U300-H

VDD18_PMU

DVDD18_MIPIRX — T25
DVSS18_MIPIRX — U25
DVDD18_MIPITX — R25
DVSS18_MIPITX — P25
AVDD18_USB — H23
AVDD33_USB — G24
AVSS33_USB — G23

VDD18_PMU
VUSB_PMU

C200 100nF
C201 100nF
C202 100nF
C203 1uF

REFP — F6
REFN — G6
C204 1uF

BG

mt6572

C205 100nF

AVDD28_DAC — F1
AVDD18_AP — E5
DVDD18_PLLGP — U9
AVDD18_MD — D3
AVSS18_MD — A1
AVSS18_MD — A4
AVSS18_MD — C3
AVSS18_MD — E2

VTCXO_PMU
VDD18_PMU
VDD18_PMU

C206 100nF
C207 100nF

VIO_EMI

U300-S

VCC Memory
VCCIO_EMI — W9
VCCIO_EMI — W12
VCCIO_EMI — W14
VCCIO_EMI — W16
VCCIO_EMI — W19

C240 100nF
C208 100nF
C209 100nF

GND
AC21, AR11, AF13, AD11, AC8, AB5, AB14, W26, T15, W23, T14, AP26, G3, K21, L11, L12, L14, L15, L16, M5, M11, M12, M13, M14, M15, M16, N10, N8, N9, N12, N13, N14, N15, N16, N22, P10, P11, P12, P13, P14, P15, P16, R10, R11, R12, R13, R14, R15, R16, T10, T11, T12, T13, AF1, U10, U11, V13, W11, Y21

DVDD Peripheral
DVDD18_MC0 — AA1
DVDD18_CAM — K20
DVDD18_VIO_1 — L3
DVDD18_VIO_2 — U19
DVDD18_VIO_3 — H13
DVDD18_LCD — AB24
DVDD3_MC1 — K24
DVDD3_LCD — W24
DVDD28_BPI — C10

VDD18_PMU
R200 0R
C210 2.2uF
VMC_PMU
VDD28_PMU
C212 2.2uF
C231 NC

VCC CPU
VCCK_CPU — P6, T7, P7, P8, P9, R6, R7, R8, R9, T6, U6, T9, T8, U7

VCC Core
VCCK — T9, T15, M9, K6, K7, K8, K9, K11, K14, K15, M10, K16, K17, I8, T7, L8, I9, L17, M6, M7, M8, T10, T11, T14, T16, L6, K12, T17, T16, L17, T12, U13, U14, U15, U16, M17, R17

C229 100nF, C228 100nF, C227 100nF, C226 100nF, C225 1uF, C224 1uF, C223 1uF, C219 1uF, C218 2.2uF, C217 2.2uF, C216 10uF, C215 10uF, C214 10uF, C213 10uF

VPROC_PMU
VPROC_PMU [2,4]

A26 — DUMMY

mt6572

SH1 8068-BB-SH
SH2 8068-RF-SH
SH3 8068-LED-SH
SH4 8068-WIFI-SH
SH5 8068-NFC-SH

U300-A (at6572)

Pin	Signal		Pin	Signal
[1] RX_BBIP	D2 DL_I_P		R12 BPI_BUS0	BPI_0 [1]
[1] RX_BBIN	C2 DL_I_N		R11 BPI_BUS1	BPI_1 [1]
[1] RX_BBQP	B1 DL_Q_P		C12 BPI_BUS2	BPI_2 [1]
[1] RX_BBQN	C1 DL_Q_N		A11 BPI_BUS3	BPI_3 [1]
[1] TX_BBIP	A2 UL_I_P		B11 BPI_BUS4	
[1] TX_BBIN	B2 UL_I_N		C11 BPI_BUS5	EINT_HP [6]
[1] TX_BBQP	B4 UL_Q_P		A13 BPI_BUS6	GPIO_GPS_LNA_EN [10]
[1] TX_BBQN	B3 UL_Q_N		R10 BPI_BUS7	GPIO_FLASH_EN [9]
[1] VM0	A8 VM0		D10 BPI_BUS8	GPIO_FLASH_SEL [9]
[1] VM1	A7 VM1		F9 BPI_BUS9	BPI1_BUS10 [1]
			E8 BPI_BUS10	BPI1_BUS11 [1]
[1] TXBPI	D5 TXBPI		B9 BPI_BUS11	BPI1_BUS12 [1]
[1] VAPC	F2 APC		B8 BPI_BUS12	BPI1_BUS13 [1]
	F3 VBIAS		E7 BPI_BUS13	EINT5_G [9]
			C7 BPI_BUS14	EINT8_G [9]
			D7 BPI_BUS15	
			D6 BSI_DATA2	BSI-A_DAT2 [1]
			C7 BSI_DATA1	BSI-A_DAT1 [1]
			F9 BSI_DATA0	BSI-A_DAT0 [1]
			F11 BSI_EN	BSI-A_EN [1]
			G11 BSI_CLK	BSI-A_CK [1]

U300-D (at6572)

Pin	Signal		Pin	Signal
[4] AUD_MISO	T1 AUD_DAT_MISO			
[4] AUD_CLK	K5 AUD_CLK_MOSI			
[4] AUD_MOSI	K1 AUD_DAT_MOSI			
[4] PMIC_SPI_MOSI	L2 PMIC_SPI_MOSI			
[4] PMIC_SPI_MISO	L5 PMIC_SPI_MISO			
[4] PMIC_SPI_SCK	L4 PMIC_SPI_SCK			
[4,5] PMIC_SPI_CS	K2 PMIC_SPI_CSN			
[4,5] WATCHDOG	G2 WATCHDOG			
[1,4] SRCLKENA	H4 SRCLKENA			
[1,4] EINT_PMIC	J2 EINTX			
[4] SIM1_SCLK	H5 SIM1_SCLK			
[4] SIM1_SIO	M3 SIM1_SIO			
[3,4] SIM2_SCLK	J5 SIM2_SCLK			
[4] SIM2_SIO	M1 SIM2_SIO			

VDD18_PMU — R320 — NC — SIM2_SCLK [3,4]

U300-G (at6572) — MIPI_2nd_CAM Parallel 8-bit

Pin	Signal
[9] GPIO_CMPDN2	L25 CMPDN2
[9] GPIO_CMRST2	K25 CMRST2
[9] GPIO_CMPDN	H22 CMPDN
[9] GPIO_CMRST	J22 CMRST
R24 RDN0	
R23 RDP0	
R22 RDN1	
R21 RDP1	
R26 RCN	
T26 RCP	
P19 TDN0	
P20 TDP0	
N25 TDN1	
N26 TDP1	
P23 TDN2	
P24 TDP2	
N20 TCN	
N19 TCP	
P26 VRT	

MIPI_CAM / MIPI_LCD

CMMCLK Y22 — CMMCLK [9]
CMPCLK Y23 — CMPCLK [9]
RCN_A V25 CMVREF [9]
RCP_A W25 CMHREF [9]
RDN1_A V24 CMDAT7 [9]
RDP1_A V23 CMDAT6 [9]
RDN0_A U22 CMDAT5 [9]
RDP0_A U21 CMDAT4 [9]
CMDAT3 Y26 CMDAT3 [9]
CMDAT2 Y25 CMDAT2 [9]
CMDAT1 AA25 CMDAT1 [9]
CMDAT0 AB25 CMDAT0 [9]

[8] MIPI_D0- P19
[8] MIPI_D0+ P20
[8] MIPI_D1- N25
[8] MIPI_D1+ N26
[8] MIPI_D2- P23
[8] MIPI_D2+ P24
[8] MIPI_CLK- N20
[8] MIPI_CLK+ N19

R301 1.5K MIPI_VRT P26 VRT

C301 56pF

U300-E (at6572)

Pin	Signal	Block		Pin	Signal
[1] CLK1_BB	E1 CLK26M	SYSTEM / PWM		D12 PWM_A	PWM1 [8]
[4] CLK32K_BB	H2 CLK32K_IN			E12 PWM_B	EINT1_CTP [8]
[4] RESETB	M2 SYSRSTB	LCD Parallel		N1 LPD17	EINT0_GYRO [9]
	G4 TESTMODE			N2 LPD16	EINT_MAG [9]
	AC24 FSOURCE			N3 LPD15	GPIO_CTP_RST [8]
				N4 LPD14	ENT3_SWIPE_SENSOR [7]
[4] CHD_DP	J26 CHD_DP	BC 1.1		P2 LPD13	EINT4_ALS [9]
[4] CHD_DM	J25 CHD_DM			N5 LPD12	
				R1 LPD11	EINT_IRQ_NFC [11]
[7] USB_DM	G26 USB_DM	USB 2.0		R2 LPD10	GPIO7a_NFC_ENABLE [11]
[7] USB_DP	G25 USB_DP			P5 LPD9	NFC_GPIO [11]
	H25 USB_VRT			T1 LPD8	
R303 5.1K/1% USB_VRT				R5 LPD7	
[3,9,11] SCL_0	C25 SCL_0	i2c		P2 LPD6	
[3,9,11] SDA_0	C26 SDA_0			L5 LPD5	
[3,8,9] SCL_1	R24 SCL_1			L4 LPD4	
[3,8,9] SDA_1	B23 SDA_1			J2 LPD3	
				L5 LPD2	PWM_E [7]
[7] SPI_MI	F24 SPI_MISO	SPI		L1 LPD1	PWM_D [7]
[7] SPI_MO	F25 SPI_MOSI			Y2 LPD0	PWM_C [7]
[7] SPI_CS	E23 SPI_CS			AD25 LPCE0B	LPTE [8]
	E23 SPI_SCK			AB26 LPTE	LRSTB [8]
				AC26 LRSTB	
[8] MC1CMD	K23 MC1_CMD	T-flash / KP		AA22 LPROB	
[8] MC1CK	L21 MC1_CK			AB23 LPA0	
[8] MC1DA0	K22 MC1_DAT0			AC25 LPWRB	
[8] MC1DA1	M22 MC1_DAT1			R25 KROW0	KROW0 [7]
[8] MC1DA2	M25 MC1_DAT2			A24 KROW1	KROW1 [7]
[8] MC1DA3	L26 MC1_DAT3			R26 KROW2	KROW2 [7]
				C24 KCOL0	KCOL0 [7]
	R7 AUX_IN0	ADC		D24 KCOL1	KCOL1 [7]
	R6 AUX_IN1			A25 KCOL2	SWIPE_SENSOR_RST [7]
	C5 AUX_IN2_XP			E25 UTXD1	UTXD1 TP300
	B5 AUX_IN3_YP	UART		H25 URXD1	URXD1 TP302
	C4 AUX_IN4_XM			E26 UTXD2	
	A5 AUX_IN5_YM			F26 URXD2	

VCAM_IOPMU — R304 R305 2.2K 2.2K — [3,9,11] SCL_0, SDA_0

VDD18_PMU — R310 R309 2.2K 2.2K — [3,8,9] SCL_1, SDA_1

[4] MICBIAS0 —— R601 1K
R602
1.5K
[4] MICP0 —— C601 100nF
C603
4.7uF
MIC_P [7]
MIC_N [7]
[4] MICN0 —— C602 100nF
R603
1.5K
R604 1K

[4] MICBIAS1
R621
1K
[4] MICN1 —— C621 100nF ———— C626 4.7uF
R622
C623 1.5K
33pF
C622
100pF
C624
33pF
[4] MICP1 —— C625 100nF
XMICP [6]
[4] ACCDET —— R623 1K

C611
33pF
RV611
TVS
[4] HSN —— B611 75@100MHz
REC611
C612
100pF
[4] HSP —— B612 75@100MHz
RV612
TVS
REC(SMT NC)
C613
33pF

[4] HPLP —— B621 75@100MHz C627 10uF R624 100R —— XMP3_L [6]
[4,7] HPRP —— B622 75@100MHz C628 10uF R625 100R —— XMP3_R [6]

[2,4,8,9] VDD28_PMU
R626
470K
[3] EINT_HP —— R627 47K
[6] XMP3_R
B623 1.8K@100MHz
[6] XMP3_L
B624 1.8K@100MHz
[6] XMICP
B625 1.8K@100MHz
C631 C632 RV621 RV622 RV623 R628 R629
33pF 33pF NC NC NC 470R 470R
EINT_HP
L R GND
MIC GND
CON601
Ear Jack
RV624
NC
B626
100nH
FM_RF [10]
R630 0R FM_RX_N_6572 [10]

CON703
SMT NC

[4] PWRKEY
TV5700
Varistor

CON701   USB-MICRO5P
1 USB_POWER
VBUS
[3,7] USB_DM   2 USB_DM
[3,7] USB_DP   3 USB_DP
GND 6
GND 7
GND 8
GND 9
4 ID
5 GND
TV5711 TV5712 TV5710
NC   NC   NC

[3] KCOL0   R714 1K   KCOL0_0 [7]
[3] KCOL1   R712 1K   KCOL1_1 [7]
[3] KROW0   R715 1K   KROW0_0 [7]
[3] KROW1   R716 1K   KROW1_1 [7]
[3] KROW2   R717 1K   KROW2_2 [7]

CON702
[7] KCOL0_0   1
[7] KROW0_0   2
              3
[7] KCOL1_1   4
Side key pad

TV5701 TV5702 TV5703
Varistor Varistor Varistor

[1,4,7,8,9,11] VBAT   1 VBAT
[3,7] USB_DM   1 DM
[3,7] USB_DP   1 DP
[4,7] VBUS   1 VBUS
                           1 GND

CON700
[4]   VIBR_PMU   1
                             2
[1,4,7,8,9,11] VBAT   3
[4]   LED_KEYPAD   4
                             5
[7]   KROW1_1   6
[7]   KROW2_2   7
[7]   KCOL0_0   8
[7]   KCOL1_1   9
                            10
[6]   MIC_P   11
[6]   MIC_N   12
                            13
[4]   SPK1_P   14
[4]   SPK1_N   15
                            16
[4,6]   HPRP   17
                            18
                            19
[3]   PWM_E   20
[3]   PWM_D   21
[3]   PWM_C   22
[1,2,3,4,5,8,9,11] VDD18_PMU 23
[3]   SWIPE_SENSOR_RST 24
[3]   SPI_MO   25
[3]   SPI_MI   26
[3]   SPI_CLK   27
[3]   SPI_CS   28
[3]   ENT3_SWIPE_SENSOR 29

MARK1   MARK2   MARK3   MARK4
1   1   1   1
MARKD3MM   MARKD3MM   MARKD3MM   MARKD3MM

VSIM_A

[4] SIM0_A

SIM801
Sim Card Con
GND VCC
VPP RST
I/O CLK

SIMRST_A [4]
SIMCLK_A [4]

C800 100nF
RV904 NC
RV905 NC
RV906 NC

VSIM_B

R800 0R
R841 0R

SIM802
Sim Card Con
GND VCC
VPP RST
I/O CLK

SIM1_NFC_SWP1 [11]
R846 NC
SIM0_B [4]

R842 NC

NFC_SIMVCC [11]
SIMRST_B [4]
SIMCLK_B [4]

C801 100nF
RV903 NC
RV908 NC RV900 NC

VMCH_PMU
C821 2.2uF

TF800 TFLASH1.1MM

MC1DA2 [3]
MC1DA3 [3]
MC1CM3 [3]
MC1CK [3]
MC1DA0 [3]
MC1DA1 [3]

DAT2
CD/DAT3
CMD
VDD
CLK
VSS
DAT0
DAT1
GND GND GND GND

VBAT

C816 4.7uF

L801 10uH/2520

U801 SGM3732
VIN LX
EN VOUT
GND FB

VD820

C819 1uF/50V/1.0mm/ 0603

PWM1 [3]

R822 100K

R805 0R

R806
SR1

LEDA [8]
LEDK [8]

TP9 TP10 TP11

VDD26_PMU
VDD18_PMU
[2,4,6,9]
[1,2,3,4,5,7,8,9,11]

TP5 TP6 TP7 TP8 VDD18_PMU VDD26_PMU

CTP800 CTP Connector
GND
AVDD
SCL (YP)
SDA (XL)
EINT (XR)
RST (YM)
VID
GND

SCL_1 [2,9]
SDA_1 [2,9]
EINT1_CTP [3]
GPIO_CTP_RST [2]

RV900 NC RV901 NC RV902 NC RV603 NC
C811 1uF C810 1uF

EMI832 EMI0806
MIPI_D1+ [3] I1 O1 MIPI_TDP1_1 [8]
MIPI_D1- [3] I2 O2 MIPI_TDN1_1 [8]

EMI860 EMI0806
MIPI_D2+ [3] I1 O1 MIPI_TDP2_1 [8]
MIPI_D2- [3] I2 O2 MIPI_TDN2_1 [8]

EMI830 EMI0806
MIPI_CLK+ [3] I1 O1 MIPI_TCN_1 [8]
MIPI_CLK- [3] I2 O2 MIPI_TCP_1 [8]

EMI831 EMI0806
MIPI_D0+ [3] I1 O1 MIPI_TDP0_1 [8]
MIPI_D0- [3] I2 O2 MIPI_TDN0_1 [8]

VDD28_PMU VDD18_PMU

LCD830

LEDA [8]
LEDK [8]

LPTE [2]
LRSTB [2]

MIPI_TDP2_1 [8]
MIPI_TDN2_1 [8]
MIPI_TDP1_1 [8]
MIPI_TDN1_1 [8]
MIPI_TDP0_1 [8]
MIPI_TDN0_1 [8]
MIPI_TCP_1 [8]
MIPI_TCN_1 [8]

C831 1uF C830 1uF

CAM900

GPIO_CMRST [3]
GPIO_CMPDN [3]

VCAMD_PMU
VCAMA_PMU

C901 C902 C903 C904
2.2uF 100nF 2.2uF 100nF

CMVREF [3,9]
CMVREF [3,9]
CMPCLK [3,9]
CMVCLK [3,9]
SCL_0 [3,9,11]
SDA_0 [3,9,11]
CMDAT0 [3,9]
CMDAT1 [3,9]
CMDAT2 [3,9]

VCAM_ICPMU

CMDAT3 [3,9]
CMDAT4 [3,9]
CMDAT5 [3,9]
CMDAT6 [3,9]
CMDAT7 [3,9]
CMDAT0 [3,9]

VCAM_AFPMU

C905 C906 C907 C908
2.2uF 100nF 2.2uF 100nF

BBCON-28P-P04

CAM901

GPIO_CMRST2 [3]

VCAMD_PMU
VCAMA_PMU

C915 C918 C916 C919
2.2uF 100nF 2.2uF 100nF

GPIO_CMPDN2 [3]
CMVREF [3,9]
CMVREF [3,9]
CMPCLK [3,9]
CMVCLK [3,9]
SCL_0 [3,9,11]
SDA_0 [3,9,11]
CMDAT0 [3,9]
CMDAT2 [3,9]
CMDAT1 [3,9]

VCAM_ICPMU

CMDAT3 [3,9]
CMDAT5 [3,9]
CMDAT4 [3,9]
CMDAT7 [3,9]
CMDAT6 [3,9]

C917 C920
2.2uF 100nF

FPC-P08-20P

VDD28_PMU VDD18_PMU   VDD18_PMU

U920

VDD   RSTN   R920   0R
VID   TRQ
TST1   SCL/SK   SCL_1 [3,8,9]
RSV   SDA/SI   SDA_1 [3,8,9]
CAD0   SO
CAD1   CSB
VSS   DRDY   R921   0R   EINT_MAG [3]
       CAP

C911
100nF
C912
100nF

C910
4.7uF

MT6572 DRL M-sensor

VDD18_PMU   VDD28_PMU   VDD18_PMU

C914
4.7uF

MMA8452Q

VDDIO   NC
BYP   GND
NC   INT1   EINT8_G [3]
SCL   GND
SDA   INT2   EINT5_G [3]
GND

C912 C913
100nF 100nF

SCL_1 [3,8,9]
SDA_1 [3,8,9]

D901

R901   0R

VBAT

R922

U990

VIN   VOUT
C1   PGND
C2   SGND
FLASH FB
EN   RSET
GND

C990
10uF

C991
1uF

C992
10uF

LED990
BL-HZB32X-TRB

LED991
MOTOR_2PIN

GPIO_FLASH_SEL [3]
GPIO_FLASH_EN [3]

R993
100K

R994
30K

R995
0.2R/0805/1%

R996

FLASHLED [4]

VDD18_PMU   VDD28_PMU   VBAT

R902
4.7K

J900

SDA_1 [3,8,9]   VCC
SCL_1 [3,8,9]   SDA
EINT4_ALS [3]   SCL
                 INT
                 VLED
                 GND

APDS_9900

SCL_1 [3,8,9]
SDA_1 [3,8,9]

U980
MPU-3050

VDD28_PMU

CLKIN
NC
NC
NC
NC
INE_CL

VDD18_PMU

C983
10nF
C982
100nF

EINT0_GYRO [3]

C981
100nF

C980
2.2uF

MT6627PN_QFN40

MT6627-NS/MQFN40/SMD/P0.4/5X5

R1225 1K   C1208 1nF
C1206 100nF
R1204 2K
[11] PF1   C1211 56pF
[11] TX1   R1213 560nH   C1218 33pF   R1208 0R   ANT1200 Wifi Ant Pad
C1220 180pF   C1214 82pF
C1221 180pF   C1215 82pF
[11] TX2   R1212 560nH   C1219 33pF   R1206 0R   ANT1201 Wifi Ant Pad
[11] PF2   C1212 56pF

TX2 [11]
TX1 [11]
PF2 [11]
R1200 NC
PF1 [11]

VBAT   VBAT
VDD18_PMU   R1205 0R   PVDD

H8 H7 H6 H5 H4 H3 H2 H1
TVSS2 TX2 TX1 TVSS1 RX AVSS2 TEST6 RFU3/RST
G8 G7 G6 G5 G4 G3 G2 G1
TVDD PMU_GND PF2 VMID TEST9 TEST8 AVDD_IN

A1 GPIO7
A2 IFSEL0
A3 IRQ
A4 PVDD
A5 DVDD
A6 TEST1
A7 RFU1/CLK
A8 PMUVCC

PVDD
C1252 100nF   C1253 100nF

U1200
PN544

F8 VBAT2   VBAT
F7 TVDD_OUT   C1204 1uF
F6 VSS
F5 IFSEL2   PVDD
F4 IFSEL1
F3 TEST7
F2 AVDD_OUT   C1250 1uF
F1 XTAL2   NFC_CLK2 [11]
NFC_CLK1 [11]

G1200
[11] NFC_CLK2   OUT/HOT   GND/GND
VCC/GND   VC/HOT   NFC_CLK1 [11]
C1201 10pF   27.12MHz   C1202 10pF

B1 GPIO4   [3] NFC_GPIO
B2 GPIO5
B3 GPIO6   R1299 0R
B4 IF1/MOSI
B5 PVSS   PVDD
B6 TEST2
B7 VEN   [3] EINT_IRQ_NFC / NFC_VEN [11]
B8 SIMVCC

E8 VEN_MON
E7 SIGIN   R1298 0R
E6 RFU2/I/IO1
E5 TEST5
E4 IF0/NSS
E3 GPIO0
E2 AVSS1   R1297 NC   R1296 0R   PVDD [11]
E1 XTAL1   R1295 0R

PVDD   VBAT
R1201 1M
U1202
N-Mosfet
[3] GPIO76_NFC_ENABLE   NFC_VEN [11]

C1209 470nF

C1 VDHF
C2 GPIO3
C3 GPIO2
C4 IF2/SDA/SCK
C5 TEST3
C6 TEST10
C7 SWP
C8 SVDD

D1 VCC_VDD
D2 DVSS
D3 GPIO1
D4 IF3/SCL/MISO
D5 TEST4
D6 EXT_SW_CTRL
D7 SIGOUT
D8 VBAT   VBAT

C1207 10uF
C1210 100nF   C1222 100nF   PVDD   C1223 100nF

[4,8] VSIM_B
[8] NFC_SIMVCC
[8] SIM1_NFC_SWP1

[3,9] SDA_0
[3,9] SCL_0