

# A668 Block Diagram Signal Description



Signal	From		To		Description
	Lower PCB	Upper PCB	Lower PCB	Upper PCB	
<b>Lower PCB</b>					
FDP	U201		U501		Flash Reset
/BLE	U201		U501		RAM lower byte enables
/BHE	U201		U501		RAM upper byte enables
/CS0	U201		U304	U108	For AIT LCD controller chipselect1
/CS1	U201		U101		Chip select for Melody IC
CS2 = BKN_CS	U201	CON101	CN303	U108	For AIT LCD controller chipselect
/CS4	U201		U304	U108	For AIT LCD controller chipselect2
/CS3	U201		U501		PSRAM chip select
/CS5	U201		U503		To generate two chip selects for Intel memory U501
A24	U201		U504 / U503		To generate two chip selects for Intel memory U501
/WE = WE = WE_B	U201		U501 / U101 / U305		Write Enable
HWE	U305			U108	Write Enable after EMI filter
/RD = RD = RD_B	U201		U501 / U101 / U301		Read Enable
HRD	U305			U108	Read Enable after EMI filter
D[0..15]	U201		U501 / U304 / U305		Data Bus
D[0..7]	U201		U101		Data Bus
HD[0..15]	U304 / U305		CN303	CON104 / U109	Data BUS after EMI filter
A[1:23]	U201		U501		Address
MVBAT	L304		U202 / R404 / R405 / U602 / U607		Battery supply for RF circuit
VBAT	U703		U202 / U501 / U502 / CN303	CON101 / U101 / U102 / U210 / U211 / R203	Battery supply for baseband circuit
V-ABB	U202		U201 / U60		Voltage output of U202 regulator
V-DBB	U202		U201		Voltage output of U202 regulator
V-IO	U202		U201 / U401 / U102		Voltage output of U202 regulator
V-SRAM	U202		U201 / U501 / U309		Voltage output of U202 regulator for SRAM
V-Flash	U202		U201 / U501 / U502		Voltage output of U202 regulator for Flash
13M_OUT	U201		U202 / U101 / U205		13MHz clock output
13M_OUT_U	U205		ESD313		13MHz clock output
/MELODY_RST	U201		U101		Reset for melody IC
MICBIAS	U202		R107		MIC Bias
MICP	U202		C112		Mic positive
MICN	U202		C111		Mic negative
HSC	U202		U103		Headset EAR
VOICE_MELODY	U201		U103		Voice / melody select

TEMPO	U201		U201		Melody tempo
TEMP_SEL	U201		U607		Enable RF LDO
HOOK_SW	U201		U105		Connect / disconnect a call via HOOK button in headset
EP_Status	U201		R112 / CON102		Detect if headset is plugged in
Hall_Sensor	U201		U102 / R111 / C114		Detect Phone opened or closed
HOOK_ADC	U202		R105 / R106		Hook voltage
BAT_TEMP	U202		CON304		Battery temperature
Bat_state	U201		U703		Battery detect for charging circuit
BL_EN = HBL_EN	U201		U301		Enable LCM backlight
ACC_ID	U201		U308		Accessory detect
A18 = BKN_A1 = HBKN_A1	U201	CON101	U305	U108	Command / data select for AIT LCD controller
A25 = LDO2_EN = HLDO2_EN	U201		U301		LCM reset signal
VIB = HVIB	U201	CON101	CN303	R206 / T201	Vibrator enable
BKN_RST = HBKN_RST	U201	CON101	CN303	U108	RESET for AIT LCD controller
BKN_BYP = HBKN_BYP	U201	CON101	CN303	U108	Bypass mode control for LCD controller
DR	U201		CON306		Finger Writing data ready
STBY	U201		CON306		Finger Writing standby
32K_BB	U201		U202		32KHz clock output
EARP	U202	CON101	CN303	L201	EAR positive
EARN	U202	CON101	CN303	L201	EAR negative
SIMIO	U202		CON301		SIM IO
SIMCLK	U202		CON301		SIM clock
SIMRST	U202		CON301		SIM Reset
VRSIM	U202		CON301		Supply for SIM
VCHG	U202		U701		Charging voltage indication from USB connector
TX1	U201		TP222		Test point for UART Transmitted data
RX1	U201		TP221		Test point for UART Receive data
EXT_PW_EN	U201		U704		Supply to external device enable
Light_Sensor	U202		U401		Voltage for illumination indication
KeypadLED	U201		U402 / R401		Keypad LED control
PWON	U201		S424		Power-on signal
KBR[0..4]	U201		S401-S422		Keypad ROWs
KBC[0..4]	U201		S401-S422		Keypad columns
MOSI	U201		CON306		SPI DATA OUT
MISO	U201		CON306		SPI DATA IN
SCK	U201		CON306		SPI clock
CLK	U201		U601		3 wire bus for RF chipset
LE	U201		U601		3 wire bus for RF chipset
DATAIN	U201		U601		3 wire bus for RF chipset
VC1 = VC1_1	U601		U604		Control logic for TR_SW

VC2 = VC1_2	U601		U604		Control logic for TR_SW
VC3 = VC1_3	U601		U604		Control logic for TR_SW
TCXOEN	U201		U601		RF Chipset enable and system wake up signal
BS	U201		U602		Band select for power amplifier
APC	U202		U602		PA ramp control
26MHz	C626		U201		26MHz clock to U201
AFC	U202		U603		Automatic frequency control
RXIP	U601		U202		Positive In phase baseband signal from receiver
RXIN	U601		U202		Negative In phase baseband signal from receiver
RXQP	U601		U202		Positive Quadratur-phase signal from receiver
RXQN	U601		U202		Negative Quadratur-phase signal from receiver
TXIP	U601		U202		TRANSMIT Baseband I signals
TXIN	U601		U202		TRANSMIT Baseband IX signals (180degree phase shifted I signal)
TXQP	U601		U202		TRANSMIT Baseband Q signals
TXQN	U601		U202		TRANSMIT Baseband QX signals (180degree phase shifted Q signal)
Speaker_P = SP+	U101		L301		Speaker Positive signal
Speaker_N = SP-	U101		L301		Speaker negative signal
VUSB	CON302		FUSE701		charging voltage from charger
BAT_ID	CON304		U202		Battery ID
PA_EN	U601		U602		PA enable
<b>Upper PCB</b>					
LAD1		U108		CON103	Main/ Sub LCM register select signal
LWR		U108		CON103	Main/ Sub LCM write enable
LRD		U108		CON103	Main / Sub LCM read enable
M_LCD		U108		CON103	Main LCM chip select
S_LCD		U108		CON104	Sub LCM chip select
RSTB	U201	CON101	CN303	CON103	LCM reset
LD[0..17]		U108		CON103	Data Bus for Main LCD
LCM_BL1		U210		CON103	Power supply for LCM backlight
LCM_BL2		U210		CON103	Power supply for LCM backlight
LCM_BL3		U210		CON103	Power supply for LCM backlight
CSDA		U108		CN102	I2C data for camera control
CSCL		U108		CN102	I3C data for camera control
BL_EN	U201	CON101	CN303	U210	LCM backlight control
13M_OUT		CON101		U108	13Mhz clock input for AIT LCD controller
CCLKIN		U108		CON102	Camera clock input to AIT LCD controller
CCLKOUT		U108		CON102	Clock input to camera module
CHREF		U108		CON102	camera Horizontal effective pixel synchronization output
CVREF		U108		CON102	camera vertical synchronization signal output
CD[0..7]		CON105		U109	Digital video output signal

1V8		U101		U108 / CN102	1.8V for LCD controller and CMOS sensor
2V8A		U102		CN102	2.8V for CMOS sensor
2V8D		U101		U108 / CN102	2.8V for LCD controller and CMOS sensor
CRESET		U108		CN102	camera reset signal input
CPDWN		U108		CN102	camera powerdown signal input
LDO1_EN	U201	CON101	CN303	U101 / U102	Enable LDOs for LCD controller, CMOS sensor and LCM
LDO2_EN	U201	CON101	CN303	U102	Enable LDOs for LCD controller, CMOS sensor and LCM
FLASH_EN		U108		U209	Flash light control
LED_R		U108		T202	3 color indicator
LED_G		U108		U203	3 color indicator
LED_B		U108		U203	3 color indicator