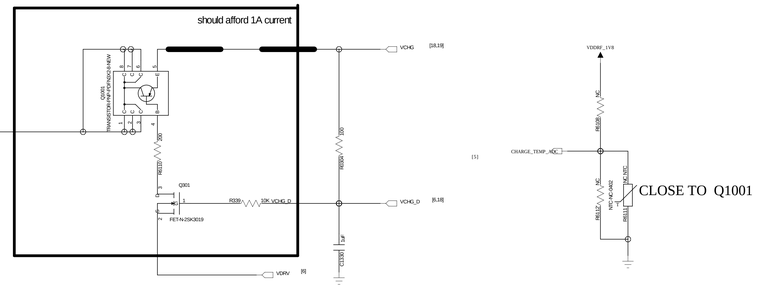


Switching charger



	R6107	C6103	C6106	C6108	R0306	R0307	
Max1.5A 5415E	56 mohm	1uf 25V	22uf 6.3V	2.2uf 6.3V	NF	0 ohm	OVP
Max2.25A 5425E	47 mohm	10uf 25V	22uf 6.3V	2.2uf 6.3V	NF	0 ohm	OVP
default 1A~2.5A ETA6937	0 ohm	1uf 25V	10uf 25 V	1uf 6.3V	0 ohm	NF	no OVP

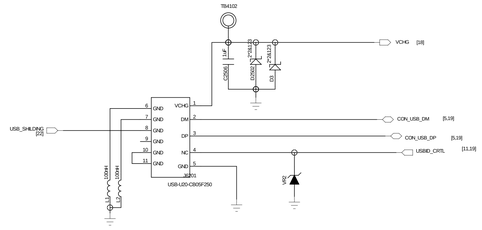
USB CHARGE/700mA



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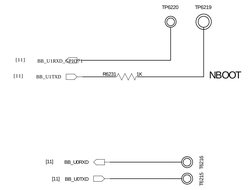
USB Connector



MARK POINT



Test Points



SharkL3 strapping pin

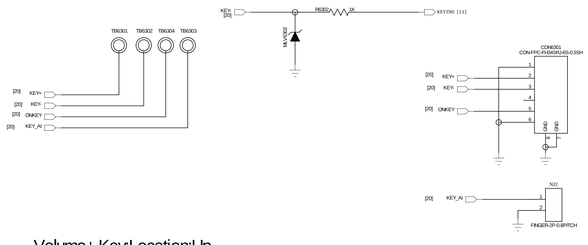
Ball name	Signal name in boot code	Value	Descriptions	Default vale
U1TXD	USB_DLOAD_EN	0	USB download(no time out)	1(ie=1,wpu)
		1	UART download(Default)	
AUD_DAD1	ARM_BOOT_MD0	000	Reserved	111(ie=1,wpu) (MSB:md2 LSB:md0)
		001	TLC NAND Toggle	
AUD_DAD0	ARM_BOOT_MD1	010	MLC/SLC NAND Flash(ONFI)	
		011	SD boot (no time out)	
ADI_SCLK	ARM_BOOT_MD2	100	MLC/SLC NAND Flash(Toggle)	
		101	TLC NAND ONFI(and Toshiba/Sandisk)	
		110	Reserved	
		111	eMMC boot	

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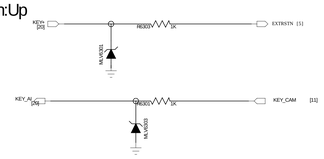
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Volume Key

Volume- Key;Location:Down



Volume+ Key;Location:Up

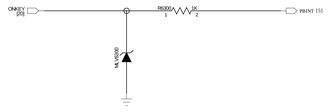


Spport two keys 7S reset ,also support single key(PBINT) 7S reset with SC2721

Two keys Reset :EXTRSTN+PBINT

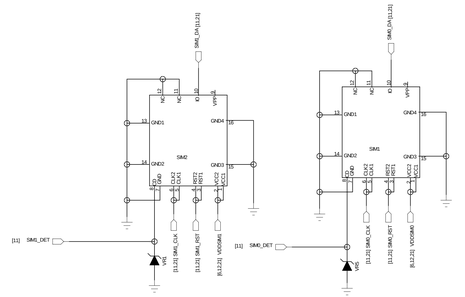
RGB LEDs

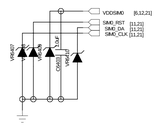
POWER KEY

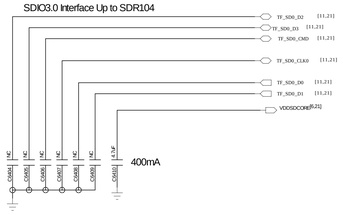


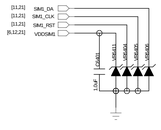
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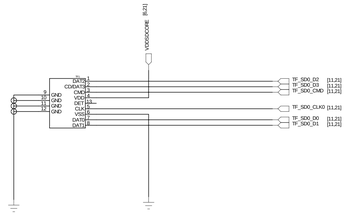
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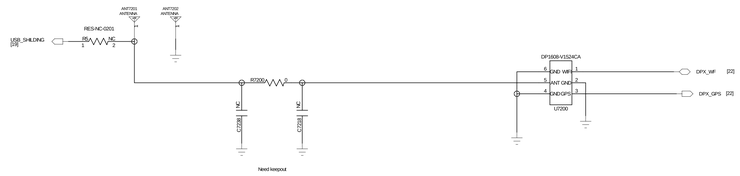




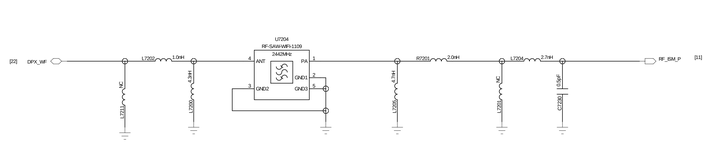
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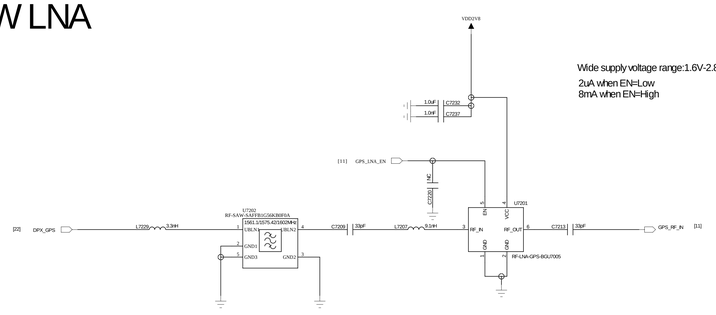
WIFI&BT&GPS ANT



WIFI/BT SAW



GPS SAW LNA

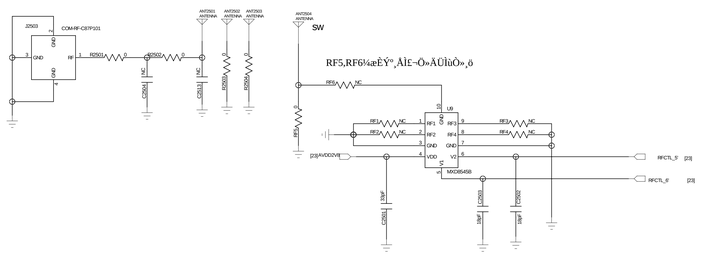


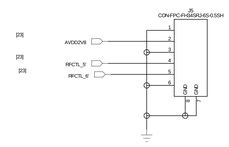
26M TCXO reserved

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