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P3V3_DELAYED

R35 10K R44 10K R53 10K R70 10K R73 10K R76 10K R83 10K R84 10K R237 10K R253 10K R197 100K

UART5_RXD
UART5_TXD
UART2_RXD
UART2_TXD
UART1_RXD
UART1_TXD
UART3_RXD
UART3_TXD
UART4_RXD
UART4_TXD

PCB_VER_VOL_B

R338 0R

GND

*æ±¾°Å	A	B	C	D	E
R338	0R	1K	2.2K	4.7K	6.8K

I2C1_SDA — 4.7K R18 — P3V3_DELAYED
I2C1_SCL — 4.7K R24 — P3V3_DELAYED
I2C2_SDA — 4.7K R100 — P3V3_DELAYED
I2C2_SCL — 4.7K R99 — P3V3_DELAYED
I2C3_SDA — 4.7K R75 — P3V3_DELAYED
I2C3_SCL — 4.7K R69 — P3V3_DELAYED
TSC_WAKE — 4.7K R90 — P3V3_DELAYED
TSC_INT — 4.7K R89 — P3V3_DELAYED

I2C1_SDA — 100R R74 — I2C_SDA_OUT
I2C1_SCL — 100R R368 — I2C_SCL_OUT

AUD6_TXD(DIO_PIN2) — R148 33R — ESAI_DAC_D0A
AUD6_TXFS(DIO_PIN3) — R149 33R — ESAI_DAC_LRCKA
AUD6_TXC(DIO_PIN15) — R151 33R — ESAI_DAC_SCKTA

ESAI_DAC_SCKT — R261 NC
ESAI_DAC_LRCK — R270 NC
ESAI_DAC_D0 — NC

AUD6_RXD(DIO_PIN4) — R240 — TFT_3V3_CTL
AUD6_TXD(DIO_PIN2) — NC R163 — P3V3_DELAYED
GPIO_XF_POW — 10K R180 — P3V3_DELAYED

POW_GPS_MIC_SW — 100R R276 — MUC_TO_IMX6_IO1

P3V15_BACKUP
C37 0.1uF/25V
NC C137
GPS_ANT_DET

P5V0
C96 4.7uF/50V
C92 4.7uF/50V
C93 1NF/50V
POWER_+12V
C80 10uF/50V
C82 4.7uF/50V
C81 0.1uF/50V

CON1
POWER_+12VB — 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 — 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 — POWER_+12VB
POWER_+12V — POWER_+12V
P5V0 — P5V0
TP119 TP118 TP117 TP115 TP116 TP112 TP111 TP110 TP100 TP99 TP98 TP97 TP96 TP95 TP94 TP93 TP92 TP91 TP90 TP89 TP88 TP87 TP86 TP85 TP84 TP83 TP82 TP81 TP80 TP79 TP78 TP77 TP76 TP63 TP54 TP53 TP46 TP45 TP29 TP25 TP24
R399 PTS120616V035 — P3V3_DELAYED
7186-BOOT1 — TFT_EN/PMW
DISC_LED — R369 100R — UART1_RXD
P3V15_BACKUP — R385 100R — UART1_TXD
KEY_LED_PWR — TUNE_A
VOL_A — TUNE_B
PCB_VER_VOL_B — KEY_AD_0
GPS_ANT_DET — KEY_AD_1
TFT_3V3_CTL
IMX6_TO_MCU_IO3 — R71 100R — R196 0R — USB_DP_DN4
IMX6_TO_MCU_IO2 — R129 100R — R195 0R — USB_DM_DN4
USB_OTG_ID — R150 100R — MCU_7186_SCL
POW_GPS_MIC_SW — GPIO_CAM_DET — MCU_7186_SDA
7186_DUT_INT — R294 100R — UART2_RXD
EXT_RST — R332 100R — UART2_TXD
UART4_RXD_A — R333 100R — UART2_CTS
UART4_TXD_A — R85 0R — UART-RTS
7186-BOOT0 — R87 0R
GPIO_XF_POW — R215 100R — C_IN/CAM2
TFT_VGH/L_CTL — R747 100R — Y_IN/CAM1
GPIO_KDXF_WK — R277 100R — CVBS_IN
GPIO_XF_RST — R284 100R
I2C_SCL_OUT — MIC_MAIN_DOWN1
I2C_SDA_OUT — MIC2+DOWN
ESAI_DAC_D0A — MIC_MAIN-LINE_INL_UP
ESAI_DAC_LRCKA — MIC2_EXT
ESAI_DAC_SCKTA — GND — L_OUT

SOC-B2B-FEMALE-40PX2-IMSA-9828S-80Z07-GF

7186_DUT_INT — R66 100R — IMX6_TO_MCU_IO3
TUNE_B — R211 100R — IMX6_TO_MCU_IO4
7186-BOOT0 — R77 100R — MUC_TO_IMX6_IO2
7186-BOOT1 — R86 100R — MUC_TO_IMX6_IO3
DISC_LED — R200 100R — MUC_TO_IMX6_IO4
VOL_A — R404 100R — IMX6_UP_DATA
HI¹ÊÓÃÓÚ¼ì²â

UART4_RXD — R161 100R — UART4_RXD_A
UART4_TXD — R201 100R — UART4_TXD_A
NC C196 — NC C198 — GND
J6
GND
TP146 TP144 TP140 TP145 TP144 TP143 TP139 TP142 TP141 TP140
R17 R171 R173 R190 R193 R195
NC NC NC NC NC NC NC NC NC NC NC NC
SLEEP_STATUS_TO_CPU
POW_FROM_CPU
RESET_FROM_CPU
WAKEUP_IN_FROM_CPU
WAKEUP_OUT_TO_CPU
RING_TO_CPU
AUD4_TXD AUD4_TXFS AUD4_TXC AUD4_RXD — RN8 — GND
J1

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S6 S17 S3 S4 — NC
S18 S16 S7 S1 S2 S15 S14 S13 S12 S5 S8 S9 S10 S11 — NC
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GPIO_SD3_PWR — P3V3_DELAYED — NC R113 — R59 NC — FB19 — C285 NC — U7 VIN VO2 ON/OF VO1 R1C1 R2 — NC — R60 NC — R45 NC — P3V3_DELAYED
TP43 — VDD_SD3 — SD_VCC — FB12 NC — C282 — C363 NC — VDD_SD3
SD_VCC — R235 NC — R230 NC — R234 NC — R233 NC — R232 NC — R236 NC
SD3_CLK — R382 NC — SD_CLK
SD3_CD — R375 NC — SD_DET
SD3_DAT1 — R376 NC — SD_DAT1
SD3_DAT0 — R377 NC — SD_DAT0
SD3_WP — R378 NC
SD3_DAT3 — R379 NC — SD_DAT3
SD3_CMD — R380 NC — SD_CMD
SD3_DAT2 — R381 NC — SD_DAT2
TP2 TP42 TP51 TP50 TP41 TP48 TP49 TP40
D32 D30 D39 D38 D37 D36 D35 D34
TP53 — NC NC NC NC NC NC NC NC

SD

GPS-RESET — R371 NC — GPS_VCC — R389 NC — C17 NC — GND
U31
GPS_RF — 12 GND — GND 13 — ANT_ON
VCC_RF — 11 RF_IN — ANT_ON 14
GPS_RESET — 10 GND — RESERVED 15
9 VCC_RF — RESERVED 16
8 RESET_N — RESERVED 17
C241 NC — 7 — RESERVED 18
6 VDD_USB — SDA 19
5 USB_DP — SCL 20
4 USB_DM — TXD 21 — TXD_GPS
3 EXTINT — RXD 22 — RXD_GPS
2 TIMEPULSE — V_BCKP 23 — V_BCKP
1 D_SEL — VCC 24 — GPS_V33
RESERVED — GND — GND
IC-MODULE-GPS-UBLOX_NEO_7M

SOC-ANT/GPS-1P-GT5E-1P-DS-DIP-H-HIROSE
GND 2 — ANT 1 — GND 3
TVS6 TPD10E245DPYR
0.2nF/50V C227 — GPS_RF
RF_IN
GPS_VD3.3
C265 18PF/50V — C260 1NF/50V — 0.1uF/25V C172 — C120 1NF/50V
0.1uF/25V C138 — C129 1NF/50V
R238 60R/1000MA
D31 RBE07V20A
GPS_VD3.3
R271 NC — GPS_PSV0
R270 GPS_ANT_DET
R269 NC — C188 NC — C102 NC — C100 NC — C101 NC — R273 NC — C274 NC

ANT_ON — NC R230 — GPS_V33
GPS_RESET — 4.7K R29
GPS_PSV0 — C224 2.2uF/6.3V — C230 2.2uF/6.3V — GND — R5 60R/1000MA — P5V0

TXD_GPS — 220R R229 — UART5_RXD
RXD_GPS — 220R R245 — UART5_TXD
VCC_RF — R604 NC — GPS_VD3.3
TXD_GPS
RXD_GPS
V_BCKP — 0R R219 — P3V15_BACKUP
C366 12pF/50V — C33 2.2uF/6.3V — 12pF/50V C41

GPS_V33 — MAX-200mA — U36 VOUT VIN EN GND NC — GPSPOWER_EN
C251 1NF/50V — C262 1NF/50V — C273 0.1uF/25V — GPS_PSV0
R57 4.7K — GPIO_GPS_MODE_IO5
XC6209F332MR-G
R52 47K — C250 0.1uF/50V

GPS_VD3.3 — U28 VOUT VIN EN GND NC — GPS_PSV0 — GPSPOWER_EN
C184 0.1uF/25V — C179 1NF/50V — R188 10K — D33 RB751V-40 — GND
XC6204F402MR-G
C215 0.1uF/50V — R342 47K
GPSPOWER_EN — R184 10K — P3V3_DELAYED

R369 100R — UART1_RXD
R385 100R — UART1_TXD
C283 NC — GND — R268 NC — GND
R196 0R — USB_DP_DN4
R195 0R — USB_DM_DN4
MCU_7186_SDA
GPIO_CAM_DET
R294 100R — UART2_RXD
R332 100R — UART2_TXD
R333 100R — UART2_CTS
R85 0R — UART-RTS
C286 NC — GND — C28 NC — GND
C_IN/CAM2
Y_IN/CAM1
CVBS_IN
GND — MIC_MAIN_DOWN1
MIC2+DOWN
MIC_MAIN-LINE_INL_UP
MIC2_EXT
GND — L_OUT

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NC
46 47 GND
TP149 TP151 TP150 TP152 TP153 TP154 TP155 TP157 TP156 TP158 TP159 TP161 TP160 TP162 TP163 TP164 TP166 TP165 TP169 TP170 TP174 TP175 TP176 TP179 TP180 TP181 TP182
45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12
NC RN2 — LVDS0_TX0_DN / LVDS0_TX0_DP / LVDS0_TX1_DN / LVDS0_TX1_DP
R1 NC — LVDS0_TX2_DN
R2 NC — LVDS0_TX2_DP
R26 NC — LVDS0_CLK_DN
R43 NC — LVDS0_CLK_DN
R395 NC — LVDS0_TX3_DN
R396 NC — LVDS0_TX3_DP
RNJ NC — LVDS0- / LVDS0+ / LVDS1- / LVDS1+
RN4 NC — LVDS2- / LVDS2+ / LVDS3- / LVDS3+
KEY_LED_PWR
TFT_3V3_CTL
TP23 — TFT_EN/PMW
TFT_VGH/L_CTL
MCU_7186_SCL
MCU_7186_SDA
TSC_INT
I2C3_SDA
TSC_WAKE
I2C3_SCL
TP_CTL_POW
MIC2+DOWN
MIC_MAIN_DOWN1
P5V0
POWER_+12V
CON2
NC C299 NC C23 NC C88 NC C117 NC C118 NC C267
C106 NC C144 NC C242 NC C243 NC C305 NC
R367 R364 R362 R366 NC R236

J15
GND
TP178 TP168 TP196 TP167 TP31 TP28 TP62 TP98 TP195
14 15 1 2 3 4 5 6 7 8 9 10 11 12 13 16
R223 KEY_AD_1
R225 KEY_AD_0
R107 DISC_LED
R226 TUNE_B
R363 TUNE_A
R106 NC — R84 NC — NC — PCB_VER_VOL_B
R92 NC — VOL_A / UART1_TXD / UART1_RXD
GND

J4
SOC-SD-47352-101-12P-SMD-H-MOLEX
SD_CLK SD_DET SD_VCC SD_DAT1 SD_DAT0 SD_DAT3 SD_CMD SD_DAT2
SDCLK SDDET VCC3 SDDAT1 SDDAT0 GND SDDAT3 SD-CMD SDDAT2 GND GND
1 2 3 4 5 6 7 8 9 10 11 12 13 14
C358 NC

USB²å×ù¼°³äµç¿ÓÔÆ

J8 ÔÂ»§USB
SOC-USB-4P-1.0MM-1-1554979-3-SMD-H-TE
TP177 TP176 TP175 TP174 — USB5V GND/ID USB USB — 1 2 3 4 — 8 7 6 5
GT17HN-4DP-2H(A)(10)°ÛÉ«
L21 — 80R/3000MA — FB22
TVS3 SMF05CA-M3F7 — TVS4 SMF05CA-M3F7
C286 NC — C218 0.1uF/50V — C219 1NF/50V — EC6 220uF/16V

J16
SOC-USB-4P-1.0MM-1-1554979-3-SMD-H-TE
TP184 TP183 TP182 TP181 — USB5V GND/ID USB USB — 1 2 3 4 — 8 7 6 5
TBOX/4G
GT17HN-4DP-2H(c)(10),ÅŒÉ«
L10 — 90R/150MA — USB1_H1_DP / USB1_H1_DN / USB1+5V_1A5
FB4 80R/3000MA — NC R192 — P5V0
TVS8 SMF05CA-M3F7 — TVS9 SMF05CA-M3F7
C53 0.1uF/50V — C87 1nF/50V — EC7 220uF/16V

J11
SOC-USB-4P-1.0MM-1-1554979-3-SMD-H-TE
TP188 TP187 TP186 TP185 — USB5V GND/ID USB USB — 1 2 3 4 — 8 7 6 5
ÒÇ±í
GT17HN-4DP-2H(D)(10)°ÛÉ«
L18 — 90R/150MA — USB2_H1_DP / USB2_H1_DN
FB16 NC — USB2+5V_1A5
R246 NC — P5V0
TVS5 SMF05CA-M3F7 — TVS6 SMF05CA-M3F7 — C89 NC — C208 NC — EC1 NC

J10
SOC-USB-4P-1.0MM-1-1554979-3-SMD-H-TE
TP192 TP191 TP190 TP189 — USB5V GND/ID USB USB — 1 2 3 4 — 8 7 6 5
ÐÐ³µ¼ÇÂ¼
4G
GT17HN-4DP-2H(B)(10),ÅÌÉ«
L23 NC — USB_DP_DN3 / USB_DM_DN3
FB5 NC — USB3+5V_1A5
R143 NC — P5V0
TVS10 NC — TVS11 NC — C184 NC — C189 NC — EC5 NC

ILIM: ÏÞÁ÷0.52A×óÔò:49.9K
ÏÞÁ÷0.7A: 37.2K
ÏÞÁ÷0.8A×óÔò: 30K
ÏÞÁ÷0.9A×óÔò: 27K
ÏÞÁ÷1A: 25.8K

IC-SW-TPS2553QDBVRQ1-6.5V-1.7A-TI-NC
U9 — OUT IN ILIM GND FAULT EN — 6 1 5 2 4 3 — NC — C212 NC — GND
USB3+5V_1A5 — P5V0
R81 NC — P3V3_DELAYED
R95 NC — MCU2DR_PWR3
R98 NC — DR_FLT3
R352 NC — P3V3_DELAYED
R103 NC

IC-SW-TPS2553QDBVRQ1-6.5V-1.7A-TI-NC
U41 — OUT IN ILIM GND FAULT EN — 6 1 5 2 4 3 — NC — C62 NC — GND
USB2+5V_1A5
R353 NC — P3V3_DELAYED
R115 NC — MCU2DR_PWR2
R131 NC — DR_FLT2
R339 NC — P3V3_DELAYED
R210 NC

D_USB
FB11 NC — P5V0
FB6 60R/1000MA — P3V3_DELAYED
R210 10K R209 10K R199 NC R182 NC R343 10K R348 10K R350 10K R351 10K
2.1A³äµçÍ¨ÐÒ±ê1
R64 100R — USBCHARGE_CLT3
R49 100R — USBCHARGE_CLT2
R214 100R — USBCHARGE_DCP/CDP
R185 100R — GPIO_USB_OTG_CTRL
R359 100R — USBCHARGE_STU
R360 100R — USBCHARGE_FLT
R415 — ILM_SEL
R194 10K — D_USB
CLT3 CLT2 CLT1 EN — 8 7 6 5
STATUS — 9
USB_D+ — 10 — DP_IN — 11 — USB_D-
DM_IN — 12 — USB_5V_2
OUT
U8 TPS2546RTER
ILIM_SEL — 4
DP_OUT — 3 — USB_OTG_DP
DM_OUT — 2 — USB_OTG_DN
IN — 1 — P5V0
FAULT — 13
GND — 14
ILIM_LO — 15
ILIM_HI — 16
PAD — 17
C266 NC
90MA
R93 R187 — GND
R93¸ÄÎª210K
R415:100R
R187:20K

BH04(C301低配）取消框内原件；
BH05(C301¸ßÅä£©±£Áô¿òÄÚÔ-¼þ;
IC-SW-TPS2553QDBVRQ1-6.5V-1.7A-SOT23-6
U20 — OUT ILIM FAULT IN GND EN — 6 5 4 1 2 3 — TPS2553QDBVRQ1
USB1+5V_1A5 — P5V0
GND
R80 10K — P3V3_DELAYED
R51 100R — MCU2DR_PWR1
R67 100R — DR_FLT1
R345 10K — P3V3_DELAYED
R186 470K
R181

C498 18PF — C499 18PF — Y5 24M — R644 0R — R643 0R
USB_DP_DN3 / USB_DM_DN3 — USB_DP_DN4 / USB_DM_DN4
IC-USB-TUSB4041I-HTQFP64-T1
U33 — USB_R1 VDD33 XI XO NC RSVD VDD33 RSVD RSVD VDD RSVD RSVD VDD RSVD RSVD VDD PWR4/EN3 PGND — USB_DP_DN3 USB_DM_DN3 RSVD RSVD VDD USB_DP_DN4 USB_DM_DN4 RSVD RSVD VDD RSVD RSVD VDD PWR3/EN2 PWR2/EN1 PWR1/EN0 SCL_SMBCLK SDA_SMBDAT FULLPWRMGMTZ/SMBA1 PWRCTL1/BATEN4 GANGED/SMBUS_ALSFEND PWRCTL2/BATEN2 OVERCURRZ AUTOENZ/HS_SLSFEND OVERCURR1Z OVERCURR2Z TEST VDD33 USB_DM_UP USB_DP_UP VDD33 GRSTZ TEST VDD TUSB4041
USB2_H1_DP / USB2_H1_DN
USB1_H1_DN / USB1_H1_DP
GND
VDD33
P3V3_DELAYED — 60R/1000MA — FB48 — 75MA — VDD11
USB_DP_DN3 / USB_DM_DN3
USB_DP_DN4 / USB_DM_DN4
USB1_H1_DN / USB1_H1_DP
USB_H1_DN / USB_H1_DP
GRSTZ_TCK
C497 1UF — GND — R536 10K — VDD33
TEST_TRSTZ
R640 90.9K — R639 10K — P5V0 — GND
PWRON4_BATEN4
PWRON3_BATEN3
PWRON2_BATEN2
PWRON1_BATEN1
SDA_SMBDAT
SCL_SMBCLK
SMBUSZ
FULLPWRMGMTZ
PWRCTL_POL_TDO
GANGED_IIS_UP
OVERCUR2Z_TMS
OVERCUR1Z_TDI
AUTOENZ
OVERCUR3Z_TCK
OVERCUR4Z

R445 4.7K — GND — R636 NC — SMBUSZ
R538 NC — GND — 4.7K R624 — PWRON3_BATEN3
R508 NC — GND — 4.7K R617 — PWRON2_BATEN2
R618 4.7K — PWRON1_BATEN1
R523 NC — GND
R517 NC — GND — 4.7K R619 — PWRON4_BATEN4
R504 NC — R626 NC — SCL_SMBCLK
R503 NC — R627 NC — SDA_SMBDAT
R630 4.7K — GND — PWRCTL_POL_TDO
R480 NC
R634 4.7K — GND — AUTOENZ
R485 NC
OVERCUR1Z_TDI — R635 NC — GND — VDD33
OVERCUR2Z_TMS — R637 NC — GND — VDD33
TEST_TRSTZ — R641 4.7K — GND — VDD33
R642 NC
¿ÉÌæ»»Ê±Ê¹ÓÃ
OVERCUR3Z_TCK — R533 NC — GND — VDD33
OVERCUR4Z — R632 NC — VDD33
R532 NC — GND
FULLPWRMGMTZ — R629 NC — VDD33
R478 4.7K — GND
GND — R479 4.7K — VDD33
GANGED_IIS_UP — R631 NC

SHF15 — SHF13 — USB1_H1_DP
NC — NC — USB1_H1_DN
SHF16 — SHF14
U10 — VDD11 — FB24 60R/1000MA — P3V3_DELAYED
OUT IN GND EN NC — 5 1 4 2 3 — TLV70212
C41 1NF — C51 22UF — R218 4.7K
C179 1UF — R175 4.7K
I2C1_SCL — R326 100R — SCL_SMBCLK
I2C1_SDA — R327 100R — SDA_SMBDAT
REST_HUB — R341 100R — GRSTZ_TCK

VDD33 — C45 22UF — C47 0.1UF — C48 0.1UF — C53 0.1UF — C55 0.1UF — C158 0.1UF
VDD11 — C56 22UF — C49 0.1UF — C50 0.1UF — C54 0.1UF — C64 0.1UF — C47 0.1UF — C156 0.1UF