

Num	Function Name	BGA	type	Description	Pin-Multiplexer							
					Mode 0	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Mode 7
1	GND		GND	Ground								
2	MMC2_CLK	V12	O	WiFi SDIO clock	gpmc_clk	lcd_memory_clk	gpmc_wait1	mmc2_clk	pr1_mii1_crs	pr1_mdio_mdclk	mcasp0_fsr	gpio2_1
3	MMC2_CMD	T13	O	WiFi SDIO command, gpio2_0	gpmc_csn3	gpmc_a3	rmii2_crs_dv	mmc2_cmd	pr1_mii0_crs	pr1_mdio_data	EMU4	gpio2_0
4	MMC2_RST	U10	O	WiFi SDIO reset, gpio0_22	gpmc_ad8	lcd_data23	mmc1_dat0	mmc2_dat4	ehrpw_m2A	pr1_mii_mt0_clk		gpio0_22
5	MMC2_IRQ	T10	O	WiFi SDIO Interrupt Request, gpio0_23	gpmc_ad9	lcd_data22	mmc1_dat1	mmc2_dat5	ehrpw_m2B	pr1_mii0_col		gpio0_23
6	PWM_REQ	T11	O	PWM_REQ, gpio0_26	gpmc_ad10	lcd_data21	mmc1_dat2	mmc2_dat6	ehrpw_m2_tripzone_input	pr1_mii0_bxen		gpio0_26
7	SMPS_REQ	U12	O	WiFi SDIO Spatial Multiplexing Power Save Request, gpio0_27	gpmc_ad11	lcd_data20	mmc1_dat3	mmc2_dat7	ehrpw_m0_synco	pr1_mii0_bxd3		gpio0_27
8	MMC2_DAT0	T12	IO	WiFi SDIO data 0, gpio1_12	gpmc_ad12	lcd_data19	mmc1_dat4	mmc2_dat0	eQEP2A_in	pr1_mii0_bxd1	pr1_pru0_pru_r30_14	gpio1_12
9	MMC2_DAT1	R12	IO	WiFi SDIO data 1, gpio1_13	gpmc_ad13	lcd_data18	mmc1_dat5	mmc2_dat1	eQEP2B_in	pr1_mii0_bxd1	pr1_pru0_pru_r30_15	gpio1_13
10	MMC2_DAT2	V13	IO	WiFi SDIO data 2, gpio1_14	gpmc_ad14	lcd_data17	mmc1_dat6	mmc2_dat2	eQEP2_index	pr1_mii0_bxd0	pr1_pru0_pru_r31_14	gpio1_14
11	MMC2_DAT3	U13	IO	WiFi SDIO data 3, gpio1_15	gpmc_ad15	lcd_data16	mmc1_dat7	mmc2_dat3	eQEP2_strobe	pr1_ecap0_ecap_capin_apw_m0	pr1_pru0_pru_r31_15	gpio1_15
12	GND		G	Ground								
13	MDIO_CLK	M18	O	MDIO Clk	mdio_clk	timer5	uart5_txd	uart3_rtsn	mmc0_sdw_p	mmc1_clk	mmc2_clk	gpio0_1
14	MDIO_DATA	M17	IO	MDIO Data	mdio_data	timer6	uart5_rxd	uart3_ctsn	mmc0_sdc_d	mmc1_cmd	mmc2_cmd	gpio0_0
15	GMII2_TXEN	R13	O	GMII2 Transmit Enable	gpmc_a0	gmii2_bxen	rgmii2_tctl	rmii2_txen	gpmc_a16	pr1_mii_mt1_clk	ehrpw_m1_tripzone_inp	gpio1_16
16	GMII2_RXDV	V14	O	GMII2 Receive Data Valid	gpmc_a1	gmii2_rxdv	rgmii2_rctl	mmc2_dat0	gpmc_a17	pr1_mii1_bxd3	ehrpw_m0_synco	gpio1_17
17	GMII2_TXD3	U14	O	GMII2 Transmit Data bit 3	gpmc_a2	gmii2_bxd3	rgmii2_td3	mmc2_dat1	gpmc_a18	pr1_mii1_bxd2	ehrpw_m1A	gpio1_18
18	GMII2_TXD2	T14	O	GMII2 Transmit Data bit 2	gpmc_a3	gmii2_bxd2	rgmii2_td2	mmc2_dat2	gpmc_a19	pr1_mii1_bxd1	ehrpw_m1B	gpio1_19
19	GMII2_TXD1	R14	O	GMII2 Transmit Data bit 1	gpmc_a4	gmii2_bxd1	rgmii2_td1	rmii2_bxd1	gpmc_a20	pr1_mii1_bxd0	eQEP1A_in	gpio1_20
20	GMII2_TXD0	V15	O	GMII2 Transmit Data bit 0	gpmc_a5	gmii2_bxd0	rgmii2_td0	rmii2_bxd0	gpmc_a21	pr1_mii1_rxd3	eQEP1B_in	gpio1_21
21	GMII2_TXCLK	U15	I	GMII2 Transmit Clock	gpmc_a6	gmii2_bxclk	rgmii2_tclk	mmc2_dat4	gpmc_a22	pr1_mii1_rxd2	eQEP1_index	gpio1_22
22	GMII2_RXCLK	T15	I	GMII2 Receive Clock	gpmc_a7	gmii2_rxclk	rgmii2_rclk	mmc2_dat5	gpmc_a23	pr1_mii1_rxd1	eQEP1_strobe	gpio1_23
23	GMII2_RXD3	V16	I	GMII2 Receive Data bit 3	gpmc_a8	gmii2_rxd3	rgmii2_rd3	mmc2_dat6	gpmc_a24	pr1_mii1_rxd0	mcasp0_aclkx	gpio1_24
24	GMII2_RXD2	U16	I	GMII2 Receive Data bit 2	gpmc_a9	gmii2_rxd2	gmii2_rd2	mmc2_dat7 / rmi2_crs_dv	gpmc_a25	pr1_mii_mr1_clk	mcasp0_fsx	gpio1_25
25	GMII2_RXD1	T16	I	GMII2 Receive Data bit 1	gpmc_a10	gmii2_rxd1	rgmii2_rd1	rmii2_rxd1	gpmc_a26	pr1_mii1_rxdv	mcasp0_axr0	gpio1_26
26	GMII2_RXD0	V17	I	GMII2 Receive Data bit 0	gpmc_a11	gmii2_rxd0	rgmii2_rd0	rmii2_rxd0	gpmc_a27	pr1_mii1_rxer	mcasp0_axr1	gpio1_27
27	USB0_DRVVBUS	F16	O	USB0 Active high VBUS control output	USB0_DRVVBUS							
28	USB0_VBUS	P15	A	USB0 VBUS detection input	USB0_VBUS							
29	USB0_CE	M15	A	no connect	USB0_CE							
30	USB0_ID	P16	A	USB0 OTG ID (Micro-A or Micro-B Plug)	USB0_ID							
31	GND		GND	Ground								
32	USB0_DP	N17	DIFF	USB0 Data plus	USB0_DP							
33	USB0_DM	N18	DIFF	USB0 Data minus	USB0_DM							
34	GND		GND	Ground								
35	USB1_DP	R17	DIFF	USB1 Data plus	USB1_DP							
36	USB1_DM	R18	DIFF	USB1 Data minus	USB1_DM							
37	GND		GND	Ground								
38	USB1_ID	P17	A	USB0 ID	USB1_ID							
39	USB1_DRV	F15	O	USB1 Active high VBUS control output	USB1_DRVVBUS							gpio3_13
40	USB1_VBUS	T18	A	USB1 VBUS detection input	USB1_VBUS							
41	RESETN	B15	I	Active low Power on Reset	PWRONRSTn							
42	RTC_RST	B5	I	Active low RTC reset input	RTC_PORz							
43	WDT		I	Manual Reset input								
44	PWR_BUT		I	PMIC bottom input								
45	VDD_5V		PWR	5V Supply input								
46	VDD_5V		PWR	5V Supply input								
47	GND		GND	Ground								
48	VDD_3.3VB		PWR	3.3V IO Level output								
49	VDD18_RTC		PWR	RTC Battery								
50	GND		GND	Ground								
51	MMC0_CLK	G17	O	MMC0 clock	mmc0_clk	gpmc_a24	uart3_ctsn	uart2_rxd	dcan1_tx	pr1_pru0_pru_r30_12	pr1_pru0_pru_r31_12	gpio2_30
52	MMC0_CMD	G18	O	MMC0 command	mmc0_cmd	gpmc_a25	uart3_rtsn	uart2_bxd	dcan1_rx	pr1_pru0_pru_r30_13	pr1_pru0_pru_r31_13	gpio2_31
53	MMC0_DA70	G16	IO	MMC0 data 0	mmc0_dat0	gpmc_a23	uart5_rtsn	uart3_txd	uart1_rin	pr1_pru0_pru_r30_11	pr1_pru0_pru_r31_11	gpio2_29
54	MMC0_DAT1	G15	IO	MMC0 data 1	mmc0_dat1	gpmc_a22	uart5_ctsn	uart3_rxd	uart1_dtrn	pr1_pru0_pru_r30_10	pr1_pru0_pru_r31_10	gpio2_28
55	MMC0_DAT2	F18	IO	MMC0 data 2	mmc0_dat2	gpmc_a21	uart4_rtsn	timer6	uart1_dsrn	pr1_pru0_pru_r30_9	pr1_pru0_pru_r31_9	gpio2_27
56	MMC0_DAT3	F17	IO	MMC0 data 3	mmc0_dat3	gpmc_a20	uart4_ctsn	timer5	uart1_dcdn	pr1_pru0_pru_r30_8	pr1_pru0_pru_r31_8	gpio2_26
57	MCASP0_AHCLKX	A14	O	McASP12S MCLK	mcasp0_ahclkx	eQEP0_strobe	mcasp0_axr3	mcasp1_axr1	EMU4	pr1_pru0_pru_r30_7	pr1_pru0_pru_r31_7	gpio3_21
58	I2C0_SCL	C16	O	I2C0 clock (open drain with pull-up resistor on the SOM), gpio3_6	I2C0_SCL	timer7	uart2_rtsn	eCAP1_in_PWM1_out				gpio3_6
59	I2C0_SDA	C17	IO	I2C0 data (open drain with pull-up resistor on the SOM), gpio3_5	I2C0_SDA	timer4	uart2_ctsn	eCAP2_in_PWM2_out				gpio3_5
60	LEDA		I	WLED driver, no connect								
61	LEDK1		I	WLED driver, no connect								
62	LEDK2		I	WLED driver, no connect								
63	GND		GND	Ground								
64	RGMI1_TRP0		DIFF	Ethernet Data 0 Positive								
65	RGMI1_TRN0		DIFF	Ethernet Data 0 Negative								
66	RGMI1_TRP1		DIFF	Ethernet Data 1 Positive								
67	RGMI1_TRN1		DIFF	Ethernet Data 1 Negative								
68	GND		GND	Ground								
69	RGMI1_TRP2		DIFF	Ethernet Data 2 Positive								
70	RGMI1_TRN2		DIFF	Ethernet Data 2 Negative								
71	RGMI1_TRP3		DIFF	Ethernet Data 3 Positive								
72	RGMI1_TRN3		DIFF	Ethernet Data 3 Negative								
73	GND		GND	Ground								
74	RGMI1_LINK		O	PHY 1000M Link LED								
75	RGMI1_ACT		O	PHY Status LED								
76	RGMI1_OPT		O	PHY 100M Link LED								
77	GND		GND	Ground								
78	DCAN0_TX	D18	O	User LED1, gpio0_12	uart1_ctsn	timer6	dcan0_tx	I2C2_SDA	spi1_cs0	pr1_uart0_cts_n	pr1_edc_latch0_in	gpio0_12
79	DCAN0_RX	D17	O	User LED2, gpio0_13	uart1_rtsn	timer5	dcan0_rx	I2C2_SCL	spi1_cs1	pr1_uart0_rts_n	pr1_edc_latch1_in	gpio0_13
80	UART0_TX	E16	O	Dbg Uart Transmit	uart0_txd	spi1_cs1	dcan0_rx	I2C2_SCL	eCAP1_in_PWM1_out	pr1_pru1_pru_r30_15	pr1_pru1_pru_r31_15	gpio1_11
81	UART0_RX	E15	I	Dbg Uart Receive	uart0_rxd	spi1_cs0	dcan0_tx	I2C2_SDA	eCAP2_in_PWM2_out	pr1_pru1_pru_r30_14	pr1_pru1_pru_r31_14	gpio1_10
82	UART1_TX	D15	O	Uart 1 Transmit	uart1_txd	mmc2_sdw_p	dcan1_rx	I2C1_SCL		pr1_uart0_bxd	pr1_pru0_pru_r31_16	gpio0_15
83	UART1_RX	D16	I	Uart 1 Receive	uart1_rxd	mmc1_sdw_p	dcan1_tx	I2C1_SDA		pr1_uart0_rxd	pr1_pru1_pru_r31_16	gpio0_14
84	UART2_TX	J15	O	Uart 2 Transmit, use for RS485, gpio3_2	gmii1_rxerr	rmii1_rxerr	spi1_d1	I2C1_SCL	mcasp1_fsx	uart5_rtsn	uart2_bxd	gpio3_2
85	UART2_RX	H17	I	Uart 2 Receive, use for RS485, gpio3_1	gmii1_crs	rmii1_crs_dv	spi1_d0	I2C1_SDA	mcasp1_aclkx	uart5_ctsn	uart2_rxd	gpio3_1
86	GND		GND	Ground								
87	UART3_TX	C18	O	Buzzer, gpio0_7	eCAP0_in_PWM0_out	uart3_bxd	spi1_cs1	pr1_ecap0_ecap_capin_apw_m0	spi1_sclk	mmc0_sdw_p	xdma_event_intr2	gpio0_7
88	UART3_RX	C15	I	Touch INT, gpio0_6	spi0_cs1	uart3_rxd	eCAP1_in_PWM1_out	mmc0_pow	xdma_event_intr2	mmc0_sdc_d	EMU4	gpio0_6
89	UART4_TX	E17	O	Uart 4 Transmit / CAN Receive	uart0_rtsn	uart4_bxd	dcan1_rx	I2C1_SCL	spi1_d1	spi1_cs0	pr1_edc_sync1_out	gpio1_9
90	UART4_RX	E18	I	Uart 4 Receive / CAN Transmit	uart0_ctsn	uart4_rxd	dcan1_tx	I2C1_SDA	spi1_d0	timer7	pr1_edc_sync0_out	gpio1_8
91	UART5_TX	H18	I	User KEY2, gpio0_29	rmii1_refclk	xdma_event_intr2	spi1_cs0	uart5_bxd	mcasp1_axr3	mmc0_pow	mcasp1_ahclkx	gpio0_29
92	UART5_RX	H16	I	User KEY1, gpio3_0	gmii1_col	rmii2_refclk	spi1_sclk	uart5_rxd	mcasp1_axr2	mmc2_dat3	mcasp0_axr2	gpio3_0
93	GND		GND	Ground								
94	JTAG_TRSTn	B10	O	JTAG TEST RESET (ACTIVE LOW)	nTRST							
95	JTAG_TMS	C11	O	JTAG TEST MODE SELECT	TMS							
96	JTAG_TDI	B11	I	JTAG TEST DATA INPUT	TDI							
97	JTAG_TCK	A12	I	JTAG TEST CLOCK	TCK							
98	JTAG_TDO	A11	O	JTAG TEST DATA OUTPUT	TDO							
99	VDD_ADC		PWR	Supply voltage range for ADC								
100	AIN0	B6	A	Analog Input/Output 0, used with touchscreen	AIN0							
101	AIN1	C7	A	Analog Input/Output 1, used with touchscreen	AIN1							
102	AIN2	B7	A	Analog Input/Output 2, used with touchscreen	AIN2							
103	AIN3	A7	A	Analog Input/Output 3, used with touchscreen	AIN3							
104	AIN4	C8	A	Analog Input/Output 4, used with touchscreen	AIN4							
105	AIN5	B8	A	Analog Input/Output 5	AIN5							
106	AIN6	A8	A	Analog Input/Output 6	AIN6							
107	AIN7	C9	A	Analog Input/Output 7	AIN7							
108	GND		GND	Ground								
109	EVENT_INTR0	A15	O	LCD Enable, gpio0_19	xdma_event_intr0		timer4	clkout1	spi1_cs1	pr1_pru1_pru_r31_16	EMU2	gpio0_19
110	EVENT_INTR1	D14	I	NET1 INIT	xdma_event_intr1		tolkin	clkout2	timer7	pr1_pru0_pru_r31_16	EMU3	gpio0_20
111	GND		GND	Ground								
112	I2C1_SCL	A16	O	I2C1_SCL	spi0_cs0	mmc2_sdw_p	I2C1_SCL	ehrpw_m0_synci	pr1_uart0_bxd	pr1_edio_data_in1	pr1_edio_data_out1	gpio0_5
113	I2C1_SDA	B16	IO	I2C1 Data	spi0_d1	mmc1_sdw_p	I2C1_SDA	ehrpw_m0_tripzone_input	pr1_uart0_rxd	pr1_edio_data_in0	pr1_edio_data_out0	gpio0_4
114	PWM1	A17	O	LCD Bright, gpio0_2	spi0_sclk	uart2_rxd	I2C2_SDA	ehrpw_m0A	pr1_uart0_cts_n	pr1_edio_sof	EMU2	gpio0_2
115	PWM2	B17	O	LED, gpio0_3	spi0_d0	uart2_txd	I2C2_SCL	ehrpw_m0B	pr1_uart0_rts_n	pr1_edio_latch_in	EMU3	gpio0_3
116	GND		GND	Ground								
117	MCASP0_ACLKX	A13	O	McASP0/ I2S Transmit Bit Clock	mcasp0_aclkx	ehrpw_m0A		spi1_sclk	mmc0_sdc_d	pr1_pru0_pru_r30_0	pr1_pru0_pru_r31_0	gpio3_14
118	MCASP0_FXS	B13	O	McASP0 Transmit Frame Sync	mcasp0_fsx	ehrpw_m0B		spi1_d0	mmc1_sdc_d	pr1_pru0_pru_r30_1	pr1_pru0_pru_r31_1	gpio3_15
119	GPI03_16	D12	O	gpio3_16 use for Touchscreen reset	mcasp0_axr0	ehrpw_m0_tripzone_input		spi1_d1	mmc2_sdc_d	pr1_pru0_pru_r30_2	pr1_pru0_pru_r31_2	gpio3_16
120	MCASP0_AHCLKR	C12	IO	McASP0 Receive Master Clock	mcasp0_ahclkx	ehrpw_m0_synci	mcasp0_axr2	spi1_cs0	eCAP2_in_PWM2_out	pr1_pru0_pru_r30_3	pr1_pru0_pru_r31_3	gpio3_17
121	USER_LED1	B12	O	SOM LED, gpio3_18	mcasp0_ackr	eQEP0A_in	mcasp0_axr2	mcasp1_aclkx	mmc0_sdw_p	pr1_pru0_pru_r30_4	pr1_pru0_pru_r31_4	gpio3_18
122	GPI03_19	C13	I	gpio MMC0 detection, gpio3_19	mcasp0_fsr	eQ						