| REVISION RECORD | | | |
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| LTR | ECO NO. | APPROVED: | DATE: |
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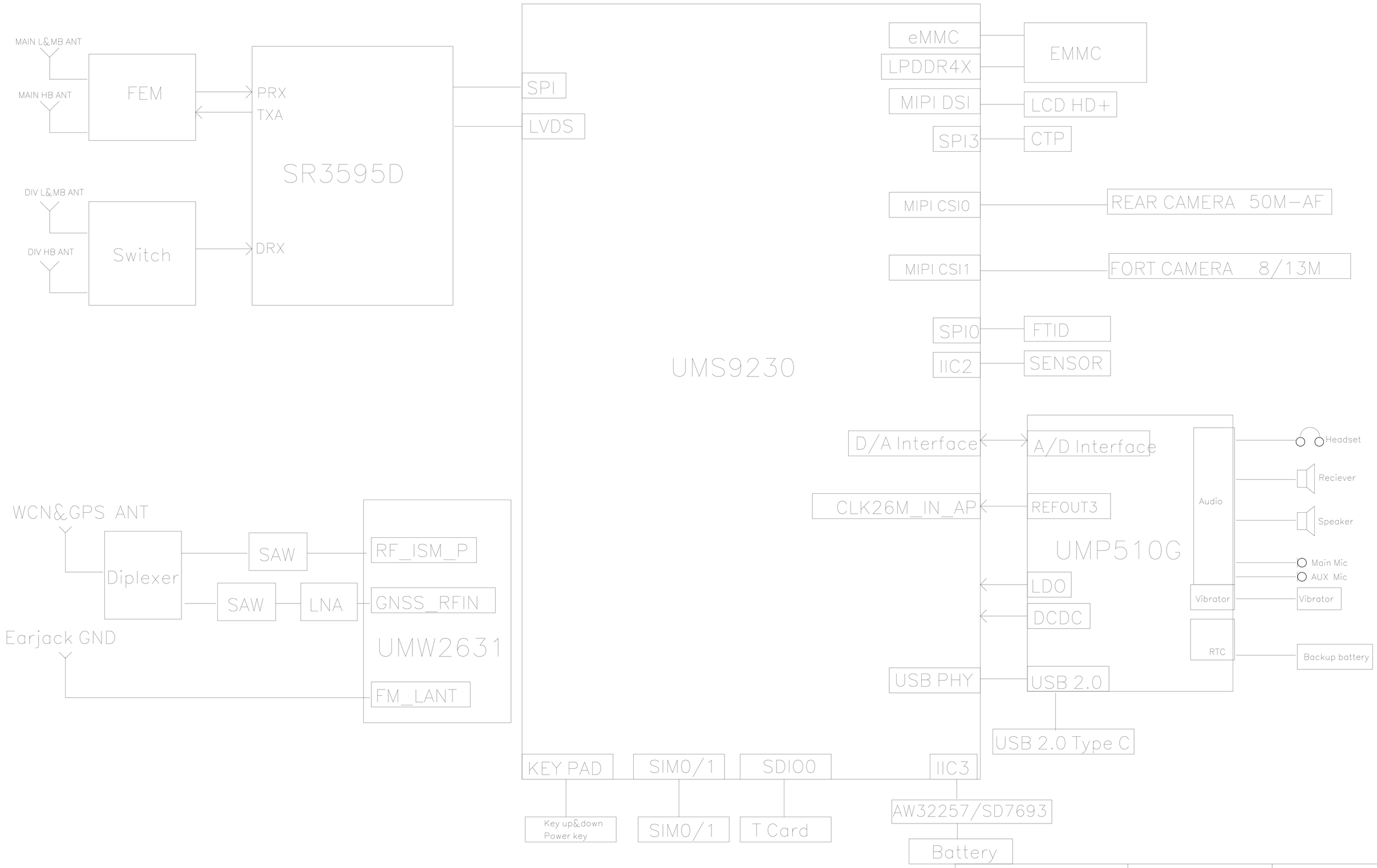
# BLOCK DIAGRAM

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| COMPANY: TRANSSION HOLDINGS | | MODEL: J6563_F069_MAIN | Modified Date: 13/11/2024:15:08 |
| DRAWN | DATED | TITLE: | |
| CHECKED | DATED < > | Confidentiality CONFIDENTIAL | VERSION: SHEET: 1 OF 24 |

# RF BLOCK DIAGRAM

| REVISION RECORD | | | |
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| LTR | ECO NO: | APPROVED: | DATE: |
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| COMPANY: TRANSSION HOLDINGS | | | | MODEL: K6735_F201_MAIN | | Modified Date: 08/03/2024:15:12 |
| DRAWN | | DATED | | TITLE: | | VERSION: |
| CHECKED | | DATED | < > | Confidentiality | CONFIDENTIAL | SHEET: 2 OF 24 |

| REVISION RECORD | | | |
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| LTR | ECO NO: | APPROVED: | DATE: |
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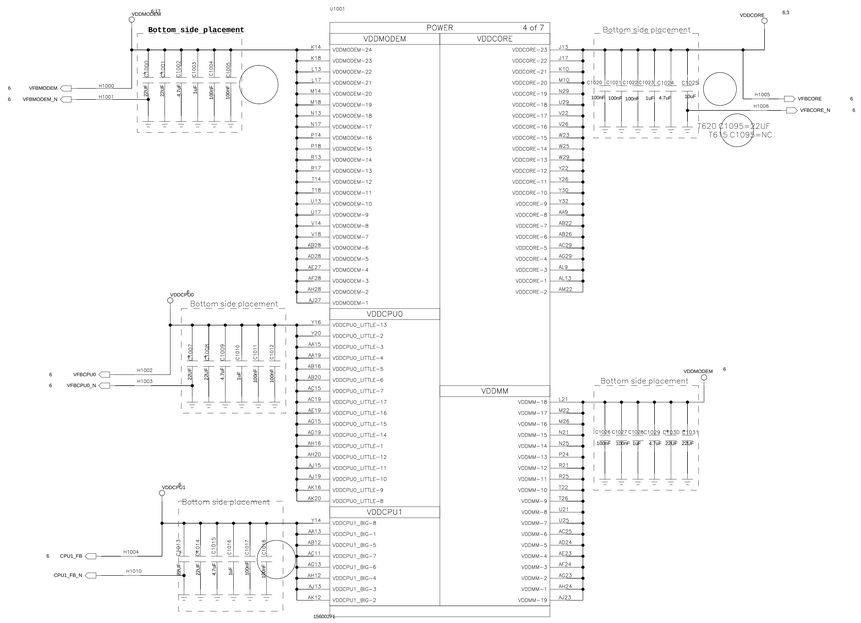
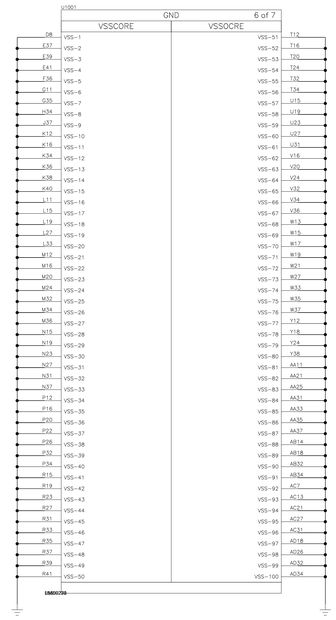
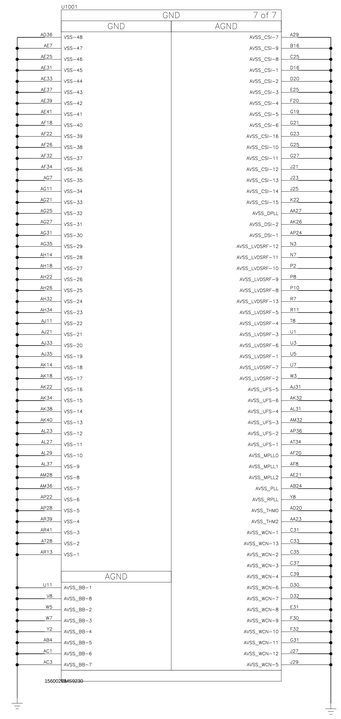
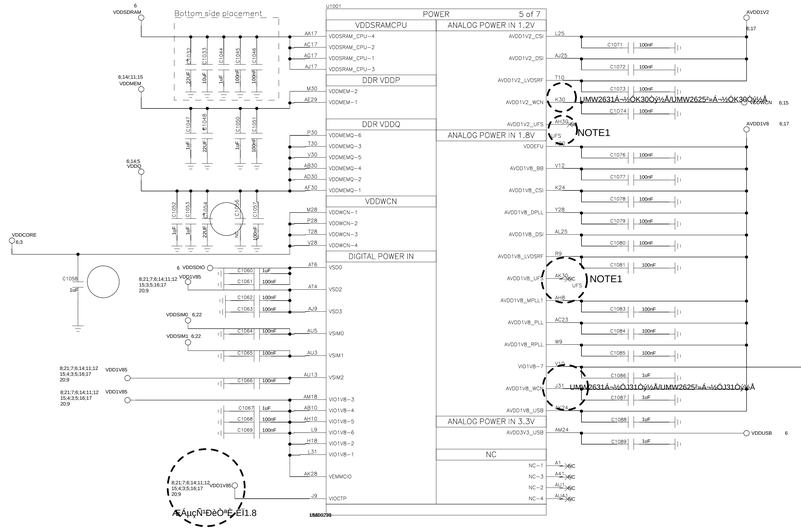
# POWER




NOTE1

| | AH30 | AK30 |
|---|---|---|
| EMMC | NC | NC |
| UFS | AVDD1V2 | AVDD1V8 |

| COMPANY: TRANSSION HOLDINGS | | | | MODEL: | | Modified Date: |
|---|---|---|---|---|---|---|
| DRAWN | | DATED | | TITLE: K6735_F201_MAIN | | 06/12/2024:17:33 |
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3 of 7
KEYINI%DEDIO%×ÆOIIOEiOA
RFLVDS %Ó¿ÜµÁÈÜÁÈÞ 1040Mbps/Lane
emmc.R1104»BèÓ¼Ïüé-board IdÉÇ11E-ÉiÓÁÈb¼È-ÁÜ²¿ÈÁ

| REVISION RECORD | | | |
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# MEMORY

×€×€ÈÈEMCPE#umcpE''-"ò DDRµ¯DQ^ß" ·ÓÇµÜµÜÓ×`-PIN^ß:

×€×€ÈÈEMMCE#ufsE'•ÓÅ°µ''-"ò DDRµ¯DQ^ß" ·ÓÇµÜµÞ`-PIN^ß:

U1001
UMS9230_H0.9
MEMORY Order by Func.2 D,LP4(x)

DATA LANE 0 A

| | | | | |
|---|---|---|---|---|
| 14 | EMDQ0_A | F40 | EMDQ0_A/EMDQ0_A | |
| 14 | EMDQ1_A | G41 | EMDQ7_D1/EMDQ1_A | |
| 14 | EMDQ2_A | H40 | EMDQ5_A/EMDQ2_A | |
| 14 | EMDQ3_A | J41 | EMDQ6_A/EMDQ3_A | |
| 14 | EMDQ4_A | J39 | EMDM0_A/EMDQ4_A | |
| 14 | EMDQ5_A | H38 | EMDQ3_A/EMDQ5_A | |
| 14 | EMDQ6_A | G39 | EMDQ2_A/EMDQ6_A | |
| 14 | EMDQ7_A | F38 | EMDQ0_A/EMDQ7_A | |
| 14 | EMDM0_A | G37 | EMDQ1_A/EMDM0_A | |
| 14 | EMDQS0_A_P | H36 | EMDQS0_T_A/EMDQS0_T_A | |
| 14 | EMDQS0_A_N | J35 | EMDQS0_C_A/EMDQS0_C_A | |

DATA LANE 1 A

| | | | | |
|---|---|---|---|---|
| 14 | EMDQ8_A | V38 | EMDQ10_A/EMDQ8_A | |
| 14 | EMDQ9_A | U39 | EMDM1_A/EMDQ9_A | |
| 14 | EMDQ10_A | T38 | EMDQ13_A/EMDQ10_A | |
| 14 | EMDQ11_A | U37 | EMDQ11_A/EMDQ11_A | |
| 14 | EMDQ12_A | W41 | EMDQ9_A/EMDQ12_A | |
| 14 | EMDQ13_A | V40 | EMDQ12_A/EMDQ13_A | |
| 14 | EMDQ14_A | U41 | EMDQ14_A/EMDQ14_A | |
| 14 | EMDQ15_A | T40 | EMDQ15_A/EMDQ15_A | |
| 14 | EMDM1_A | W39 | EMDQ8_A/EMDM1_A | |
| 14 | EMDQS1_A_P | T36 | EMDQS1_T_A/EMDQS1_T_A | |
| 14 | EMDQS1_A_N | U35 | EMDQS1_C_A/EMDQS1_C_A | |

DATA LANE 0 B

| | | | | |
|---|---|---|---|---|
| 14 | EMDQ0_B | AP40 | EMDQ4_B/EMDQ0_B | |
| 14 | EMDQ1_B | AN41 | EMDQ7_B/EMDQ1_B | |
| 14 | EMDQ2_B | AM40 | EMDQ5_B/EMDQ2_B | |
| 14 | EMDQ3_B | AL41 | EMDQ6_B/EMDQ3_B | |
| 14 | EMDQ4_B | AL39 | EMDM0_B/EMDQ4_B | |
| 14 | EMDQ5_B | AM38 | EMDQ3_B/EMDQ5_B | |
| 14 | EMDQ6_B | AN39 | EMDQ2_B/EMDQ6_B | |
| 14 | EMDQ7_B | AP38 | EMDQ0_B/EMDQ7_B | |
| 14 | EMDM0_B | AN37 | EMDQ1_B/EMDM0_B | |
| 14 | EMDQS0_B_P | AL35 | EMDQS0_T_B/EMDQS0_T_B | |
| 14 | EMDQS0_B_N | AK36 | EMDQS0_C_B/EMDQS0_C_B | |

DATA LANE 1 B

| | | | | |
|---|---|---|---|---|
| 14 | EMDQ8_B | AB38 | EMDQ10_B/EMDQ8_B | |
| 14 | EMDQ9_B | AC39 | EMDM1_B/EMDQ9_B | |
| 14 | EMDQ10_B | AC37 | EMDQ11_B/EMDQ10_B | |
| 14 | EMDQ11_B | AD38 | EMDQ13_B/EMDQ11_B | |
| 14 | EMDQ12_B | AA41 | EMDQ9_B/EMDQ12_B | |
| 14 | EMDQ13_B | AB40 | EMDQ12_B/EMDQ13_B | |
| 14 | EMDQ14_B | AC41 | EMDQ14_B/EMDQ14_B | |
| 14 | EMDQ15_B | AD40 | EMDQ15_B/EMDQ15_B | |
| 14 | EMDM1_B | AA39 | EMDQ8_B/EMDM1_B | |
| 14 | EMDQS1_B_P | AB36 | EMDQS1_T_B/EMDQS1_T_B | |
| 14 | EMDQS1_B_N | AC35 | EMDQS1_C_B/EMDQS1_C_B | UMS9230 |

15600204 NOTE: using alternate to change order

2 of 7

CA A

| | | | | |
|---|---|---|---|---|
| | EMCK_T_A/EMCK_T_A | P36 | EMCLK_A_P | 14 |
| | EMCK_C_A/EMCK_C_A | N35 | EMCLK_A_N | 14 |
| | EMCKE0_A/EMCKE0_A | M38 | EMCKE0_A | 14 |
| | EMCKE1_A/EMCKE1_A | L39 | EMCKE1_A | 14 |
| | EMCS0_A/EMCS0_A | N39 | EMCS0_A | 14 |
| | EMCS1_A/EMCS1_A | P38 | EMCS1_A | 14 |
| | EMCA1_A/EMCA0_A | N41 | EMCA0_A | 14 |
| | EMCA0_A/EMCA1_A | P40 | EMCA1_A | 14 |
| | EMCA2_A/EMCA2_A | L36 | EMCA2_A | 14 |
| | EMCA4_A/EMCA3_A | M40 | EMCA3_A | 14 |
| | EMCA5_A/EMCA4_A | L37 | EMCA4_A | 14 |
| | EMCA3_A/EMCA5_A | L41 | EMCA5_A | 14 |

CA B

| | | | | |
|---|---|---|---|---|
| | EMCK_T_B/EMCK_T_B | AE35 | EMCLK_B_P | 14 |
| | EMCK_C_B/EMCK_C_B | AF36 | EMCLK_B_N | 14 |
| | EMCKE0_B/EMCKE0_B | AH38 | EMCKE0_B | 14 |
| | EMCKE1_B/EMCKE1_B | AJ39 | EMCKE1_B | 14 |
| | EMCS0_B/EMCS0_B | AG39 | EMCS0_B | 14 |
| | EMCS1_B/EMCS1_B | AF38 | EMCS1_B | 14 |
| | EMCA1_B/EMCA0_B | AG41 | EMCA0_B | 14 |
| | EMCA0_B/EMCA1_B | AF40 | EMCA1_B | 14 |
| | EMCA2_B/EMCA2_B | AG37 | EMCA2_B | 14 |
| | EMCA4_B/EMCA3_B | AH40 | EMCA3_B | 14 |
| | EMCA5_B/EMCA4_B | AJ37 | EMCA4_B | 14 |
| | EMCA3_B/EMCA5_B | AJ41 | EMCA5_B | 14 |

REF ZQ

| | | | | |
|---|---|---|---|---|
| | EMRESET_N | Y40 | EMRSTN | 14 |
| EMZQ | D40 | R1200 / R1201 | NC / 240R | VDD2 / GND |

EMMC

| | | | | |
|---|---|---|---|---|
| | EMMC_CLK | AT30 | EMMC_CLK | 14 |
| | EMMC_CMD | AN31 | EMMC_CMD | 14 |
| | EMMC_RST | AP32 | EMMC_RST | 14 |
| | EMMC_DS/GPIO105 | AU31 | EMMC_RCLK | 14 |
| | EMMC_D0/BT_RFCTLG1/GPIO98 | AR31 | EMMC_D0 | 14 |
| | EMMC_D1/BT_RFCTLI G1/GPIO108 | AR29 | EMMC_D1 | 14 |
| | EMMC_D2/BT_RFCTLSG1/GPIO109 | AU33 | EMMC_D2 | 14 |
| | EMMC_D3/BT_RFCTLSG1/GPIO106 | AM30 | EMMC_D3 | 14 |
| | EMMC_D4/BT_RFCTLAG1/GPIO104 | AP30 | EMMC_D4 | 14 |
| | EMMC_D5/BT_RFCTLSG1/GPIO103 | AT32 | EMMC_D5 | 14 |
| | EMMC_D6/BT_RFCTLEG1/GPIO100 | AU29 | EMMC_D6 | 14 |
| | EMMC_D7/BT_RFCTLTG1/GPIO101 | AN29 | EMMC_D7 | 14 |

R1202 0R

×€ÈÈE"CPU-½<•eMMCt¿•Ç¡¯µ¯CLK/RST/CMD"¯CMMCLK0µ¯GPIO„f¯Ût¤¯ÙÒ^£‹¯ª„®„f¯ÙÒÒÈ£

# PMU_POWER

| REVISION RECORD | | | |
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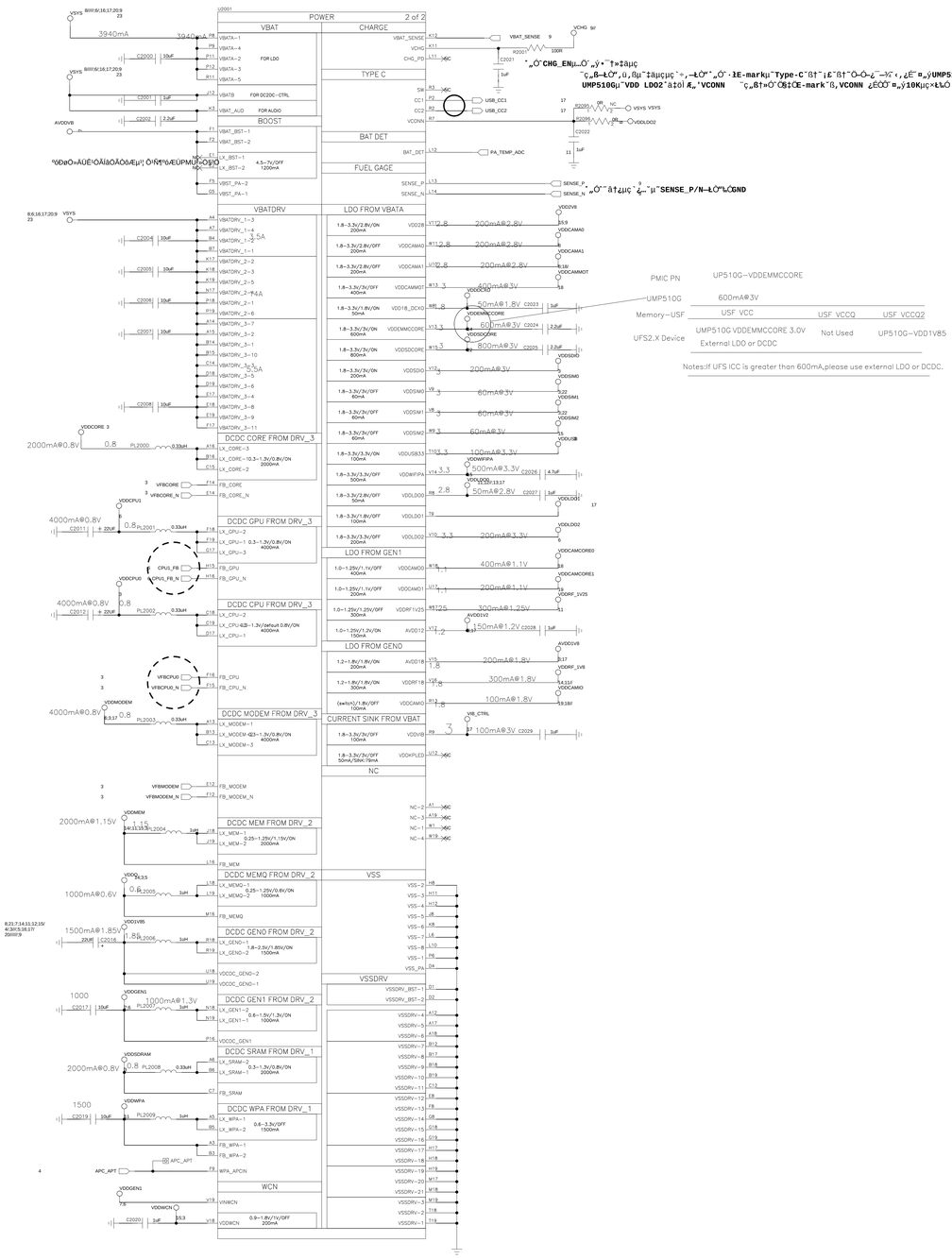


## UMP510G DCDC output

| Input Power | Power Name | Output Voltage (V) | Output Current (mA) | Default Voltage (V) | Default |
|---|---|---|---|---|---|
| VBAT | DCDC CORE | 0.3–1.3 | 2000 | 0.8 | ON |
| | DCDC GPU | 0.3–1.3 | 4000 | 0.8 | ON |
| | DCDC CPU | 0.3–1.3 | 4000 | 0.8 | ON |
| | DCDC MODEM | 0.3–1.3 | 4000 | 0.8 | ON |
| | DCDC MEM | 0.25–1.25 | 2000 | 1.15 | ON |
| | DCDC MEMQ | 0.25–1.25 | 1000 | 0.6 | ON |
| | DCDC GEN0 | 1.8–2.5 | 1500 | 1.85 | ON |
| | DCDC GEN1 | 0.6–1.5 | 1000 | 1.3 | ON |
| | DCDC SRAM | 0.3–1.3 | 2000 | 0.8 | ON |
| | DCDC WPA | 0.6–3.3 | 1500 | / | OFF |

## UMP510G LDO output

| Input Power | Power Name | Output Voltage (V) | Output Current (mA) | Default Voltage (V) | Default |
|---|---|---|---|---|---|
| VBAT | VDD28 | 1.8–3.3 | 200 | 2.8 | ON |
| | VDDCAMA0 | 1.8–3.3 | 200 | 2.8 | OFF |
| | VDDCAMA1 | 1.8–3.3 | 200 | 2.8 | OFF |
| | VDDCAMMOT | 1.8–3.3 | 400 | 3 | OFF |
| | VDD18_DCXO | 1.8–3.3 | 50 | 1.8 | ON |
| | VDDEMMCCORE | 1.8–3.3 | 600 | 3 | ON |
| | VDDSDCORE | 1.8–3.3 | 800 | 3 | ON |
| | VDDSDIO | 1.8–3.3 | 200 | 3 | ON |
| | VDDSIM0 | 1.8–3.3 | 60 | 3 | OFF |
| | VDDSIM1 | 1.8–3.3 | 60 | 3 | OFF |
| | VDDSIM2 | 1.8–3.3 | 60 | 3 | OFF |
| | VDDUSB33 | 1.8–3.3 | 100 | 3.3 | ON |
| | VDDWIFIPA | 1.8–3.3 | 500 | 3.3 | OFF |
| | VDDLDO0 | 1.8–3.3 | 50 | 2.8 | OFF |
| | VDDLDO1 | 1.8–3.3 | 100 | 3.3 | OFF |
| | VDDLDO2 | 1.8–3.3 | 200 | 3.3 | OFF |
| GEN1 | VDDCAMD0 | 1.0–1.25 | 400 | 1.1 | OFF |
| | VDDCAMD1 | 1.0–1.25 | 200 | 1.1 | OFF |
| | VDDRF1V25 | 1.0–1.25 | 300 | 1.25 | OFF |
| | AVDD12 | 1.0–1.25 | 150 | 1.2 | ON |
| GEN0 | AVDD18 | 1.2–1.8 | 200 | 1.8 | ON |
| | VDDRF18 | 1.2–1.8 | 300 | 1.8 | ON |
| | VDDCAMIO | 1.2–1.8 | 100 | 1.8 | OFF |
| GEN1 | WCN | 1.0–1.6 | 200 | 1 | OFF |

| | | | | | |
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| COMPANY: TRANSSION HOLDINGS | | | MODEL: K6735_F201_MAIN | | Modified Date: 20/12/2024:10:31 |
| DRAWN | | DATED | TITLE: | | VERSION: |
| CHECKED | | DATED < > | Confidentiality | CONFIDENTIAL | SHEET: 6 OF 24 |

| REVISION RECORD | | | |
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| LTR | ECO NO: | APPROVED: | DATE: |
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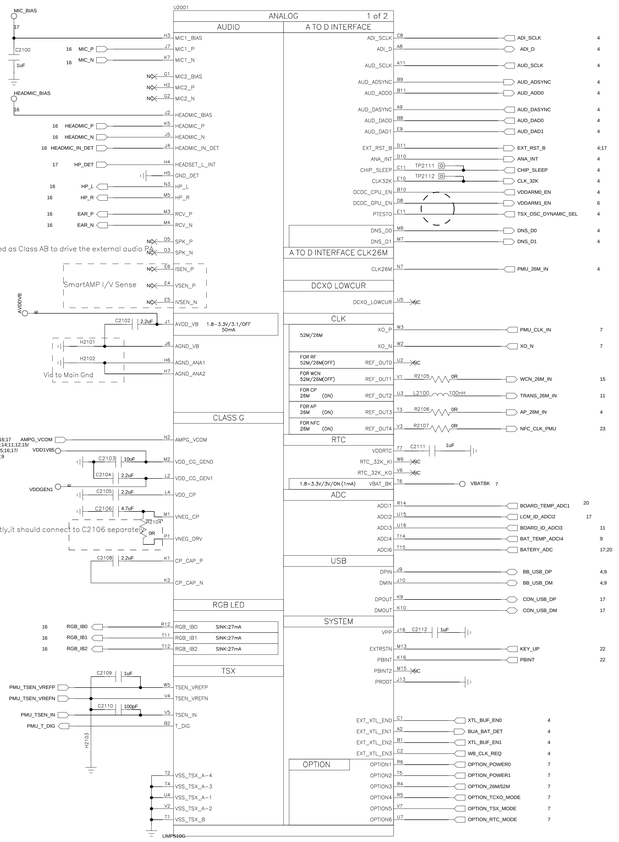
# PMU_ANALOG




# BKBT

# TSX

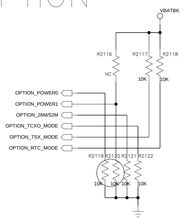
IDistance from TCXO/TSX to heat source should be 3mm/46mm separately at least..

Minimum 0.25mm-clearance route out area around TCXO/TSX to avoid heat conductivity effects..

Recommend no-copper area under TCXO/TSX from Layer L1 to Layer L(n-1)

Keep 1mm away from the PCB edge, don t refer to the PCB Main GND, refer PCB design guide for detail

# OPTION




| Item | Scenario | Option1 | Option2 |
|---|---|---|---|
| 0 | Qogir L6+UMP510G | 0 | 0 |
| 1 | Qogir L6+UMP510G+DCDC | 0 | 1 |
| 2 | | 1 | 0 |
| 3 | | 1 | 1 |

| Scenario | Option3(26M/52M) | Option4(TCXO_MODE) | Option5(TSX_MODE) | Option6(RTC_MODE) |
|---|---|---|---|---|
| 26M TCXO+32K Crystal | 0 | 1 | 0 | 0 |
| 26M TSX+32K Crystal | 0 | 0 | 1 | 0 |
| 26M TSX+32K-less from PMIC internal | 0 | 0 | 1 | 1 |
| 26M DCXO+32K-less from PMIC interna | 0 | 1 | 1 | 1 |
| 26M DCXO+32K Crystal | 0 | 1 | 1 | 0 |

| | | | | | |
|---|---|---|---|---|---|
| COMPANY: TRANSSION HOLDINGS | | | MODEL: | | Modified Date: |
| DRAWN | | DATED | TITLE: K6735_F201_MAIN | | 04/12/2024:15:34 |
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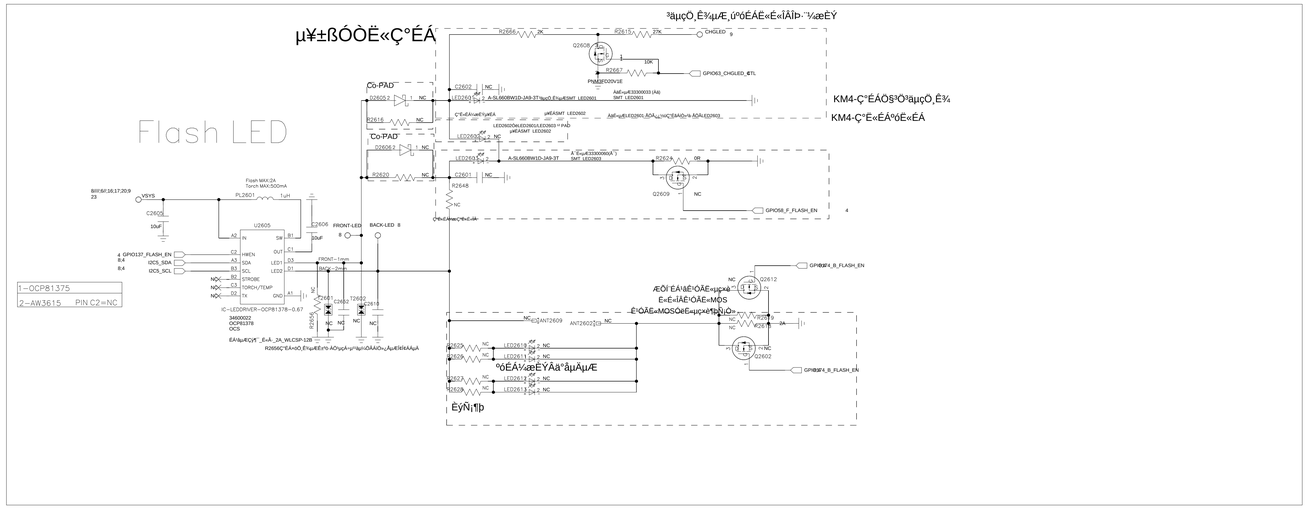
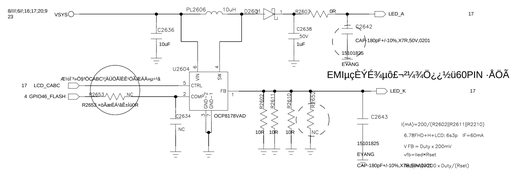


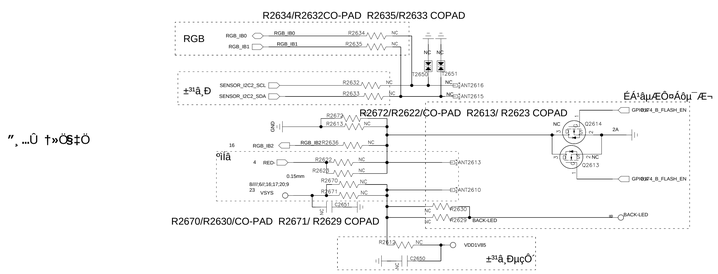

## Back Light Driver

1uF 50V 0603




| | PIN2 | C2634 | | R2653 |
|---|---|---|---|---|
| HIBMÃÉÙ ÑÑÇÖß | NC | 220nF | | NC |
| HIBMÃ¶ ÑÑÇÖß | COMP | 220nF | | 100R |
| HIBMÃß ÑÑÇÖß | STROBE | NC | | 0R |

## ºíÍâ/±³¹ãą Ð/RGB/ÉÁ¹ãµÆ 4Ñ¡1

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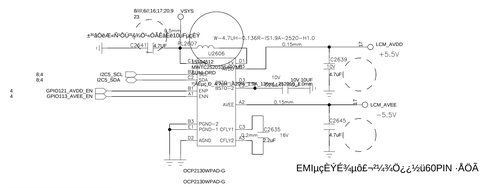
SMT

| | | | | | |
|---|---|---|---|---|---|
| ºíÍâ | | R2622/3=0R | R2670/1=0R | ANT2610 | ANT2613 |
| RGB | R6334/5=0R | R2670=0R | R2636=0R | ANT2610 | ANT2613 ANT2615 ANT2616 |
| ±³¹ãą Ð | R6332/3=0R | R2612=0R | R2613=0R | ANT2610 | ANT2613 ANT2615 ANT2616 |
| ÉÁ¹ãµÆ | R2613=0R | R2670=0R | R2629/30=0R | ANT2610 | ANT2613 ANT2615 ANT2616 |

Ç°É«É«ÎÃÎùQ2613/14É¬ñÕòÎùR2613/R2670

## BIAS OCP2131:I2C Address= write:0x7C read:0x7D

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| COMPANY: TRANSSION HOLDINGS | | MODEL: K6735_F201_MAIN | Modified Date: 22/01/2025:17:57 |
| DRAWN | DATED | TITLE: | VERSION: SHEET: 8 OF 24 |
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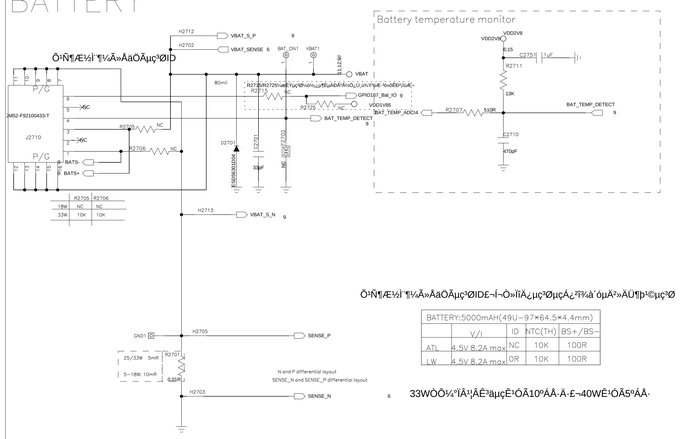
# BATTERY

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| BATTERY:5000mAH(49U-97*64.5*4.4mm) | | | | |
|---|---|---|---|---|
| | V/I | ID | NTC(TH) | BS+/BS- |
| ATL | 4.5V 8.2A max | NC | 10K | 100R |
| LW | 4.5V 8.2A max | OR | 10K | 100R |

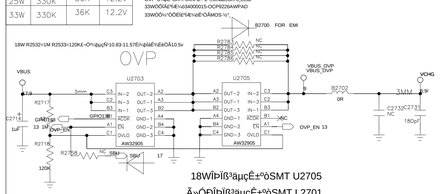
33WÖÖ½°ÍÃ¹ÃÉ³ãµçÉ¹ÖÃ10ºÃÃ·Ã·£¬40WÉ¹ÖÃ5ºÃÃ·

# USB CHARGE/2A OTG

| | R2717 | R2718 | OVLO |
|---|---|---|---|
| 10W | NC | 0R | 6.8V |
| 18W | 1M | 120K | 11.2V |
| 25W | 330K | 36K | 12.2V |
| 33W | 330K | 36K | 12.2V |

25W(IBAT=5A) 22mR OVP(ET9540CL)

Ö»Ö¹Ù±ÊÖÃ»Ö¹ÍÃÃ¡Ã·£¬ÉÉæ
33WÖÖÃÃ¹ÃÉ½ù3000015-OCP8206WPWD
33WÖÖ½°ÖÖÉÍ¹ÃÉ¼ù6ÉÓÃÃ¡½°¿

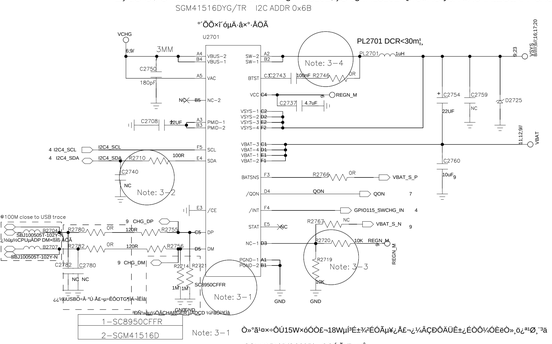



18WÌÞÍß³ãµçÉ±°ÓSMT U2705
Ã»ÓÐÍÞÍß³ãµçÉ±°ÓSMT L2701

Ê¢¹ûÓÐ*ÓÕ§°Ó.´Í0 10wÉ¬Ö»ÃÜÓÃsc8950/sgm41516E,ÇÓ sgm41516E Q4Ó»ÃÜ½9ÃÃ°Ì×ÓÃÃÓáÃÍ´ì×ÓÃÓÃ.³ãµç;

SGM41516DYG/TR I2C ADDR 0x6B

*ÕÓ×Ì´ó¡Ã·à×*·ÃÓÃ




18W+ÌÞÍß³ãµç

| U2703 | U2705 | R2783~R2786 | L2701 | U2701 |
|---|---|---|---|---|
| AW32905 | AW32905 | NC | SMT | SGM41516D SC8950 |
| ÓÉÍß¼ùOVP_EN=L U2703µÍ¡ÍÃ | ÓÉÍß¼ùOVP_EN=L U2705µÍ¡ÍÃ | U2701 SW CHG ½»» ÓÉÍß18W | | 7,4 |
| ÌÞÍß¼ùOVP_EN=H U2703½ØÖ | ÌÞÍß¼ùOVP_EN=H U2705½ØÖ¡ÃÓÉÍß17 | ½OVP½ù½ÓT01 SW CHG ½»» ÌÞÍß¼ùÍß18W | | 7,4 |

18W

| AW32905 | NC | SMT | SMT | U2701 SW CHG Ã·½ÜÃÓÉÍß18W |
|---|---|---|---|---|
| U2703/5 | L2701 | Q2704/2 | U2704 SW CHG ÌÞÃ·½ÓÉÍß10-18W | |

45W+ÌÞÍß³ãµç

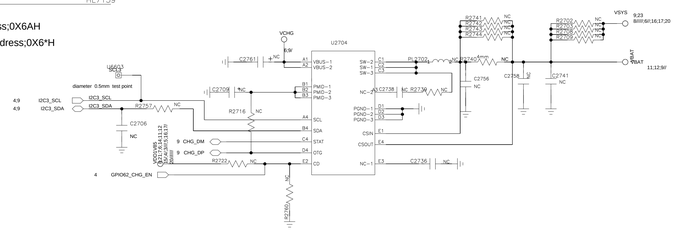
| U2701 | U2702 | U2704 | U2705 | U2706 |
|---|---|---|---|---|
| NC | NC | DMT2004UFDF | SGM41516D SC8950 | SC8548 HL7139 |

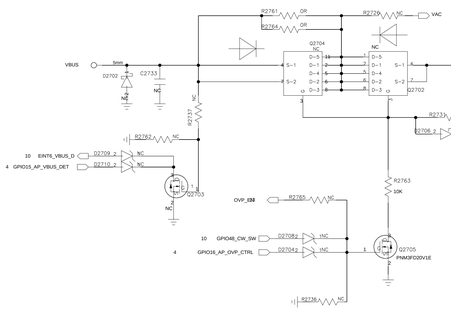
# SMT charger IC Charging indicator

| | U2701 | U2704 | U2702 |
|---|---|---|---|
| 10WÌÞÃ·¾¶ 10W | NC | AW32257 | NC |
| 18W³¬Ð 18W | SGM41516D SC8950 | SD7693/HL7009 | NC |
| 18WÌÞÃ·¾¶ 18W | NC | SD7693/HL7009 | NC |
| 18WÃ·¾¶ 18W | SGM41516D SC8950 | NC | NC |
| 33/45WÌÞÃ·¾¶ 33W | | SD7693/HL7009 | SC8548 HL7139 |
| 33/45WÃ·¾¶ 33W | SGM41516D SC8950 | NC | SC8548 HL7139 |

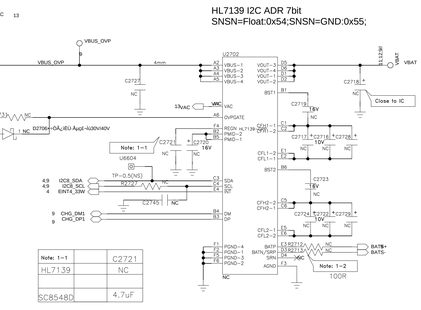
10W: ETA6937/AW32257 ;I2C adress;0X6AH
18W: ETA6937/¶ ÓÆ£1/¶ ÓÆ£2;I2C adress;0X6*H

| AW32257 | R2716=100K | R2741~44=NC R2740=0.033 | C2709=10UF | R2702/03/08/09=0R |
|---|---|---|---|---|
| SD7693/HL7009 | R2716=NC | R2740=NC R2741~44=0R | C2709=4.7UF | R2702/03/08/09=0R |




HL7139 I2C ADR 7bit
SNSN=Float:0x54;SNSN=GND:0x55;




| Note: 1~1 | C2721 |
|---|---|
| HL7139 | NC |
| SC8548D | 4.7uF |

1. HL7139¿âÖ»ÃÜÍùHL7139µÃÍíÃÍÉ~ª»ÃÜÍùRT9756AÉ~»å×ª¼þ
2. RT9756AµÃ¿ã½ÉÃÜÍùRT9756AÉ~ÖÓÃÜÍùHL7139
3.33/40WÉ±°ÓGNDµÃ»ØÃ÷ÐêÓ°Íùµ´Æ~É~ÍãÓ[Íì»ÓÃÐêÓª×»ÓÃØµñ;

| COMPANY: TRANSSION HOLDINGS | | | | MODEL: | | Modified Date: |
|---|---|---|---|---|---|---|
| DRAWN | | DATED | | TITLE: K6735_F201_MAIN | | VERSION: 03/03/2025:19:51 |
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| LTR | ECO NO. | APPROVED | DATE |
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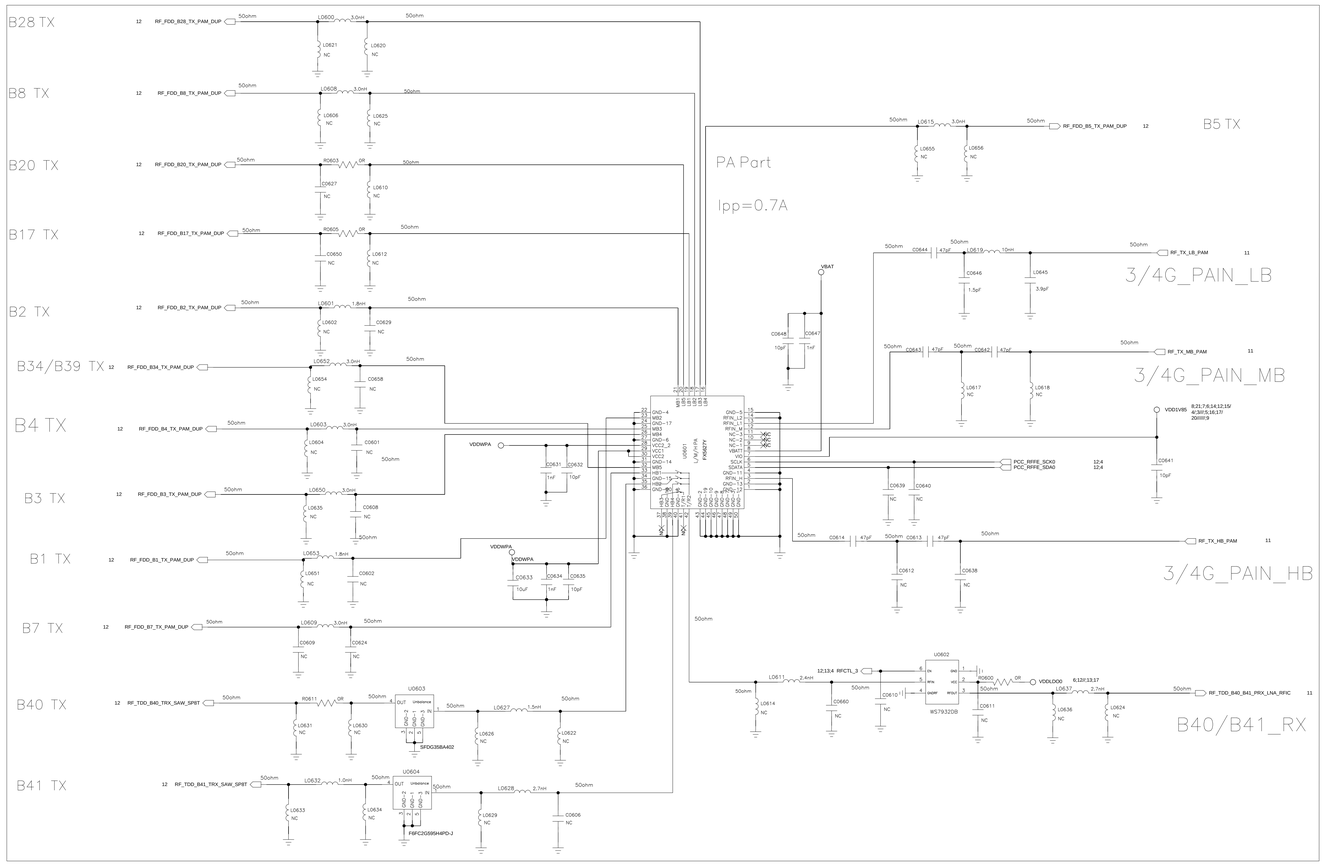
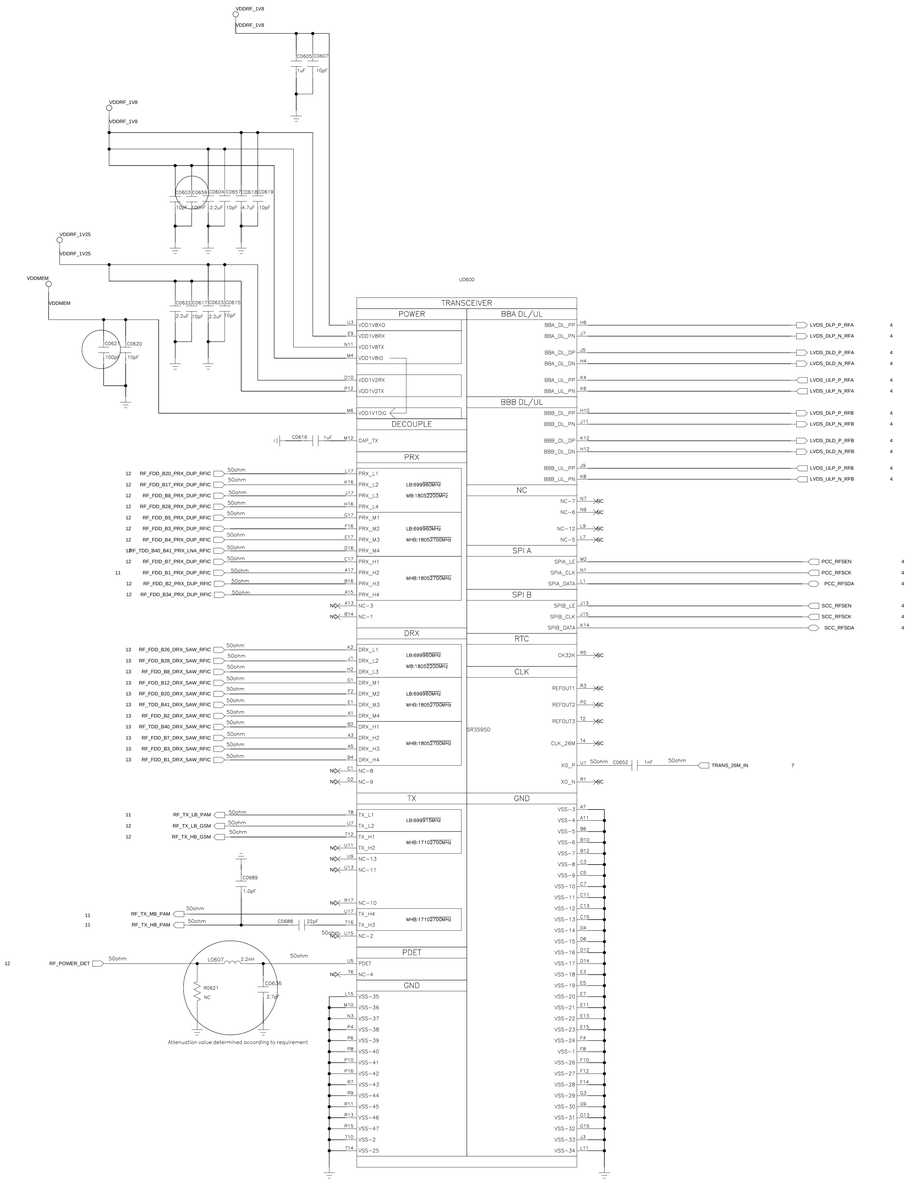
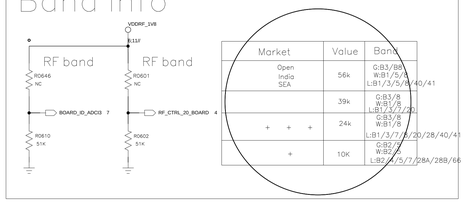
# LTE/WCDMA PAM



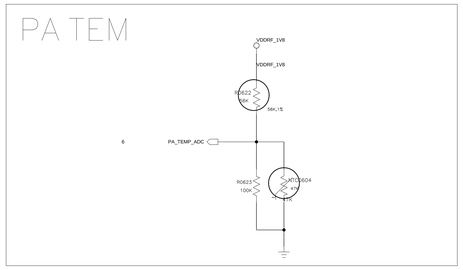




# Band info




| Market | Value | Band |
|---|---|---|
| Open<br>India<br>SEA | 56k | G:B3/B8<br>W:B1/5/8<br>L:B1/3/5/8/40/41 |
| | 39k | G:B3/8<br>W:B1/5/8<br>L:B1/3/5/8/20 |
| + + + | 24k | G:B3/8<br>W:B1/8<br>L:B1/3/7/8/20/28/40/41 |
| + | 10K | G:B3/8<br>W:B2/5<br>L:B2/4/5/7/28A/28B/66 |

# PA TEM

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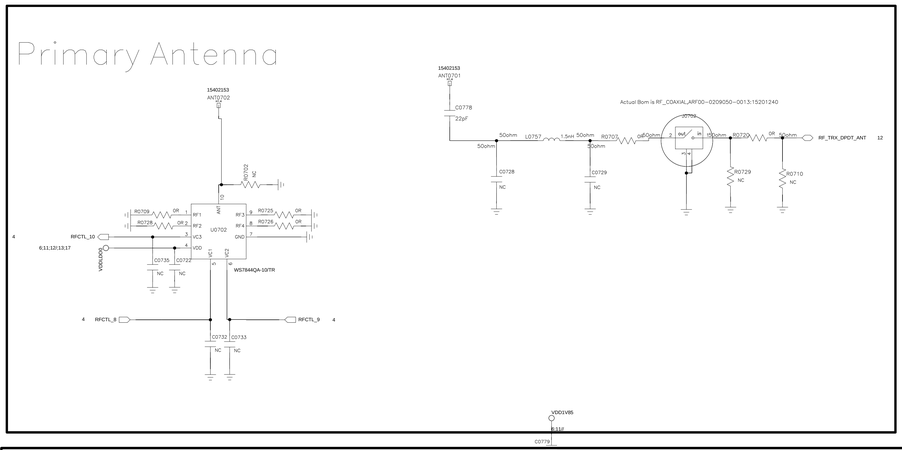


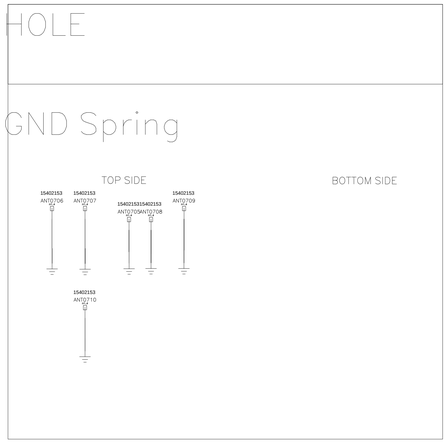


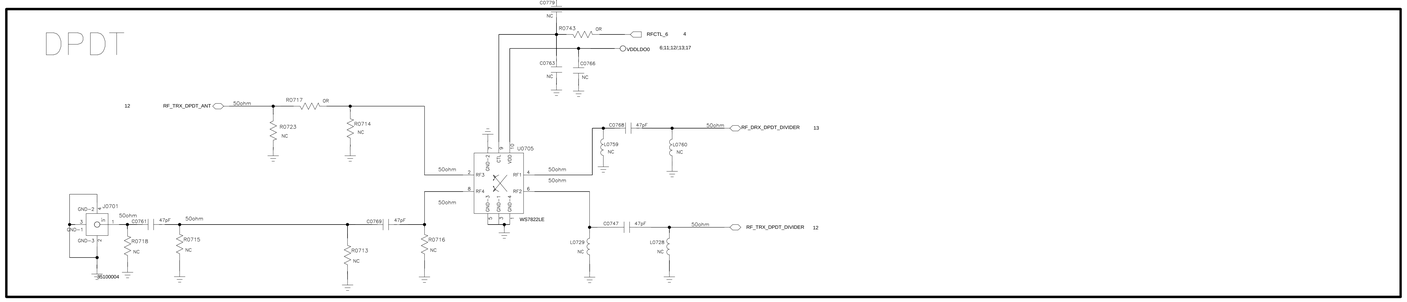


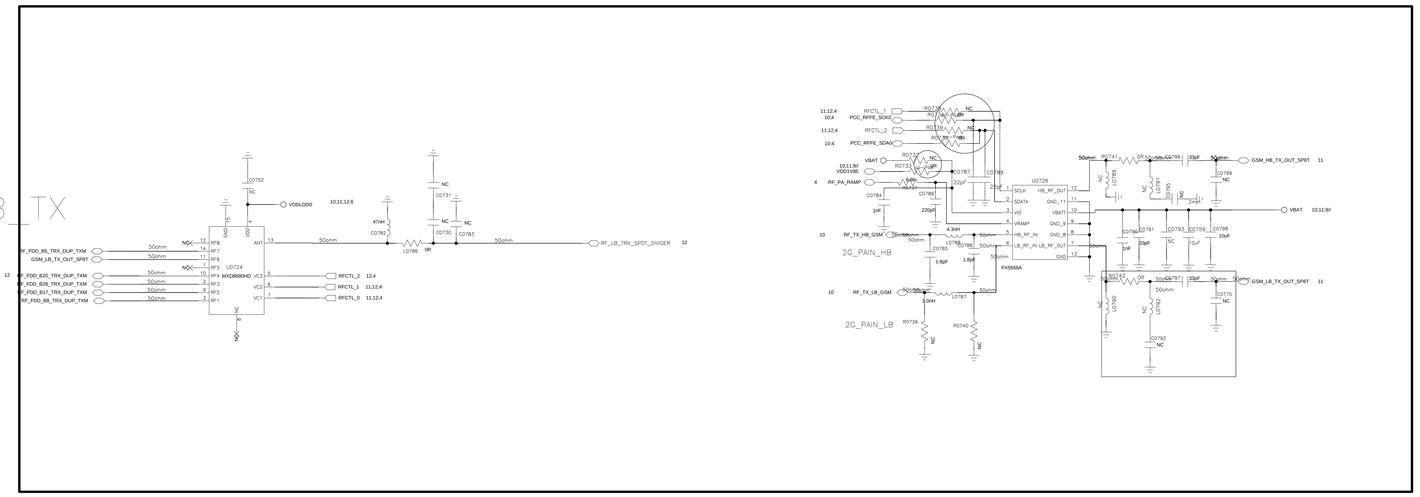


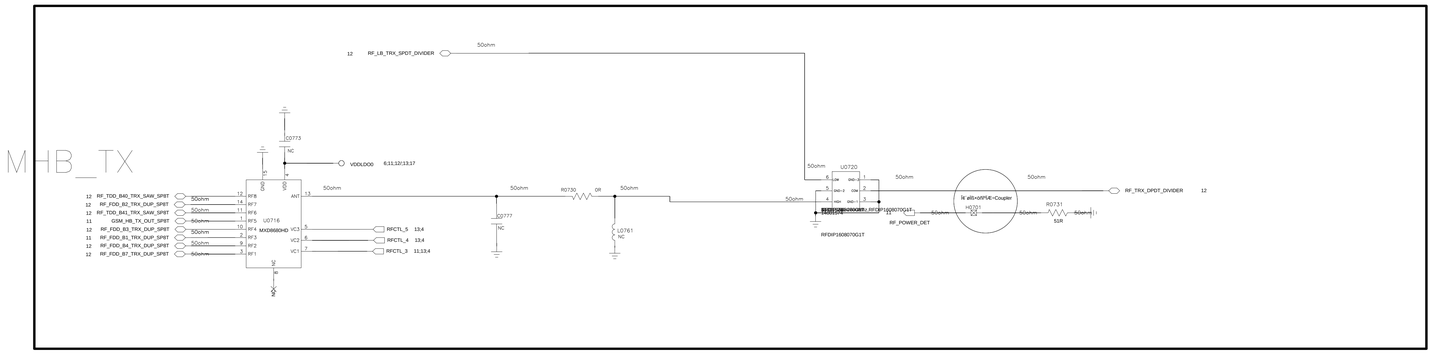


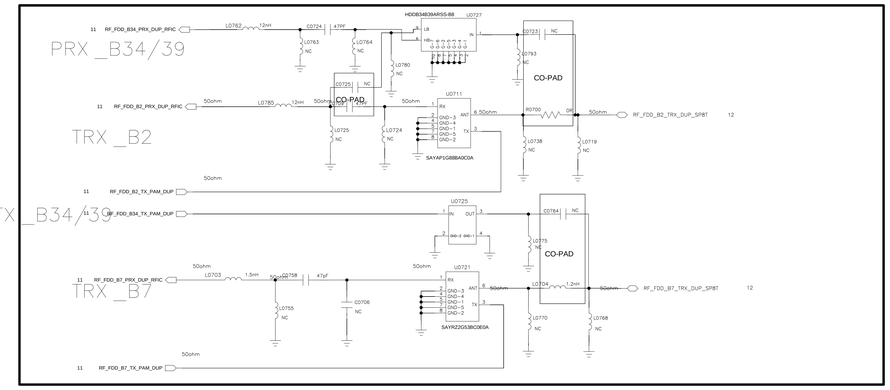


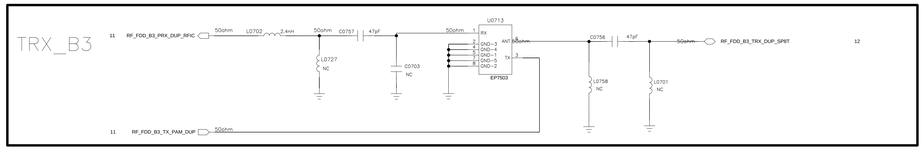


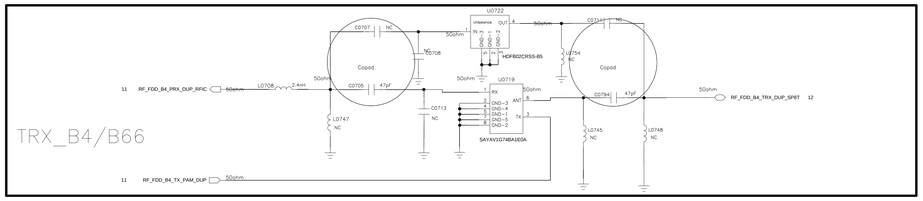


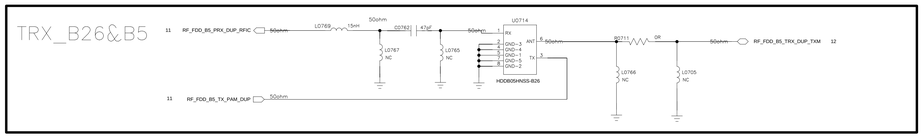


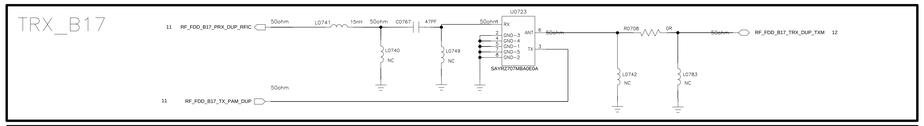


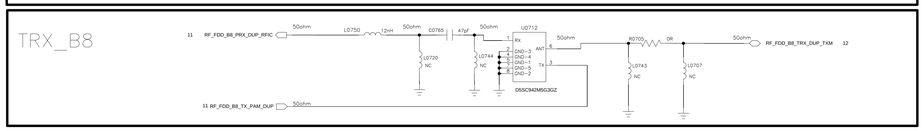


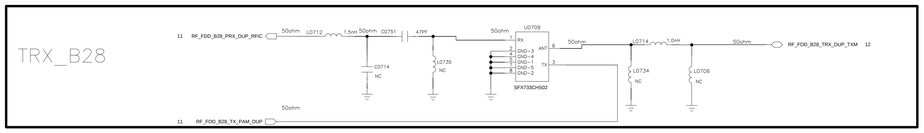


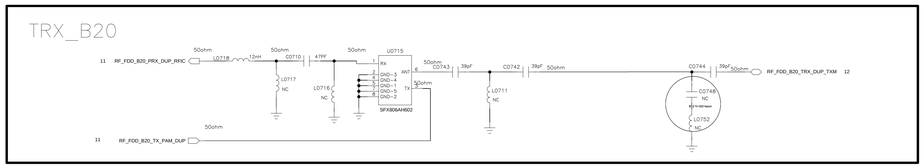


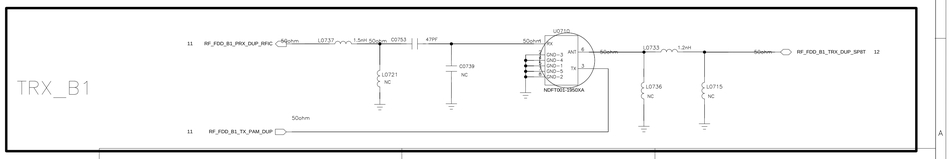


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| DRAWN | DATED | TITLE K6735_F201_MAIN | VERSION: 21/01/2025:09:57 |
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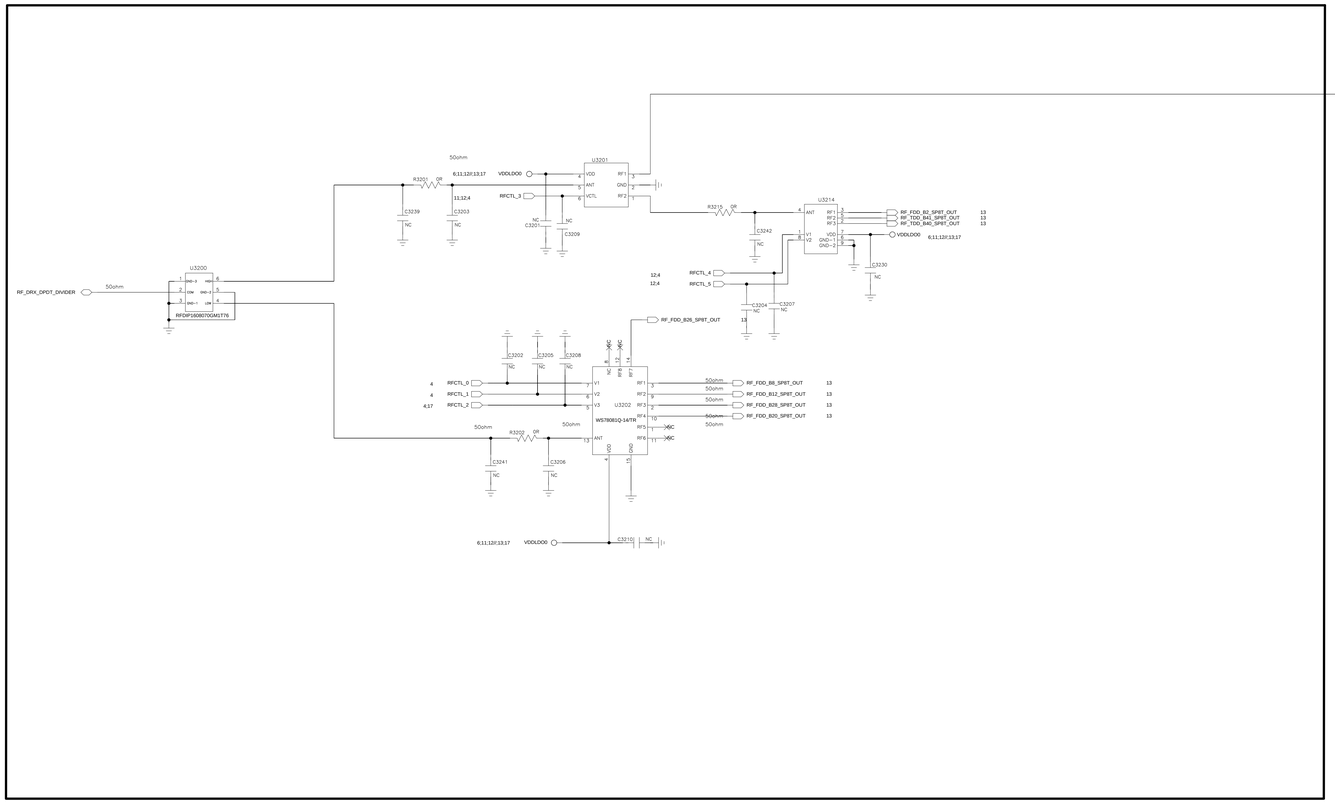
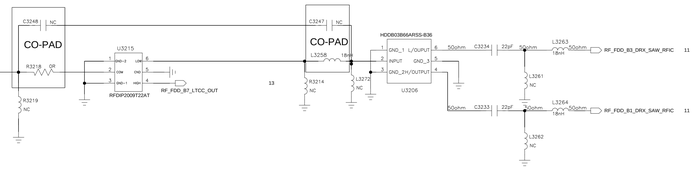
# RF_SR3595D_RF_DRX

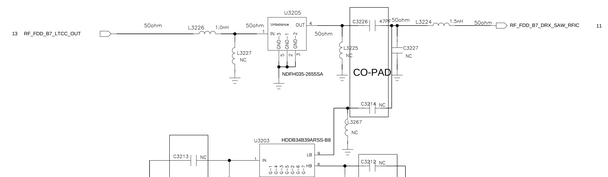



# RF_SR3595D_RF_DRX_Path

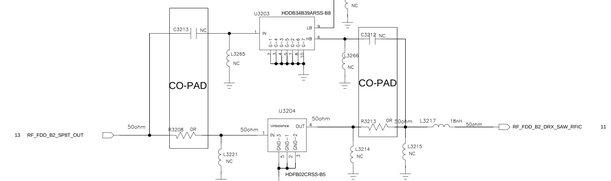
## B1/3_DRX




## B7_DRX




## B34/39_DRX

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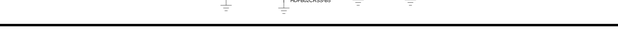
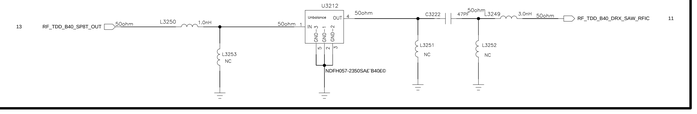



## B40_DRX

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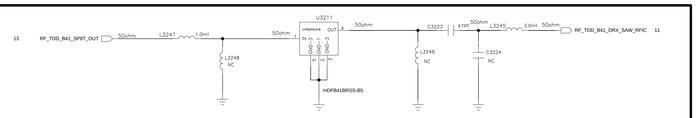


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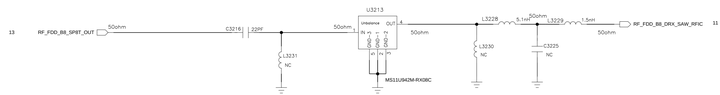


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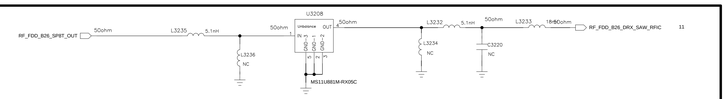


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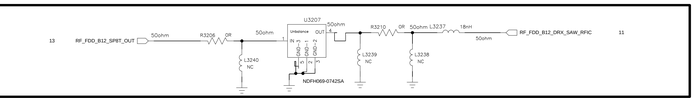


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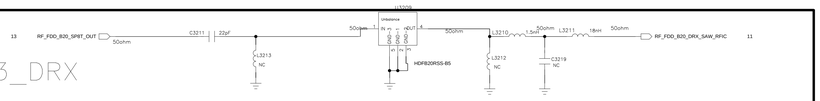


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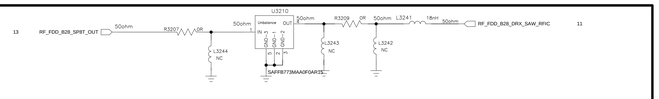


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| DRAWN | DATED | TITLE: | VERSION: |
| CHECKED | DATED < > | Confidentiality CONFIDENTIAL | SHEET: 13 OF 24 |

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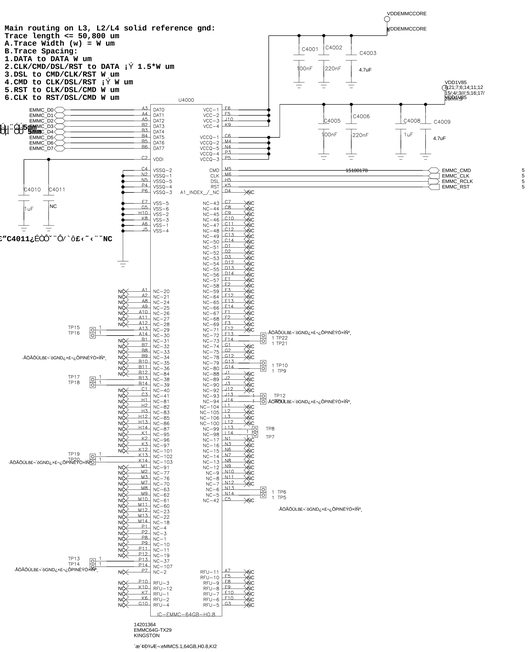
# EMMC

×€Ò‚£"9230TO»Ó-AC…"ÓÑ"ôµ¨"æ-½Ã¯Ò§‡ÕEMMC¡£UMS9230¨µ¡—½'‹¥Ø†»Ò§‡ÕUFS3.1˜»…þ£‹'„Ó'UFS2.1˜»…þ'—ŁÓ"„"¿¨¨£µ¨VCC-,•Ý¨åÓ"LDO»ÓDCDC¡£

**Main routing on L3, L2/L4 solid reference gnd:**
**Trace length <= 50,800 um**
**A.Trace Width (w) = W um**
**B.Trace Spacing:**
**1.DATA to DATA W um**
**2.CLK/CMD/DSL/RST to DATA ¡Ý 1.5*W um**
**3.DSL to CMD/CLK/RST W um**
**4.CMD to CLK/DSL/RST ¡Ý W um**
**5.RST to CLK/DSL/CMD W um**
**6.CLK to RST/DSL/CMD W um**

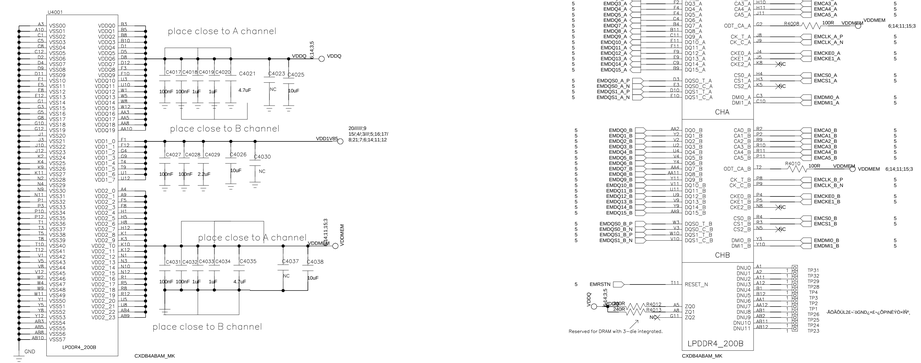
**A:[Clock,Data,CMD,DSL] [CLK,DATA]**
**B:[DSL,DATA,CMD] [CLK,DSL]**

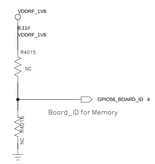
×€Ò‚"C4011¿£ÇÓ¨"Ó/'Ó£+'‹"'NC




# LPDDR4x

## KM4£º 64/128+3/4




Ñ¡ÓñMEMORYÓ¤ÁôÉ~Ã¿Ç°Ö±½ÓÈÍ¼þÐ´ÉÁÉ~ÉÏÍÃÁ·NC

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|---|---|---|---|---|---|
| COMPANY: TRANSSION HOLDINGS | | | MODEL: | | Modified Date: |
| DRAWN | | DATED | TITLE: J6563_F069_MAIN | | 05/12/2024:17:18 |
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| REVISION RECORD | | | |
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| LTR | ECO NO: | APPROVED: | DATE: |
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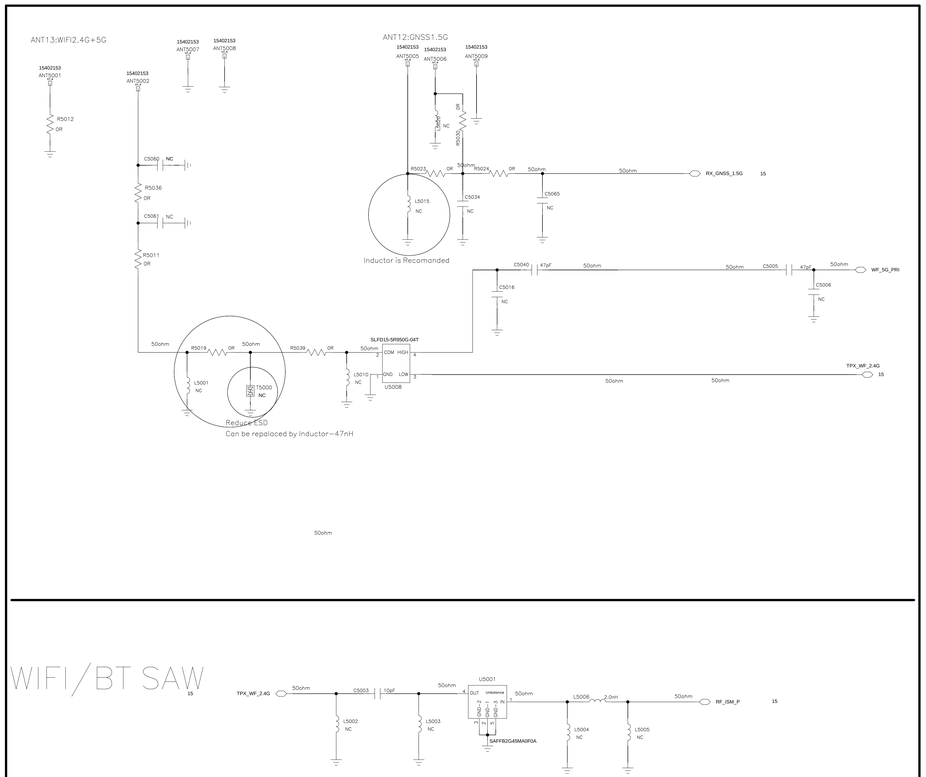
| | | | |

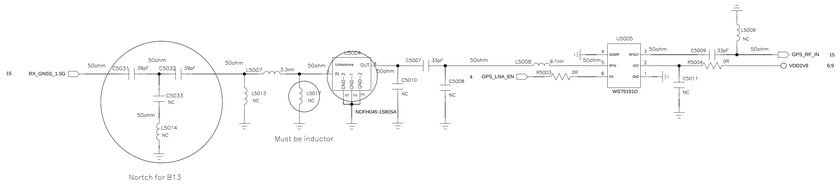
# WIFI&BT ANT

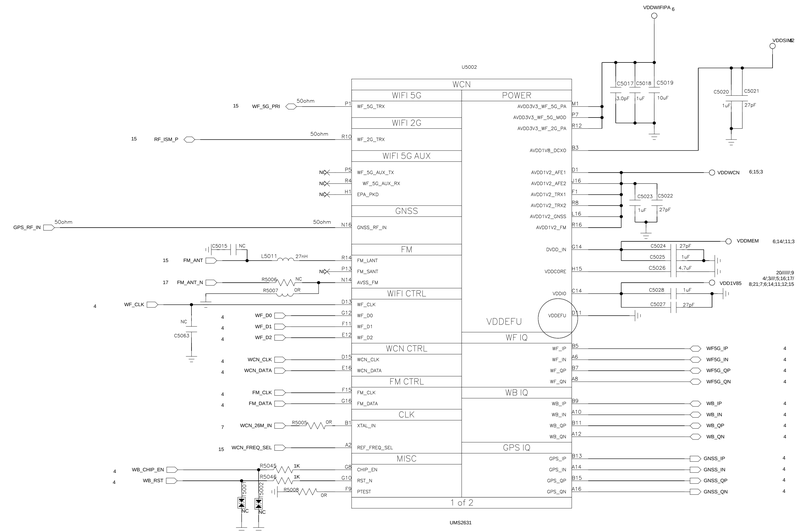


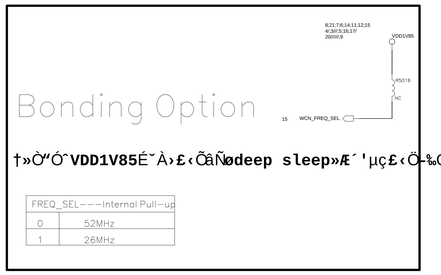

# WIFI/BT SAW



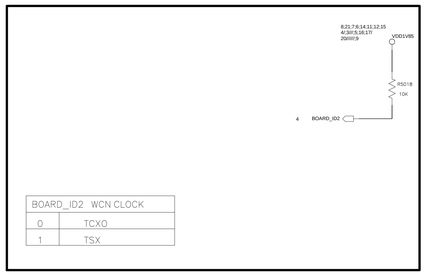

# GNSS SAW LNA



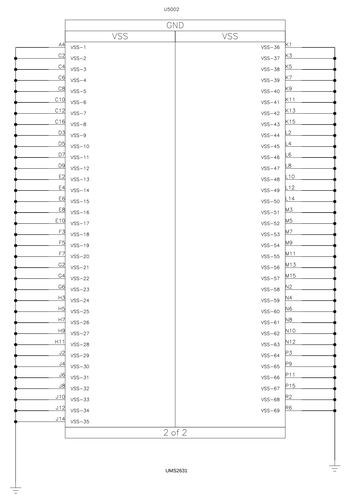




| FREQ_SEL---Internal Pull-up | |
|---|---|
| 0 | 52MHz |
| 1 | 26MHz |



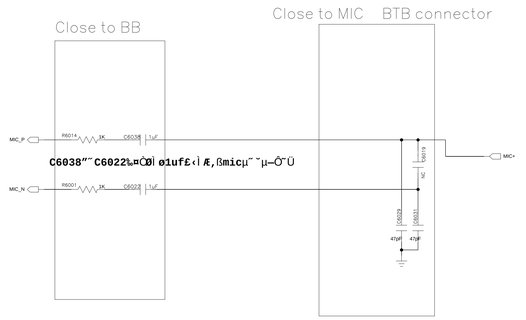

| BOARD_ID2 | WCN CLOCK |
|---|---|
| 0 | TCXO |
| 1 | TSX |




| | | | | | |
|---|---|---|---|---|---|
| COMPANY: TRANSSION HOLDINGS | | | MODEL: | | Modified Date: |
| DRAWN | | DATED | TITLE: K6735_F201_MAIN | | VERSION: 18/12/2024:14:59 |
| CHECKED | | DATED < > | Confidentiality | CONFIDENTIAL | SHEET: OF |

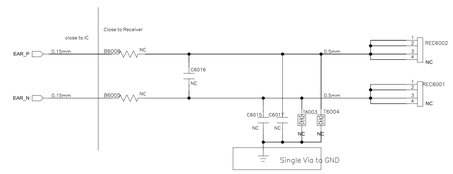
| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED: | DATE: |
| | | | |
| | | | |

# MAIN MIC



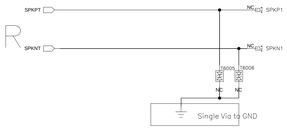

C6038"˜˜C6022‰¤ÇÖÌ ø1ufÉ‹Ì Æ,ßmicµ˜˜µ—Ö˜Ü

# RECEIVER



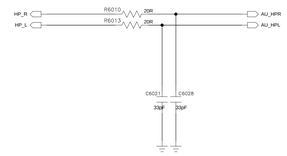

| Manufacture | Part Number_Transsion |
|---|---|
| ¯—¸˜„¸ | 15403357 |
| | 15403358 |
| ¾æ¨ƒ¤ | 15403455 |
| | 15403456 |

# UP SPEAKER




KM4--Ö§‡Ö1012Àfi° ¨

# 3.5mm Ear Jack




Ear Jack suggest support:

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

L,R,GND,MIC CTIA

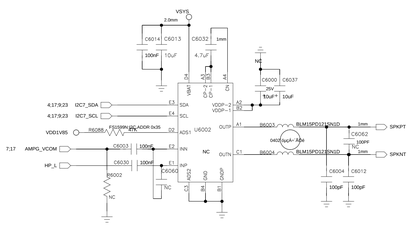
C3153 B3105
Close to Ear Jack's Pin 2(GND)

T3125 is reserved for better ESD defense of FM_ANT IO

# UP SPEAKER

KM4--Ö§‡Ö¸ «Àfi° ¨

| | | |
|---|---|---|
| µ¥Áfi° ¨ | OCA72371 | 14701066 |
| | FS1512N | 14701053 |
| ¸«Áfi° ¨ | FS1599N | 14701054 |
| | AW87390 | 14701055 |

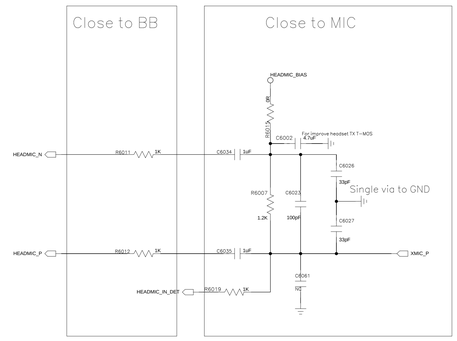



# DWN SPEAKER

in SUB BOARD

# HEAD MIC

## MIC




| | | | | | |
|---|---|---|---|---|---|
| COMPANY: TRANSSION HOLDINGS | | | MODEL: | | Modified Date: |
| DRAWN | | DATED | | TITLE: K6735_F201_MAIN | VERSION: 19/02/2025:10:00 |
| CHECKED | | DATED | < > | Confidentiality CONFIDENTIAL | SHEET: OF |

| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED: | DATE: |
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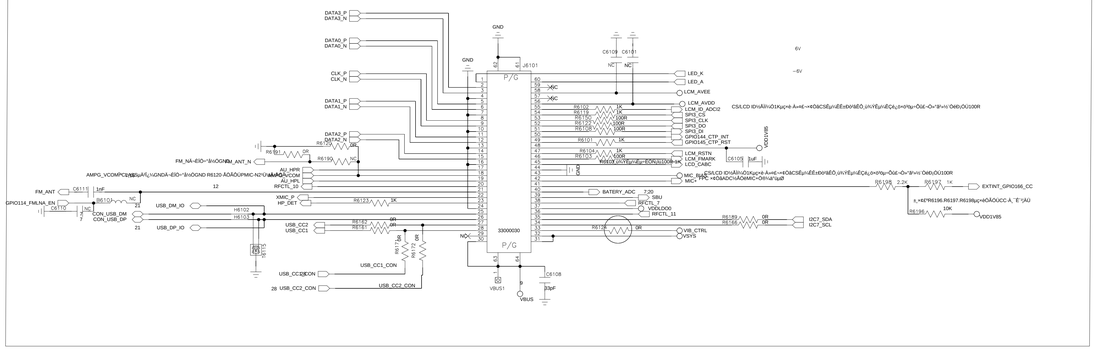
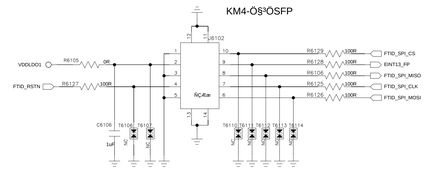
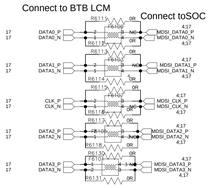
## LCM



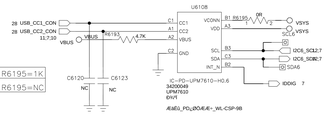

## FingerPrint




## Ä¬ÕJÙNµç×èR




CC Logic change to 34200008




| | | | | | |
|---|---|---|---|---|---|
| COMPANY: TRANSSION HOLDINGS | | | MODEL: K6735_F201_MAIN | Modified Date: | 28/02/2025:10:01 |
| DRAWN | | DATED | TITLE: | VERSION: | SHEET: 17 OF 24 |
| CHECKED | | DATED | Confidentiality CONFIDENTIAL | | |

| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED: | DATE: |
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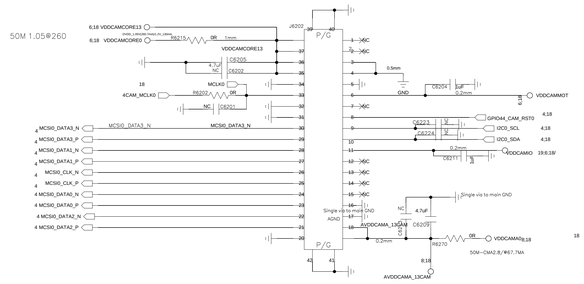
# PERI_CAMERA_I

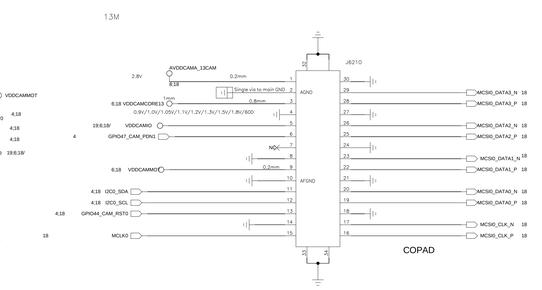
## REAR CAM I (50M-AF/13M/8M)

## KM4--13M

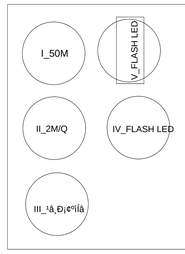
ÒÑ¸üÐÂ

| | SENSOR | I2C Address | VCAMA | VCAMD | VCAMIO | AFVDD | SAP | |
|---|---|---|---|---|---|---|---|---|
| 50M | S5KJN1SQ03-FCX9 | Write:0x20 Read:0x21 | 2.8V @67.7mA | 1.05V @260.7mA | 1.8V @ 4mA | 2.8V@ 103mA | 17201892 | 38pin |
| 50M | S5KJN1SQ03-FCX9 | Write:0x20 Read:0x21 | 2.8V @67.7mA | 1.05V @260.7mA | 1.8V@ 4mA | 2.8V@ 105mA | 17201906 | 38pin |
| 50M | HI-5022Q | Write:0x44Read:0x45 | 2.8V @68mA | 1.1V @243mA | 1.8V@ 22mA | 2.8V@ 105mA | 17201891 | 38pin |
| 13M | OV13810-QA9A | Write:0x20Read:0x21 | 2.8V @45mA | 1.2V @130mA | 1.8V@ 5mA | 2.8V@ 125mA | 17201941 | 30pin |
| 13M | OC13A0-WX1NA | Write:0x20Read:0x21 | 2.8V @45mA | 1.2V @115mA | 1.8V@ 5mA | 2.8V@ 123mA | 17201894 | 30pin |




## ºóÉã²¼¾¾ÖÊ¾ÒâÍ¼50MAF+2M/Q




| | | | | |
|---|---|---|---|---|
| HOT&SMART | I | II | III | V |
| SPART B | I II | IV | VIII | X XI |
| S&P | I II | | IX | X XI |
| S&P | I II | III | IX | XII |
| | I II | III IV | | |
| | I II | III IV | | VII |

50/13M+2M/Q+2M/Q

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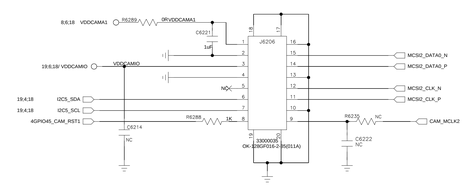
## ¹âÃô

| | | | VCAMA | PIN5 | PIN8 | | SAP |
|---|---|---|---|---|---|---|---|
| ¹âÃô | | | 2.8V@400uA | NC | OUT | | 17201873 |
| | | | 2.8V@400uA | NC | OUT | | 17201874 |
| | | | 2.8V@400uA | NC | OUT | | 17201889 |

ÒÑ¾-¸üÐÂ

## 2MÎ¢¾à/Q

| | VCAMA | VCAMIO | | | | | SAP |
|---|---|---|---|---|---|---|---|
| Î¢¾à | 2.8V@40MA | 1.8V@70MA | | | | | 17201867 |
| | 2.8V@40MA | 1.8V@70MA | | | | | 17201868 |
| | | | | | | | |




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| COMPANY: TRANSSION HOLDINGS | | | | MODEL: K6735_F201_MAIN | | Modified Date: | 06/12/2024:16:44 |
| DRAWN | | DATED | | TITLE: | | VERSION: | SHEET: 18OF 24 |
| CHECKED | | DATED | < > | Confidentiality | CONFIDENTIAL | | |

| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED: | DATE: |
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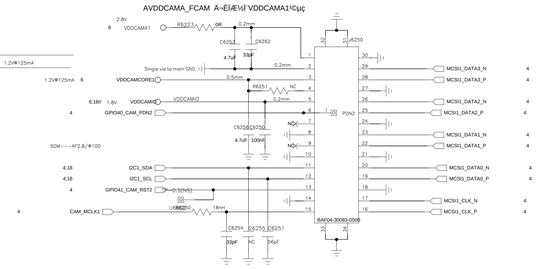
# Front Camera (13M/8M)

KM4Ó§³ÓµÝÇ°ÉâFF 8M

AVDDCAMA_FCAM Ä¬ÉÌÆ½ÌÍ VDDCAMA1³Ôµç




| | | |
|---|---|---|
| 13M | R6251=0R | 1.2V@125mA |
| 8M | R6251=NC | 1.2V@125mA 6 |

| | SENSOR | I2C Address | VCAMA | VCAMIO | VCAMIO | SAP | |
|---|---|---|---|---|---|---|---|
| 13M | GC13A0-MA11NA | Write:0x72 Read:0x73 | 2.8V@45mA | 1.2V@115mA | 1.8V @5mA | 17201959 | 30pin |
| 8M | GC08A8-MD20 | Write:0x24 Read:0x25 | 2.8V @40mA | 1.2V @110mA | 1.8V @2mA | 17201890 | 30pin |
| | OV08D10-GA5A | Write:0x6C Read:0x6D | 2.8V @50mA | 1.2V@90mA | 1.8V @1mA | 17201895 | 30pin |
| | GC08A8-MA11NA | Write:0x24 Read:0x25 | 2.8V @40mA | 1.2V@110mA | 1.8V @2mA | 17200199B0 | 30pin |

| | | | | | |
|---|---|---|---|---|---|
| COMPANY: TRANSSION HOLDINGS | | | MODEL: | Modified Date: | |
| DRAWN | | DATED | TITLE: K6735_F201_MAIN | VERSION: 23/12/2024:17:39 | SHEET: OF |
| CHECKED | | DATED < > | Confidentiality CONFIDENTIAL | | |

| REVISION RECORD | | | |
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| LTR | ECO NO: | APPROVED: | DATE: |
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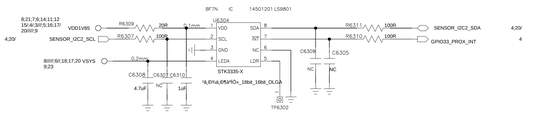
# ALS & PROX

STK33562:I2C address: W=1x0xBC, Read:0xBD

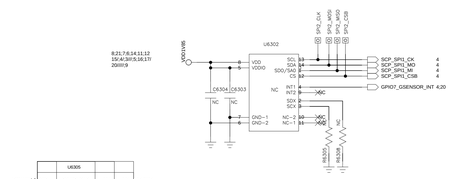
R6309µç×è?»½´Öé»»Ì³0RE¬Ö÷Ö³Ì³ÁÉ½µµÍµçÖ´´øÁ´µÁµ×ÖëÍÉÍä




| |
|---|
| MN78912DKDN |
| STK33562 |
| LS9801 |

**KM4 -Ö§‡Ö**

# G–Sensor + Gyro Sensor



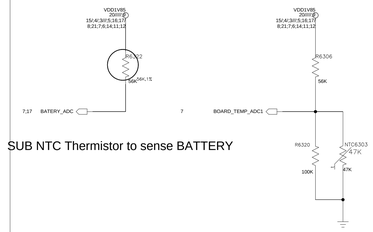

| | | | | |
|---|---|---|---|---|
| | U6305 | | | |
| SW3:0+0Ö | DIS | LSM6DSVQTR | NC | NC 14501217 |
| | DIS | ICM42631 | 0R | 0R |
| SW2:0+0Ö | N_DIS | LSM6DSOETR3 | 14501221 | |

**KM4 -¨í …þÖ§‡Ö**

# NTC

Thermistor to sense BATTERY_IC

Thermistor to sense BORAD_TEMP



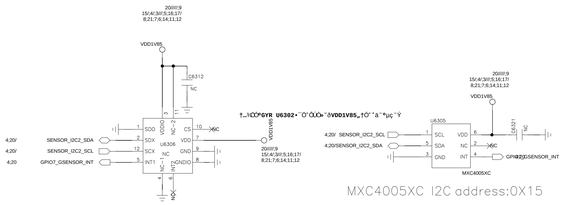

SUB NTC Thermistor to sense BATTERY

Thermistor to sense BORAD
board sensor£¨black side £©
BB IC---->>>>>>£¨3----4mm £©
PMIC---->>>>>>£¨3----4mm £©

# G Sensor

DA218–B I2C address:0x4e/0x4f

STK8BA50–S I2C address:0X18



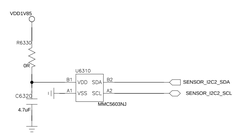

MXC4005XC I2C address:0X15

MC3413–P/MC3416 I2C address:0X98/0X99
SC7A20 I2C address:0X36/0X37

**KM4 -Ö§‡Ö**

# M–Sensor(COMPASS)

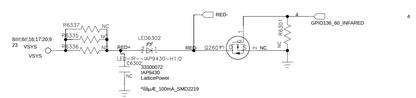
MMC5603:I2C ADDRESS:0x60(W=0x1/0x61(Read))
QMC6308:I2C ADDRESS:0x3E(W=0x1/0x39(Read))




| |
|---|
| |
| MMC5603 |
| |
| QMC6308 |

**KM4 -Ö§‡Ö**

Imax=£¨VSYS-VF£©/R63xx




**KM4 -Ö§‡Ö-–‡^æ"ì ˝â**

| | | | | | |
|---|---|---|---|---|---|
| COMPANY: TRANSSION HOLDINGS | | | MODEL: K6735_F201_MAIN | | Modified Date: 23/12/2024:17:35 |
| DRAWN | | DATED | TITLE: | | VERSION: |
| CHECKED | | DATED < > | Confidentiality | CONFIDENTIAL | SHEET: 20 OF 24 |

| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED: | DATE: |
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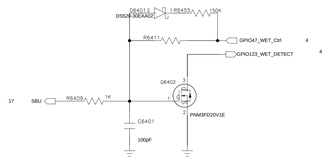
# Exchange IO

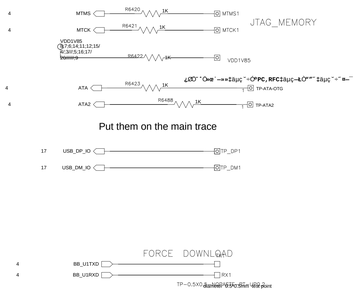
## WET detect

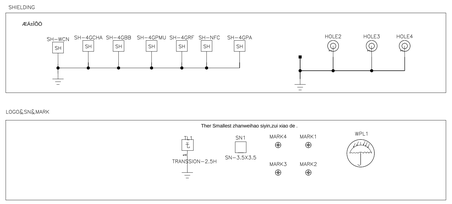



## Test Points

**Bus/Vbat/GND1/BAT_ON/PWR/D+/D-/TX1/RX1/TX0/RX0•¯Ö¨B¨æ¸ ˆÒ¿É¨Ó**

·Å/ÆÁ±ÌÕÕÍíãÃæÈÝÒ×º¸½Ó´¦




## Strapping pin

| Ball name | Signal name in boot code | Value | Descriptions | Default vale |
|---|---|---|---|---|
| U1TXD | USB_DLOAD_EN | 0 | USB download(no time out) | 1 |
| | | 1 | UART download | |
| ADI_SCLK | ARM_BOOT_MD2 | 0 | SD boot(no time out) | 1 |
| | | 1 | eMMC boot | |

| | | | | | |
|---|---|---|---|---|---|
| COMPANY: TRANSSION HOLDINGS | | | MODEL: K6735_F201_MAIN | | Modified Date: 21/01/2025:10:16 |
| DRAWN | | DATED | TITLE: | | VERSION: |
| CHECKED | | DATED < > | Confidentiality | CONFIDENTIAL | SHEET: 21 OF 24 |

| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED: | DATE: |
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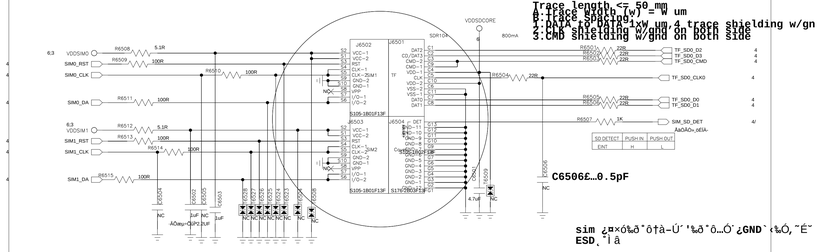
# SIM0 & SIM1 & TF

**| Clock-Data/CMD| <= 7.5mm**

**Trace length <= 50_mm**
**A:trace width (w) = W um**
**B:trace spacing1**
**1:DATA to DATA 1xW um,4 trace shielding w/gn**
**2:CLK shielding w/gnd on both side**
**3:CMD shielding w/gnd on both side**


VDDSIMO
SIM0_RST
SIM0_CLK
SIM0_DA
VDDSIM1
SIM1_RST
SIM1_CLK
SIM1_DA
R6508 5.1R
R6509 100R
R6510 100R
R6511 100R
R6512 5.1R
R6513 100R
R6514 100R
R6515 100R
J6502
J6501
J6503
J6504
3105-1801F13F
S17C0G0F13F
SDH10
VDDSDCORE
800mA
R6501A 22R
R6501B 22R
R6501C 22R
R6504A 22R
R6505A 22R
R6505B 22R
R6507 1K
TF_SD0_D2
TF_SD0_D3
TF_SD0_CMD
TF_SD0_CLK0
TF_SD0_D0
TF_SD0_D1
SIM_SD_DET
SD DETECT
EINT
PU@H IN
H
PU@H OUT
L
C6506£…0.5pF
VDDSD
4.7uF
NC
1uF
ESD5V0U1U
ESD3V3U1U
ESD2V5U1U
ESD1V8U1U
ESD1V2U1U
ESD0V9U1U
ESD0V6U1U
ESD0V3U1U
ESD0V2U1U
ESD0V1U1U
ESD0V0U1U
ESD0V0U1U
ESD0V0

| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED: | DATE: |
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# NFC

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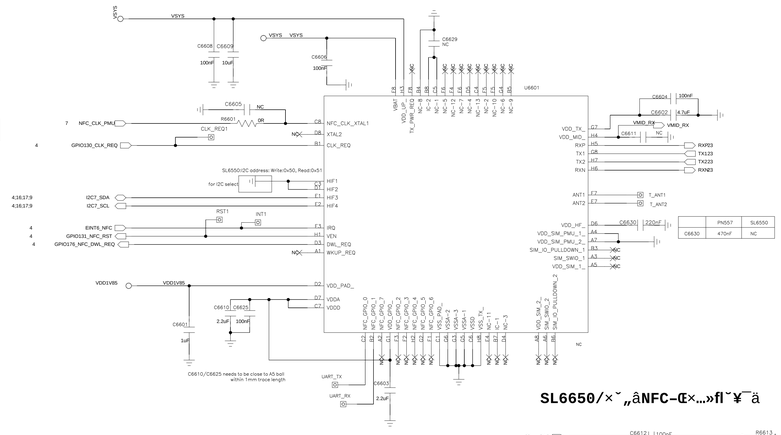
34200040

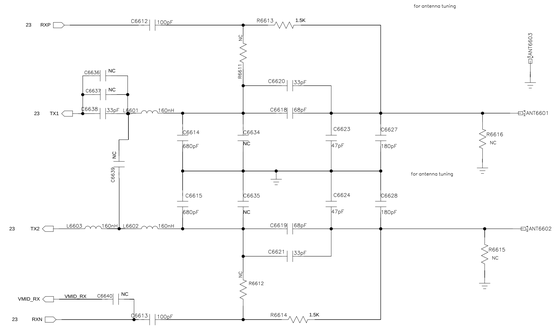
THN31FGB1N

**KM4--†»Ö§‡ÖNFC**




| | PN557 | SL6550 |
|---|---|---|
| C6630 | 470nF | NC |

## SL6650/×˘„âNFC-Œ×…»fl˘¥¯ä




| COMPANY: TRANSSION HOLDINGS | | | | MODEL: K6735_F201_MAIN | | Modified Date: 05/12/2024:17:46 | |
|---|---|---|---|---|---|---|---|
| DRAWN | | DATED | | TITLE: | | VERSION: | SHEET: 23 OF 24 |
| CHECKED | | DATED | < > | Confidentiality | CONFIDENTIAL | | |

| REVISION RECORD | | | |
|---|---|---|---|
| LTR | ECO NO: | APPROVED: | DATE: |
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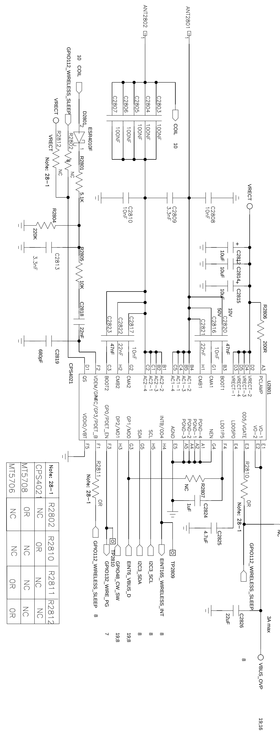
|---|---|---|---|---|---|---|---|
| COMPANY: TRANSSION HOLDINGS | | | | MODEL: K6735_F201_MAIN | | Modified Date: | 08/03/2024:15:12 |
| DRAWN | | DATED | | TITLE: CHANGE_LIST | | VERSION: | SHEET: 24 OF 24 |
| CHECKED | | DATED | < > | Confidentiality | CONFIDENTIAL | | |



| Note: 2R=1 | R2802 | R2810 | R2811 | R2812 |
|---|---|---|---|---|
| CPS4021 | NC | 0R | NC | NC |
| M15708 | 0R | NC | NC | NC |
| M15706 | NC | NC | 0R | 0R |