

MDS Block Diagram Signal Description



Signal	From			To			Description
	Lower PCB	Board to Board	Upper PCB	Lower PCB	Board to Board	Upper PCB	
/CE (/NFLSCE1)	U330			U03			NAND Flash chip select
/PG	U0102			U0407			Indicates when a valid power supply is present for the charger and enable U0407
/PWRFAIL	U0102			U330			Indicates when low battery or an over temperature condition
/RE	U330			U03			NAND Flash read enable
/WE	U330			U03			NAND Flash write enable
/WP	U330			U03			NAND Flash write protect
Adapter-in	T0401			U0408,U0402			Supply for U0408 power
Adin	T0401			U0102			Charger input voltage from ac adapter or USB
Ad-in	CN1103			D0404			adapter charger insert
ALE	U330			U03			NAND Flash address latch enable
AUDIOinsert	CN1103			U330			CE BUS for detecting Audio Sense
Audio-sel	U0902			U0906			shut-down U0906
Bat-FDBK-en	U0102			CN1103			Battery Feedback signal for external Charger equipment to drive Charger voltage output
BATT-Cover	XXXX			U0102			Indicates if battery cover is in place
Battery-temp	CON0406			U0102 U1110			Battery temperature sense
BT-RESET	U330			U2			RESET bluetooth
BT-RX	U2			U330			U330 UART2 receive data
BT-TX	U330			U2			U330 UART2 transmit data
BUL_SS_2101	U330			U0902			SPI Slave Select Input
BUL_SSPRXD_2101	U330			U0902			SPI Serial Data Input
BUL_SSPCLK3_2101	U330			U0902			SPI Serial Clock Input
BUL_SSPTXD3_2101	U0902			U330			SPI Serial Data Output
CAM-CLK	U330			CN1		CN1601	Camera interface line clock
CAM-D0-7	U330			CN1		CN1601	Camera digital image data bits
CAM-EXCLK	U330			CN1		CN1601	Camera interface external clock
CAM-HS	U330			CN1		CN1601	Camera horizontal synchronization
CAM-RST	U330			CN1		CN1601	Camera interface reset
CAM-VS	U330			CN1		CN1601	Camera vertical synchronization
CE-RTS1	U1169			U330			Detect USB insert
Charger-ID	R1113			CN1301			Detect charger ID
CLE	U330			U03			NAND Flash common latch enable
CODEC-powerdown	U330			U0902			shut-down U0902
COMOS-ON	U330			CN1		CN1601	Enable/disable Camera
CS_SDRAM	U330			U03			SDRAM chip-select/power-down control signal
DSEL0	U1002			U330			detect CE BUS accessory
DSEL0-CE	U1002			CN1103			detect CE BUS accessory through U1002
DSEL1	U1001			U330			detect CE BUS accessory
DSEL1-CE	U1001			CN1103			detect CE BUS accessory through U1001
DSEL2	U330			CN1103			detect CE BUS accessory
Flash-driver-en	U330			CN1		U1606	enable signal for Flash-Light
GSM_HSMICP_2101	U0902			CN1301			Output to GSM Module
GSM_HSO_2101	CN1301			U0902			Input from GSM Module
GSM_Reset	U0102			CN1301			For GSM Module Reset
GSM_SIMCLK	CN1301			CON1503		SIM1	output CLock from Sim Card Interface to SIM Card
GSM_SIMIO	CN1301			CON1503		SIM1	Data In and Output from and to SIM Card / Interface
GSM_SIMRST	CN1301			CON1503		SIM1	active low ReSeT signal from SIM interface
GSM_SIMVCC	CN1301			CON1503		SIM1	SIM Card support voltage VCC 1.8 or 3V

GSM-CTS	U330			CN1301			U330 UART3 request to send
Signal	From			To			Description
	Lower PCB	Board to Board	Upper PCB	Lower PCB	Board to Board	Upper PCB	
GSM-DCD	CN1301			U330			hardware flow protocol
GSM-MCSI-CLK	CN1301			U2			synchronous data clock
GSM-MCSI-Din	CN1301			U2			synchronous data output to U2
GSM-MCSI-Dout	U2			CN1301			synchronous data input to U2
GSM-MCSI-SYNC	CN1301			U2			synchronous data sync
GSM-ON	U0102			CN1301			For GSM Module ON/OFF
GSM-RTS	CN1301			U330			U330 UART3 clear to send
GSM-RX	U330			CN1301			U330 uart3 transmit data to GSM module
GSM-TX	U330			CN1301			U330 uart3 receive data to GSM module
GSM-Wakeup	U330			CN1301			Wake-up GSM module
HALL_SENSOR_DET	U602			U330			Hall sensor detect
Headset_Mic	C0913			1001			Handfree MIC output through C0913
HEADSET_MIC_BIAS	U0902			R0909			MIC-Bais voltage
HEADSET_MICN_IN	U0902			CON0926			Mic- output
Headset_MICP_IN	U0902			C0913			Handfree MIC output
HEADSET_MICP_IN	U0902			CON0926			Mic+ output
HL	U0906			1001			Headset Driver Output
HL2101	U0902			C0986			Headset Driver Output
Hook-CE	CN1103			U330			CE Bus accessory signal
HOOK-sw	U1010			U330			detecting handfree hook switch activity
HR	U0906			1001			Headset Driver Output
HR2101	U0902			C0985			Headset Driver Output
HSD	U0902			CN1103			CE BUS Audio Output through R1103 and C1104
I2C-SCLK	U330			U0102			Serial interface clock line
I2C-SDA	U330			U0102			Serial interface data/address
I2S_BITCLK_2101	U330			U0902			I2S Bit clock
I2S_DATA_IN_2101	U330			U0902			I2S Data input
I2S_DATA_OUT_2101	U0902			U330			I2S Data Output
I2S_SYNC_2101	U330			U0902			I2S sync
I2S_SYSCLK_2101	U330			U0902			I2S Word Clock
Insert-detect	1001			U330			handsfree insertion detection
IO0-7	U330			U03			NAND Flash multiplexed data/address
IRDA-SD	U330			U0507			IrDA Shut down
KBC0-1	U330			Keypad			Keypad (Board) Colum Strobe
KBR0-7	U330			Keypad			Keypad (Board) Row Sense
KeypadLED-EN	U0102			D06XX			enable signal for Keyboard BackLight
LCD11-15	U330			CN1		CN1602	LCD Red pixel data bits
LCD5-10	U330			CN1		CN1602	LCD Green pixel data bits
LCD-AC	U330			CN1		CN1602	LCD ac-bias
LCD-B	U330			CN1		CN1602	Blue bit in 18-bit LCD
LCD-D0-4	U330			CN1		CN1602	LCD Blue pixel data bits
LCD-Din			CON3	U330		CN2	SUB LCD data output
LCD-Dout	U330			CON1503		CON3	SUB LCD data input
LCD-HSYNC	U330			CN1		CN1602	LCD horizontal sync
LCD-PCLK	U330			CN1		CN1602	LCD pixel clock output
LCD-R	U330			CN1		CN1602	Red bit in 18-bit LCD
LCD-SCLK	U330			CON1503		CON3	Sub LCD clock
LCD-VSYNC	U330			CN1		CN1602	LCD vertical sync
Low-Power	U330			U0102			indicating deep sleep mode
MIC-bias	U0416			R0911			Handfree MIC bias voltage



Signal	Lower PCB	Board to Board	Upper PCB	Lower PCB	Board to Board	Upper PCB	Description
MIC-in	CN1103			U0902			CE BUS MIC INPUT
MMC-CLK	U330			CON1503	CN2		SD card clock
Signal	From			To			Description
	Lower PCB	Board to Board	Upper PCB	Lower PCB	Board to Board	Upper PCB	
MMC-CMD	U330			CON1503	CN2		SD card command
MMC-DAT0	U330			CON1503	CN2		SD card data bit 0
MMC-DAT1	U330			CON1503	CN2		SD card data bit 1
MMC-DAT2	U330			CON1503	CON1503		SD card data bit2
MMC-DAT3	U330			CON1503	CN2		SD card data bit 3
MUTE	U330			CN1103			Mute signal to CE Bus accessory
nMPU-RESET	U0102			U330			resets the U330 MPU core.
nRESET-OUT	U330			U0902			Reset U0902 Driver
Nrespwron	U0102			U330			resets the U330 device.
nSCAS	U330			U03			SDRAM column address strobe
nSDQML	U330			U03			SDRAM low data mask
nSDQMU	U330			U03			SDRAM upper data mask
nSRAS	U330			U03			SDRAM row address strobe
nSWE	U330			U03			SDRAM write enable
nSWE	U330			U03			SDRAM write enable
ON/OFF	U1366 U0513			U0102			Power ON/OFF U0102
OP-EN	U330			U0904			shut-down U0904
OPTION1	CN1103			U1103			for detecting CE BUS accessorys
OPTION1-CE	U1003			U330			detecting CE BUS accessorys or connect GND for nRESET-OUT signal control
OPTION2	U1004			U0205			Switch OPTION2_1 and nMPU-RESET signal
OPTION2-CE	CN1103			U1004			for detecting CE BUS accessorys
Photo-sensor	U0605			CN1301			Enviroment light measurement
PWL	U330			CN1		U1601	Control LCM Backlight LED
PWR-INT	U0102			U330			Indicates a charge fault or termination
RDY/Nbusy	U03			U330			NAND Flash ready signal/busy signal
RESET-lcd	U330			CN1		CN1602	Reset LCD
RX1	U0507, U1107			U330			Uart1 receive data, From U0507: IrDA signal. From U1107: RX signal come from CE Bus accessory
RX2	U1002			CN1301			GSM Module UART2 receive data
SADD0-12	U330			U03			SDRAM address bus
SBANK0-1	U330			U03			SDRAM bank address bus
SCLK	U330			CN1		CN1601	serial interface clock
SD_DET		CN2			CON1503	U330	Detect SD card insert
SDA	U330			CN1		CN1601	serial interface data I/O
SDCLK	U330			U03			SDRAM clock
SDCLK_EN	U330			U03			SDRAM clock enable
SDTAT0-15	U330			U03			SDRAM data bus
SPEAKER8_N_2101	U0904			CN1		U1603	Speaker- output through OP(U0904) amplify signal
SPEAKER8_P_2101	U0904			CN1		U1603	Speaker + output through OP(U0904) amplify signal
STATUS	U330			U1101			Switch Vcc-ntc or VBATT output voltage
SUBLCD-CS	U330			CON1503		CON3	Sub LCD Chip select
SWB	U1106			CN1103			CE BUS accessory power
SWB-EN	U330			U1106			Enable SWB power
Test-mode	U330			U1001 U1002			switch URAT or detect CE BUS accessory
TSC_SPK_n	U0902			C0962			Speaker - output
TSC_SPK_P	U0902			C0961			Speaker + output
TX1	U330			U0507,U1107			Uart1 TX, To U0507: IrDA, To U1107: to CEBUS accessory
TX2	CN1301			U1001			GSM Module UART2 transmit data
USB/RXD	U1107			CN1103			USB-/UART RX signal
USB/TXD	U1107			CN1103			USB+/UART TX signal



USB_PU_EN	U330			R0531			USB pullup enable
USBDM	U330			R0503			USB- data line to the USB connector thought 27 ohm resistance
USB-DM	R0503			U1107			USB- data line to the USB connector thought U1107 SWITCH
Signal	From			To			Description
	Lower PCB	Board to Board	Upper PCB	Lower PCB	Board to Board	Upper PCB	
USB+DP	U330			R0502			USB+ data line to the USB connector thought 27 ohm resistance
USB-DP	R0502			U1107			USB+ data line to the USB connector thought U1107 SWITCH
USB-UART	U330			U1107			Switch UART1 or USB mode
USBVBUS	CN1103			D0405			USB charger insert
VBAT	U1101			XXXX			Supply for U0102 and some LDO (voltage via U1101 to switch battery or U0408 voltage)
VBATT(Vcharge)	CON0406			XXXX			Battery Voltage supply for GSM module voltage
VCC-1V8	U0102			XXXX			Supply for U330 RAM interface □U03(SDRAM) and U0902 digital power
VCC-2V75	U0102			XXXX			Supply for U330 I/O interface □U03(NAND Flash) and some peripheral(U0507□U602□U0605□U0902□U2) POWER
VCC-3V3	U0102			U0102			Supply for U0102 of LDO1 and LDO2
VCC-CORE	U0102			U330			Supply for OMAP(U330) core voltage
Vcc-ntc	U0408			U1101			Supply for BaseBand power When no battery voltage
VCC-SD		U1601			CN2		Supply for SD Card power
Vcodec	U0401			U0902			3.3V for U0902 power
Vcodec-EN	U330			U0401			Enable/disable U0401 and U0416 voltage output
Vibrator	U0102			CON1503	CON2		enable signal for Vibrator
VLED			U1601			CN1602	Backlight LED power
VLED-4			CN1602			U1601	Backlight LED power feedback signal
VSD-EN	U330			CON1503	U1601		Enable/disable U1601 voltage output
Vusb-3V3	U0488			U330			Supply for U330 USB I/O Interface voltage
VUSB-EN	U330			U0488			Enable/disable U0488 voltage output
Wakeup-host	CN1301			U330			GSM Module wake-up U330
XTAL_IN	U1208			U2			for crystal 26MHz input
XTAL_out	U2			U1208			for crystal 26MHz output
Vgate	U0402			T0401			PMOS gate drive signal. Overvoltage protect IC drive it to low if voltage of battery too high

