

Num	Pin Name	BGA289 Ball	BGA289 Ball		Power Rail	Comment
			Signal Name	Mode		
1	ETH1_TXN					LAN8720A pin
2	ETH1_TXP					LAN8720A pin
3	ETH1_RXN					LAN8720A pin
4	ETH1_RXP					LAN8720A pin
5	GND				GND	
6	LCD_DATA23	B16	gpio3.IO[28]	Default	3.3V	
			lcdif.DATA[23]	ALT0		
			mqs.LEFT	ALT1		
			ecspi1.MISO	ALT2		
			csi.DATA[15]	ALT3		
			weim.DATA[15]	ALT4		
			gpio3.IO[28]	ALT5		
			src.BT_CFG[31]	ALT6		
			tpsmp.HDATA[1]	ALT7		
			usdhc2.DATA3	ALT8		
			epdc.SDCE[3]	ALT9		
7	LCD_DATA22	A14	gpio3.IO[27]	Default	3.3V	
			lcdif.DATA[22]	ALT0		
			mqs.RIGHT	ALT1		
			ecspi1.MOSI	ALT2		
			csi.DATA[14]	ALT3		
			weim.DATA[14]	ALT4		
			gpio3.IO[27]	ALT5		
			src.BT_CFG[30]	ALT6		
			tpsmp.HDATA[0]	ALT7		
			usdhc2.DATA2	ALT8		
			epdc.SDCE[2]	ALT9		
8	LCD_DATA21	B14	gpio3.IO[26]	Default	3.3V	
			lcdif.DATA[21]	ALT0		
			uart8.RX	ALT1		
			ecspi1.SS0	ALT2		
			csi.DATA[13]	ALT3		
			weim.DATA[13]	ALT4		
			gpio3.IO[26]	ALT5		
			src.BT_CFG[29]	ALT6		
			tpsmp.HTRANS[1]	ALT7		
			usdhc2.DATA1	ALT8		
			epdc.SDCE[1]	ALT9		
9	LCD_DATA20	C14	gpio3.IO[25]	Default	3.3V	
			lcdif.DATA[20]	ALT0		
			uart8.TX	ALT1		
			ecspi1.SCLK	ALT2		
			csi.DATA[12]	ALT3		
			weim.DATA[12]	ALT4		
			gpio3.IO[25]	ALT5		
			src.BT_CFG[28]	ALT6		
			tpsmp.HTRANS[0]	ALT7		
			usdhc2.DATA0	ALT8		
			epdc.VCOM[1]	ALT9		
10	LCD_DATA19	D14	gpio3.IO[24]	Default	3.3V	
			lcdif.DATA[19]	ALT0		
			pwm6.OUT	ALT1		
			global wdog	ALT2		
			csi.DATA[11]	ALT3		
			weim.DATA[11]	ALT4		
			gpio3.IO[24]	ALT5		
			src.BT_CFG[27]	ALT6		
			tpsmp.HDATA_DIR	ALT7		
			usdhc2.CLK	ALT8		
			epdc.VCOM[0]	ALT9		
11	LCD_DATA18	A13	gpio3.IO[23]	Default	3.3V	
			lcdif.DATA[18]	ALT0		
			pwm5.OUT	ALT1		
			ca7_platform.EVENTO	ALT2		
			csi.DATA[10]	ALT3		
			weim.DATA[10]	ALT4		
			gpio3.IO[23]	ALT5		
			src.BT_CFG[26]	ALT6		
			tpsmp.CLK	ALT7		
			usdhc2.CMD	ALT8		
			epdc.BDR[1]	ALT9		
			gpio3.IO[22]	Default		
			lcdif.DATA[17]	ALT0		

12	LCD_DATA17	B13	uart7.RX	ALT1	3.3V	
			ca7_platform.TRACE_CTL	ALT2		
			csi.DATA[0]	ALT3		
			weim.DATA[9]	ALT4		
			gpio3.IO[22]	ALT5		
			src.BT_CFG[25]	ALT6		
			sim_m.HWRITE	ALT7		
			usdhc2.DATA7	ALT8		
			epdc.GDSP	ALT9		
13	LCD_DATA16	C13	gpio3.IO[21]	Default	3.3V	
			lcdif.DATA[16]	ALT0		
			uart7.TX	ALT1		
			ca7_platform.TRACE_CLK	ALT2		
			csi.DATA[1]	ALT3		
			weim.DATA[8]	ALT4		
			gpio3.IO[21]	ALT5		
			src.BT_CFG[24]	ALT6		
			sim_m.HSIZE[2]	ALT7		
14	LCD_DATA15	D13	usdhc2.DATA6	ALT8	3.3V	
			epdc.GDCLK	ALT9		
			gpio3.IO[20]	Default		
			lcdif.DATA[15]	ALT0		
			sai3.TX_DATA	ALT1		
			ca7_platform.TRACE[15]	ALT2		
			csi.DATA[23]	ALT3		
			weim.DATA[7]	ALT4		
			gpio3.IO[20]	ALT5		
15	LCD_DATA14	A12	src.BT_CFG[15]	ALT6	3.3V	
			sim_m.HSIZE[1]	ALT7		
			usdhc2.DATA5	ALT8		
			epdc.GDRL	ALT9		
			gpio3.IO[19]	Default		
			lcdif.DATA[14]	ALT0		
			sai3.RX_DATA	ALT1		
			ca7_platform.TRACE[14]	ALT2		
			csi.DATA[22]	ALT3		
16	LCD_DATA13	B12	weim.DATA[6]	ALT4	3.3V	
			gpio3.IO[19]	ALT5		
			src.BT_CFG[14]	ALT6		
			sim_m.HSIZE[0]	ALT7		
			usdhc2.DATA4	ALT8		
			epdc.SDSHR	ALT9		
			gpio3.IO[18]	Default		
			lcdif.DATA[13]	ALT0		
			sai3.TX_BCLK	ALT1		
17	LCD_DATA12	C12	ca7_platform.TRACE[13]	ALT2	3.3V	
			csi.DATA[21]	ALT3		
			weim.DATA[5]	ALT4		
			gpio3.IO[18]	ALT5		
			src.BT_CFG[13]	ALT6		
			sim_m.HRESP	ALT7		
			usdhc2.RESET_B	ALT8		
			epdc.BDR[0]	ALT9		
			gpio3.IO[17]	Default		
18	LCD_DATA11	D12	lcdif.DATA[12]	ALT0	3.3V	
			sai3.TX_SYNC	ALT1		
			ca7_platform.TRACE[12]	ALT2		
			csi.DATA[20]	ALT3		
			weim.DATA[4]	ALT4		
			gpio3.IO[17]	ALT5		
			src.BT_CFG[12]	ALT6		
			sim_m.HREADYOUT	ALT7		
			ecspi1.RDY	ALT8		
	LCD_DATA10		epdc.PWRCTRL[0]	ALT9	3.3V	
			gpio3.IO[16]	Default		
			lcdif.DATA[11]	ALT0		
			sai3.RX_BCLK	ALT1		
			ca7_platform.TRACE[11]	ALT2		
			csi.DATA[19]	ALT3		
			weim.DATA[3]	ALT4		
			gpio3.IO[16]	ALT5		
			src.BT_CFG[11]	ALT6		
	LCD_DATA9		sim_m.HPROT[3]	ALT7	3.3V	
			can2.RX	ALT8		
			epdc.PWRSTAT	ALT9		
	LCD_DATA8		gpio3.IO[15]	Default	3.3V	
			lcdif.DATA[10]	ALT0		
			sai3.RX_SYNC	ALT1		

19	LCD_DATA10	E12	ca7_platform.TRACE[10]	ALT2	3.3V	
			csi.DATA[18]	ALT3		
			weim.DATA[2]	ALT4		
			gpio3.IO[15]	ALT5		
			src.BT_CFG[10]	ALT6		
			sim_m.HPROT[2]	ALT7		
			can2.TX	ALT8		
			epdc.PWRCOM	ALT9		
20	LCD_DATA9	A11	gpio3.IO[14]	Default	3.3V	
			lcdif.DATA[9]	ALT0		
			sai3.MCLK	ALT1		
			ca7_platform.TRACE[9]	ALT2		
			csi.DATA[17]	ALT3		
			weim.DATA[1]	ALT4		
			gpio3.IO[14]	ALT5		
			src.BT_CFG[9]	ALT6		
21	LCD_DATA8	B11	sim_m.HPROT[1]	ALT7	3.3V	
			can1.RX	ALT8		
			epdc.PWRWAKE	ALT9		
			gpio3.IO[13]	Default		
			lcdif.DATA[8]	ALT0		
			spdif.IN	ALT1		
			ca7_platform.TRACE[8]	ALT2		
			csi.DATA[16]	ALT3		
22	LCD_DATA7	D10	weim.DATA[0]	ALT4	3.3V	
			gpio3.IO[13]	ALT5		
			src.BT_CFG[8]	ALT6		
			sim_m.HPROT[0]	ALT7		
			can1.TX	ALT8		
			epdc.PWRIRQ	ALT9		
			gpio3.IO[12]	Default		
			lcdif.DATA[7]	ALT0		
23	LCD_DATA6	A10	uart7.RTS_B	ALT1	3.3V	
			ca7_platform.TRACE[7]	ALT2		
			enet2.1588_EVENT3_OUT	ALT3		
			spdif.EXT_CLK	ALT4		
			gpio3.IO[12]	ALT5		
			src.BT_CFG[7]	ALT6		
			sim_m.HMASTLOCK	ALT7		
			ecspi1.SS3	ALT8		
24	LCD_DATA5	B10	epdc.SDDO[7]	ALT9	3.3V	
			gpio3.IO[11]	Default		
			lcdif.DATA[6]	ALT0		
			uart7.CTS_B	ALT1		
			ca7_platform.TRACE[6]	ALT2		
			enet2.1588_EVENT3_IN	ALT3		
			spdif.LOCK	ALT4		
			gpio3.IO[11]	ALT5		
25	LCD_DATA4	C10	src.BT_CFG[6]	ALT6	3.3V	
			sim_m.HBURST[2]	ALT7		
			ecspi1.SS2	ALT8		
			gpio3.IO[10]	Default		
			lcdif.DATA[5]	ALT0		
			uart8.RTS_B	ALT1		
			ca7_platform.TRACE[5]	ALT2		
			enet2.1588_EVENT2_OUT	ALT3		
	LCD_DATA3		spdif.OUT	ALT4	3.3V	
			gpio3.IO[10]	ALT5		
			src.BT_CFG[5]	ALT6		
			sim_m.HBURST[1]	ALT7		
			ecspi1.SS1	ALT8		
			epdc.SDDO[5]	ALT9		
			gpio3.IO[9]	Default		
			lcdif.DATA[4]	ALT0		
	LCD_DATA2		uart8.CTS_B	ALT1	3.3V	
			ca7_platform.TRACE[4]	ALT2		
			enet2.1588_EVENT2_IN	ALT3		
			spdif.SR_CLK	ALT4		
			gpio3.IO[9]	ALT5		
			src.BT_CFG[4]	ALT6		
			sim_m.HBURST[0]	ALT7		
			sai1.TX_DATA	ALT8		
	LCD_DATA1		epdc.SDDO[4]	ALT9	3.3V	
			gpio3.IO[8]	Default		
			lcdif.DATA[3]	ALT0		
			pwm4.OUT	ALT1		
			ca7_platform.TRACE[3]	ALT2		

26	LCD_DATA3	D10	enet1.1588_EVENT3_OUT i2c4.SCL gpio3.IO[8] src.BT_CFG[3] sim_m.HADDR[31] sai1.RX_DATA epdc.SDDO[3]	ALT3 ALT4 ALT5 ALT6 ALT7 ALT8 ALT9	3.3V	
27	LCD_DATA2	E10	gpio3.IO[7] lcdif.DATA[2] pwm3.OUT ca7_platform.TRACE[2] enet1.1588_EVENT3_IN i2c4.SDA gpio3.IO[7] src.BT_CFG[2] sim_m.HADDR[30] sai1.TX_BCLK epdc.SDDO[2]	Default ALT0 ALT1 ALT2 ALT3 ALT4 ALT5 ALT6 ALT7 ALT8 ALT9	3.3V	
28	LCD_DATA1	A9	gpio3.IO[6] lcdif.DATA[1] pwm2.OUT ca7_platform.TRACE[1] enet1.1588_EVENT2_OUT i2c3.SCL gpio3.IO[6] src.BT_CFG[1] sim_m.HADDR[29] sai1.TX_SYNC epdc.SDDO[1]	Default ALT0 ALT1 ALT2 ALT3 ALT4 ALT5 ALT6 ALT7 ALT8 ALT9	3.3V	
29	LCD_DATA0	B9	lcdif.DATA[0] pwm1.OUT ca7_platform.TRACE[0] enet1.1588_EVENT2_IN i2c3.SDA gpio3.IO[5] src.BT_CFG[0] sim_m.HADDR[28] sai1.MCLK epdc.SDDO[0]	ALT0 ALT1 ALT2 ALT3 ALT4 ALT5 ALT6 ALT7 ALT8 ALT9	3.3V	
30	LCD_RESET	E9	gpio3.IO[4] lcdif.RESET lcdif.CS ca7_platform.EVENT1 sai3.TX_DATA global wdog gpio3.IO[4] anatop.TESTI[3] sim_m.HADDR[27] ecspi2.SS3 epdc.GDOE	Default ALT0 ALT1 ALT2 ALT3 ALT4 ALT5 ALT6 ALT7 ALT8 ALT9	3.3V	
31	LCD_VSYNC	C9	gpio3.IO[3] lcdif.VSYNC lcdif.BUSY uart4.RTS_B sai3.RX_DATA wdog2.WDOG_B gpio3.IO[3] anatop.TESTI[2] sim_m.HADDR[26] ecspi2.SS2 epdc.SDCE[0]	Default ALT0 ALT1 ALT2 ALT3 ALT4 ALT5 ALT6 ALT7 ALT8 ALT9	3.3V	
32	LCD_HSYNC	D9	gpio3.IO[2] lcdif.HSYNC lcdif.RS uart4.CTS_B sai3.TX_BCLK wdog3.WDOG_RST_B_DE gpio3.IO[2] anatop.TESTI[1] sim_m.HADDR[25] ecspi2.SS1 epdc.SDOE	Default ALT0 ALT1 ALT2 ALT3 ALT4 ALT5 ALT6 ALT7 ALT8 ALT9	3.3V	
			gpio3.IO[0] lcdif.CLK lcdif.WR_RWN uart4.TX sai3.MCLK	Default ALT0 ALT1 ALT2 ALT3		

33	LCD_PCLK	A8	weim.CS2_B	ALT4	3.3V	
			gpio3.IO[0]	ALT5		
			ocotp_ctrl_wrapper.FUSE_LATCHED	ALT6		
			sim_m.HADDR[23]	ALT7		
			wdog1.WDOG_RST_B_DE	ALT8		
			epdc.SDCLK	ALT9		
34	LCD_DE	B8	lcdif.ENABLE	ALT0	3.3V	
			lcdif.RD_E	ALT1		
			uart4.RX	ALT2		
			sai3.TX_SYNC	ALT3		
			weim.CS3_B	ALT4		
			gpio3.IO[1]	ALT5		
			anatop.TESTI[0]	ALT6		
			sim_m.HADDR[24]	ALT7		
			ecspi2.RDY	ALT8		
			epdc.SDLE	ALT9		
35	GND				GND	
36	SD1_CLK	C1	gpio2.IO[17]	Default	3.3V	
			usdhc1.CLK	ALT0		
			gpt2.COMPARE2	ALT1		
			sai2.MCLK	ALT2		
			spdif.IN	ALT3		
			weim.ADDR[20]	ALT4		
			gpio2.IO[17]	ALT5		
			ccm.OUT0	ALT6		
			observe_mux.OUT[0]	ALT7		
			usb.OTG1_OC	ALT8		
37	SD1_CMD	C2	gpio2.IO[16]	Default	3.3V	
			usdhc1.CMD	ALT0		
			gpt2.COMPARE1	ALT1		
			sai2.RX_SYNC	ALT2		
			spdif.OUT	ALT3		
			weim.ADDR[19]	ALT4		
			gpio2.IO[16]	ALT5		
			sdma.EXT_EVENT[0]	ALT6		
			tpsmp.HDATA[18]	ALT7		
			usb.OTG1_PWR	ALT8		
38	SD1_DATA3	A2	gpio2.IO[21]	Default	3.3V	
			usdhc1.DATA3	ALT0		
			gpt2.CAPTURE2	ALT1		
			sai2.TX_DATA	ALT2		
			can2.RX	ALT3		
			weim.ADDR[24]	ALT4		
			gpio2.IO[21]	ALT5		
			ccm.CLKO2	ALT6		
			observe_mux.OUT[4]	ALT7		
			anatop.OTG2_ID	ALT8		
39	SD1_DATA2	B1	gpio2.IO[20]	Default	3.3V	
			usdhc1.DATA2	ALT0		
			gpt2.CAPTURE1	ALT1		
			sai2.RX_DATA	ALT2		
			can2.TX	ALT3		
			weim.ADDR[23]	ALT4		
			gpio2.IO[20]	ALT5		
			ccm.CLKO1	ALT6		
			observe_mux.OUT[3]	ALT7		
			usb.OTG2_OC	ALT8		
40	SD1_DATA1	B2	gpio2.IO[19]	Default	3.3V	
			usdhc1.DATA1	ALT0		
			gpt2.CLK	ALT1		
			sai2.TX_BCLK	ALT2		
			can1.RX	ALT3		
			weim.ADDR[22]	ALT4		
			gpio2.IO[19]	ALT5		
			ccm.OUT2	ALT6		
			observe_mux.OUT[2]	ALT7		
			usb.OTG2_PWR	ALT8		
41	SD1_DATA0	B3	gpio2.IO[18]	Default	3.3V	
			usdhc1.DATA0	ALT0		
			gpt2.COMPARE3	ALT1		
			sai2.TX_SYNC	ALT2		
			can1.TX	ALT3		
			weim.ADDR[21]	ALT4		
			gpio2.IO[18]	ALT5		
			ccm.OUT1	ALT6		
			observe_mux.OUT[1]	ALT7		
			anatop.OTG1_ID	ALT8		

42	GND				GND	
43	CSI_MCLK	F5	gpio4.IO[17]	Default	3.3V	
			csi.MCLK	ALT0		
			usdhc2.CD_B	ALT1		
			rawnand.CE2_B	ALT2		
			i2c1.SDA	ALT3		
			weim.CS0_B	ALT4		
			gpio4.IO[17]	ALT5		
			snvs_hp_wrapper.VIO_5_C	ALT6		
			TL			
44	CSI_PIXCLK	E5	tpsmmp.HDATA[20]	ALT7	3.3V	
			gpio4.IO[18]	Default		
			csi.PIXCLK	ALT0		
			usdhc2.WP	ALT1		
			rawnand.CE3_B	ALT2		
			i2c1.SCL	ALT3		
			weim.OE	ALT4		
			gpio4.IO[18]	ALT5		
			snvs_hp_wrapper.VIO_5	ALT6		
45	CSI_VSYNC	F2	tpsmmp.HDATA[21]	ALT7	3.3V	
			uart6.RX	ALT8		
			esai.TX2_RX3	ALT9		
			gpio4.IO[19]	Default		
			csi.VSYNC	ALT0		
			usdhc2.CLK	ALT1		
			i2c2.SDA	ALT3		
			weim.RW	ALT4		
			gpio4.IO[19]	ALT5		
46	CSI_HSYNC	F3	pwm7.OUT	ALT6	3.3V	
			tpsmmp.HDATA[22]	ALT7		
			uart6.RTS_B	ALT8		
			esai.TX4_RX1	ALT9		
			gpio4.IO[20]	Default		
			csi.HSYNC	ALT0		
			usdhc2.CMD	ALT1		
			i2c2.SCL	ALT3		
			weim.LBA_B	ALT4		
47	CSI_DATA00	E4	gpio4.IO[20]	ALT5	3.3V	
			pwm8.OUT	ALT6		
			tpsmmp.HDATA[23]	ALT7		
			uart6.CTS_B	ALT8		
			esai.TX1	ALT9		
			gpio4.IO[21]	Default		
			csi.DATA[2]	ALT0		
			usdhc2.DATA0	ALT1		
			ecspi2.SCLK	ALT3		
48	CSI_DATA01	E3	weim.AD[0]	ALT4	3.3V	
			gpio4.IO[21]	ALT5		
			src.INT_BOOT	ALT6		
			tpsmmp.HDATA[24]	ALT7		
			uart5.TX	ALT8		
			esai.TX_HF_CLK	ALT9		
			gpio4.IO[22]	Default		
			csi.DATA[3]	ALT0		
			usdhc2.DATA1	ALT1		
49	CSI_DATA02	E2	ecspi2.SS0	ALT3	3.3V	
			weim.AD[1]	ALT4		
			gpio4.IO[22]	ALT5		
			sai1.MCLK	ALT6		
			tpsmmp.HDATA[25]	ALT7		
			uart5.RX	ALT8		
			esai.RX_HF_CLK	ALT9		
			gpio4.IO[23]	Default		
			csi.DATA[4]	ALT0		
50	CSI_DATA03	E1	usdhc2.DATA2	ALT1	3.3V	
			ecspi2.MOSI	ALT3		
			weim.AD[2]	ALT4		
			gpio4.IO[23]	ALT5		
			sai1.RX_SYNC	ALT6		
			tpsmmp.HDATA[26]	ALT7		
			uart5.RTS_B	ALT8		
			esai.RX_FS	ALT9		
			gpio4.IO[24]	Default		
			csi.DATA[5]	ALT0	3.3V	
			usdhc2.DATA3	ALT1		
			ecspi2.MISO	ALT3		
			weim.AD[3]	ALT4		
			gpio4.IO[24]	ALT5		

			sai1.RX_BCLK	ALT6		
			tpsmp.HDATA[27]	ALT7		
			uart5.CTS_B	ALT8		
			esai.RX_CLK	ALT9		
51	CSI_DATA04	D4	gpio4.IO[25]	Default	3.3V	
			csi.DATA[6]	ALT0		
			usdhc2.DATA4	ALT1		
			ecspi1.SCLK	ALT3		
			weim.AD[4]	ALT4		
			gpio4.IO[25]	ALT5		
			sai1.TX_SYNC	ALT6		
			tpsmp.HDATA[28]	ALT7		
			usdhc1.WP	ALT8		
			esai.TX_FS	ALT9		
52	CSI_DATA05	D3	gpio4.IO[26]	Default	3.3V	
			csi.DATA[7]	ALT0		
			usdhc2.DATA5	ALT1		
			ecspi1.SS0	ALT3		
			weim.AD[5]	ALT4		
			gpio4.IO[26]	ALT5		
			sai1.TX_BCLK	ALT6		
			tpsmp.HDATA[29]	ALT7		
			usdhc1.CD_B	ALT8		
			esai.TX_CLK	ALT9		
53	CSI_DATA06	D2	gpio4.IO[27]	Default	3.3V	
			csi.DATA[8]	ALT0		
			usdhc2.DATA6	ALT1		
			ecspi1.MOSI	ALT3		
			weim.AD[6]	ALT4		
			gpio4.IO[27]	ALT5		
			sai1.RX_DATA	ALT6		
			tpsmp.HDATA[30]	ALT7		
			usdhc1.RESET_B	ALT8		
			esai.TX5_RX0	ALT9		
54	CSI_DATA07	D1	gpio4.IO[28]	Default	3.3V	
			csi.DATA[9]	ALT0		
			usdhc2.DATA7	ALT1		
			ecspi1.MISO	ALT3		
			weim.AD[7]	ALT4		
			gpio4.IO[28]	ALT5		
			sai1.TX_DATA	ALT6		
			tpsmp.HDATA[31]	ALT7		
			usdhc1.VSELECT	ALT8		
			esai.TX0	ALT9		
55	GND				GND	
56	SNVS_TAMPER0	R10	snvs_lp_wrapper.SNVS_TD1	Default	VSNVS	
			snvs_lp_wrapper.TAMPER	ALT0		
			gpio5.IO0	ALT5		
57	SNVS_TAMPER1	R9	snvs_lp_wrapper.SNVS_TD1	Default	VSNVS	
			snvs_lp_wrapper.TAMPER	ALT0		
			gpio5.IO1	ALT5		
58	SNVS_TAMPER2	P11	snvs_lp_wrapper.SNVS_TD1	Default	VSNVS	
			snvs_lp_wrapper.TAMPER	ALT0		
			gpio5.IO2	ALT5		
59	SNVS_TAMPER3	P10	snvs_lp_wrapper.SNVS_TD1	Default	VSNVS	
			snvs_lp_wrapper.TAMPER	ALT0		
			gpio5.IO3	ALT5		
60	SNVS_TAMPER4	P9	snvs_lp_wrapper.SNVS_TD1	Default	VSNVS	
			snvs_lp_wrapper.TAMPER	ALT0		
			gpio5.IO4	ALT5		
61	SNVS_TAMPER5	N8	snvs_lp_wrapper.SNVS_TD1	Default	VSNVS	
			snvs_lp_wrapper.TAMPER	ALT0		
			gpio5.IO5	ALT5		
62	SNVS_TAMPER6	N11	snvs_lp_wrapper.SNVS_TD1	Default	VSNVS	
			snvs_lp_wrapper.TAMPER	ALT0		
			gpio5.IO6	ALT5		
63	SNVS_TAMPER7	N10	snvs_lp_wrapper.SNVS_TD1	Default	VSNVS	
			snvs_lp_wrapper.TAMPER	ALT0		
			gpio5.IO7	ALT5		

64	SNVS_TAMPER8	N9	snvs_lp_wrapper.SNVS_TD1	Default	VSNVS	
			snvs_lp_wrapper.TAMPER	ALT0		
			gpio5.IO8	ALT5		
65	SNVS_TAMPER9	R6	snvs_lp_wrapper.SNVS_TD1	Default	VSNVS	
			snvs_lp_wrapper.TAMPER	ALT0		
			gpio5.IO9	ALT5		
66	PMIC_ON_REQ	T9	PMIC_ON_REQ	Default	VSNVS	Used for VSYS_3V3 power enable signal if not use,let it floating
67	PMIC_STBY_REQ	U9	PMIC_ON_REQ	Default	VSNVS	
68	BOOT_MODE0	T10	src.BOOT_MODE[0]	Default	VSNVS	
			src.BOOT_MODE[0]	ALT0		
			gpio5.IO10	ALT5		
69	BOOT_MODE1	U10	src.BOOT_MODE[1]	Default	VSNVS	
			src.BOOT_MODE[1]	ALT0		
			gpio5.IO11	ALT5		
70	ONOFF	R8	ONOFF	Default	VSNVS	if not use,let it floating
71	USB_OTG2_DN	T13				
72	USB_OTG2_DP	U13				
73	GND				GND	
74	USB_OTG1_DP	U15				
75	USB_OTG1_DN	T15				
76	USB_OTG2_VBUS	U12				Must supply 5V if USB is used.Powered up after VSYS_3V3
77	USB_OTG1_VBUS	T12				Can be left floating if OTG1 is not used as a device. Powered up after VSYS_3V3
78	GND				GND	
79	CLK1_N	P16				
80	CLK1_P	P17				
81	GND				GND	
82	JTAG_TCK	M14	sjc.TCK	Default	3.3V	
			sjc.TCK	ALT0		
			gpt2.COMPARE2	ALT1		
			sai2.RX_DATA	ALT2		
			ccm.OUT1	ALT3		
			pwm7.OUT	ALT4		
			gpio1.IO[14]	ALT5		
			osc32k.32K_OUT	ALT6		
83	JTAG_TMS	P14	sjc.TMS	Default	3.3V	
			sjc.TMS	ALT0		
			gpt2.CAPTURE1	ALT1		
			sai2.MCLK	ALT2		
			ccm.CLKO1	ALT3		
			ccm.WAIT	ALT4		
			gpio1.IO[11]	ALT5		
			sdma.EXT_EVENT[1]	ALT6		
			epit1.OUT	ALT8		
84	JTAG_TDI	N16	sjc.TDI	Default	3.3V	
			sjc.TDI	ALT0		
			gpt2.COMPARE1	ALT1		
			sai2.TX_BCLK	ALT2		
			ccm.OUT0	ALT3		
			pwm6.OUT	ALT4		
			gpio1.IO[13]	ALT5		
			mqs.LEFT	ALT6		
85	JTAG_TDO	N15	sjc.TDO	Default	3.3V	
			sjc.TDO	ALT0		
			gpt2.CAPTURE2	ALT1		
			sai2.TX_SYNC	ALT2		
			ccm.CLKO2	ALT3		
			ccm.STOP	ALT4		
			gpio1.IO[12]	ALT5		
			mqs.RIGHT	ALT6		
			epit2.OUT	ALT8		
86	JTAG_Ntrst	N14	sjc.TRSTB	Default	3.3V	
			sjc.TRSTB	ALT0		
			gpt2.COMPARE3	ALT1		
			sai2.TX_DATA	ALT2		
			ccm.OUT2	ALT3		
			pwm8.OUT	ALT4		
			gpio1.IO[15]	ALT5		
			anatop.24M_OUT	ALT6		
87	JTAG_MODE	P15	sjc.MOD	Default	3.3V	Pulled down with 10Kohm on Module
			sjc.MOD	ALT0		
			gpt2.CLK	ALT1		
			spdif.OUT	ALT2		
			anatop.ENET_REF_CLK_25M	ALT3		

			ccm.PMIC_RDY	ALT4		
			gpio1.IO[10]	ALT5		
			sdma.EXT_EVENT[0]	ALT6		
88	GPIO1_IO09	M15	gpio1.IO[9]	Default	3.3V	Can be used as analog input, refer to i.mx6ul/6ull user manual for detail.
			pwm2.OUT	ALT0		
			global_wdog	ALT1		
			spdif.IN	ALT2		
			csi.HSYNC	ALT3		
			usdhc2.RESET_B	ALT4		
			gpio1.IO[9]	ALT5		
			usdhc1.RESET_B	ALT6		
			ecspi3.TESTER_TRIGGER	ALT7		
			uart5.CTS_B	ALT8		
89	GPIO1_IO08	N17	gpio1.IO[8]	Default	3.3V	Can be used as analog input, refer to i.mx6ul/6ull user manual for detail
			pwm1.OUT	ALT0		
			wdog1.WDOG_B	ALT1		
			spdif.OUT	ALT2		
			csi.VSYNC	ALT3		
			usdhc2.VSELECT	ALT4		
			gpio1.IO[8]	ALT5		
			ccm.PMIC_RDY	ALT6		
			ecspi2.TESTER_TRIGGER	ALT7		
			uart5.RTS_B	ALT8		
90	GPIO1_IO05	M17	gpio1.IO[5]	Default	3.3V	Can be used as analog input, refer to i.mx6ul/6ull user manual for detail.
			anatop.ENET_REF_CLK2	ALT0		
			pwm4.OUT	ALT1		
			anatop.OTG2_ID	ALT2		
			csi.FIELD	ALT3		
			usdhc1.VSELECT	ALT4		
			gpio1.IO[5]	ALT5		
			enet2.1588_EVENT0_OUT	ALT6		
			ccm.PLL3_BYP	ALT7		
			uart5.RX	ALT8		
91	GPIO1_IO04	M16	gpio1.IO[4]	Default	3.3V	Can be used as analog input, refer to i.mx6ul/6ull user manual for detail.
			anatop.ENET_REF_CLK1	ALT0		
			pwm3.OUT	ALT1		
			usb.OTG1_PWR	ALT2		
			anatop.24M_OUT	ALT3		
			usdhc1.RESET_B	ALT4		
			gpio1.IO[4]	ALT5		
			enet2.1588_EVENT0_IN	ALT6		
			ccm.PLL2_BYP	ALT7		
			uart5.TX	ALT8		
92	GPIO1_IO03	L17	gpio1.IO[3]	Default	3.3V	Can be used as analog input, refer to i.mx6ul/6ull user manual for detail.
			i2c1.SDA	ALT0		
			gpt1.COMPARE3	ALT1		
			usb.OTG2_OC	ALT2		
			osc32k.32K_OUT	ALT3		
			usdhc1.CD_B	ALT4		
			gpio1.IO[3]	ALT5		
			ccm.DI0_EXT_CLK	ALT6		
			src.TESTER_ACK	ALT7		
			uart1.RX	ALT8		
93	GPIO1_IO02	L14	gpio1.IO[2]	Default	3.3V	Can be used as analog input, refer to i.mx6ul/6ull user manual for detail.
			i2c1.SCL	ALT0		
			gpt1.COMPARE2	ALT1		
			usb.OTG2_PWR	ALT2		
			anatop.ENET_REF_CLK_25M	ALT3		
			usdhc1.WP	ALT4		
			gpio1.IO[2]	ALT5		
			sdma.EXT_EVENT[0]	ALT6		
			src.ANY_PU_RESET	ALT7		
			uart1.TX	ALT8		
94	GPIO1_IO01	L15	gpio1.IO[1]	Default	3.3V	Can be used as analog input, refer to i.mx6ul/6ull user manual for detail.
			i2c2.SDA	ALT0		
			gpt1.COMPARE1	ALT1		
			usb.OTG1_OC	ALT2		
			anatop.ENET_REF_CLK2	ALT3		
			mqs.LEFT	ALT4		
			gpio1.IO[1]	ALT5		
			enet1.1588_EVENT0_OUT	ALT6		
			src.EARLY_RESET	ALT7		
			wdog1.WDOG_B	ALT8		
			gpio1.IO[0]	Default		
			i2c2.SCL	ALT0		
			gpt1.CAPTURE1	ALT1		
			anatop.OTG1_ID	ALT2		

95	GPIO1_IO00	K13	anatop.ENET_REF_CLK1	ALT3	3.3V	Can be used as analog input,refer to i.mx6ul/6ull user mamual for detail.
			mqs.RIGHT	ALT4		
			gpio1.IO[0]	ALT5		
			enet1.1588_EVENT0_IN	ALT6		
			src.SYSTEM_RESET	ALT7		
			wdog3.WDOG_B	ALT8		
96	VSNVS	P12	VDD_SNVS_IN		VSNVS	VSNVS power in 2.8~3.3V ,Should be firstly powered on.
97	VSYS_3V3				3.3V	Main 3.3V power in
98	GND				GND	
99	UART1_CTS	K15	gpio1.IO[18]	Default	3.3V	
			uart1.CTS_B	ALT0		
			enet1.RX_CLK	ALT1		
			usdhc1.WP	ALT2		
			csi.DATA[4]	ALT3		
			enet2.1588_EVENT1_IN	ALT4		
			gpio1.IO[18]	ALT5		
			anatop.USBPHY1_TSTI_TX_DN	ALT6		
			usdhc2.TESTER_TRIGGER	ALT7		
			usdhc2.WP	ALT8		
			uart5.CTS_B	ALT9		
100	UART1_RTS	J14	gpio1.IO[19]	Default	3.3V	
			uart1.RTS_B	ALT0		
			enet1.TX_ER	ALT1		
			usdhc1.CD_B	ALT2		
			csi.DATA[5]	ALT3		
			enet2.1588_EVENT1_OUT	ALT4		
			gpio1.IO[19]	ALT5		
			anatop.USBPHY1_TSTO_RX_SQUELCH	ALT6		
			qspi.TESTER_TRIGGER	ALT7		
			usdhc2.CD_B	ALT8		
			uart5.RTS_B	ALT9		
101	UART1_RX_DATA	K16	gpio1.IO[17]	Default	3.3V	
			uart1.RX	ALT0		
			enet1.RDATA[3]	ALT1		
			i2c3.SDA	ALT2		
			csi.DATA[3]	ALT3		
			gpt1.CLK	ALT4		
			gpio1.IO[17]	ALT5		
			anatop.USBPHY1_TSTI_TX_HS_MODE	ALT6		
			usdhc1.TESTER_TRIGGER	ALT7		
			spdif.IN	ALT8		
			uart5.RX	ALT9		
102	UART1_TX_DATA	K14	gpio1.IO[16]	Default	3.3V	
			uart1.TX	ALT0		
			enet1.RDATA[2]	ALT1		
			i2c3.SCL	ALT2		
			csi.DATA[2]	ALT3		
			gpt1.COMPARE1	ALT4		
			gpio1.IO[16]	ALT5		
			anatop.USBPHY1_TSTI_TX_LS_MODE	ALT6		
			ecspi4.TESTER_TRIGGER	ALT7		
			spdif.OUT	ALT8		
			uart5.TX	ALT9		
103	UART2_CTS	J15	gpio1.IO[22]	Default	3.3V	
			uart2.CTS_B	ALT0		
			enet1.CRS	ALT1		
			can2.TX	ALT2		
			csi.DATA[8]	ALT3		
			gpt1.COMPARE2	ALT4		
			gpio1.IO[22]	ALT5		
			anatop.USBPHY2_TSTO_RX_FS_RXD	ALT6		
			sjc.DE_B	ALT7		
			ecspi3.MOSI	ALT8		
104	UART2_RTS	J15	gpio1.IO[22]	Default	3.3V	
			uart2.CTS_B	ALT0		
			enet1.CRS	ALT1		
			can2.TX	ALT2		
			csi.DATA[8]	ALT3		
			gpt1.COMPARE2	ALT4		
			gpio1.IO[22]	ALT5		
			anatop.USBPHY2_TSTO_RX_FS_RXD	ALT6		

			sjc.DE_B	ALT7		
			ecspi3.MOSI	ALT8		
105	UART2_RX_DATA	J16	gpio1.IO[21]	Default	3.3V	
			uart2.RX	ALT0		
			enet1.TDATA[3]	ALT1		
			i2c4.SDA	ALT2		
			csi.DATA[7]	ALT3		
			gpt1.CAPTURE2	ALT4		
			gpio1.IO[21]	ALT5		
			anatop.USBPHY1_TSTO_RX_HS_RXD	ALT6		
			sjc.DONE	ALT7		
			ecspi3.SCLK	ALT8		
106	UART2_TX_DATA	J17	gpio1.IO[20]	Default	3.3V	
			uart2.TX	ALT0		
			enet1.TDATA[2]	ALT1		
			i2c4.SCL	ALT2		
			csi.DATA[6]	ALT3		
			gpt1.CAPTURE1	ALT4		
			gpio1.IO[20]	ALT5		
			anatop.USBPHY1_TSTO_RX_DISCON_DET	ALT6		
			rawnand.TESTER_TRIGGE	ALT7		
			ecspi3.SS0	ALT8		
107	UART3_CTS	H15	gpio1.IO[26]	Default	3.3V	
			uart3.CTS_B	ALT0		
			enet2.RX_CLK	ALT1		
			can1.TX	ALT2		
			csi.DATA[10]	ALT3		
			enet1.1588_EVENT1_IN	ALT4		
			gpio1.IO[26]	ALT5		
			anatop.USBPHY1_TSTI_TX_HIZ	ALT6		
			sim_m.HADDR[1]	ALT7		
			epit2.OUT	ALT8		
108	UART3_RTS	G14	gpio1.IO[27]	Default	3.3V	
			uart3.RTS_B	ALT0		
			enet2.TX_ER	ALT1		
			can1.RX	ALT2		
			csi.DATA[11]	ALT3		
			enet1.1588_EVENT1_OUT	ALT4		
			gpio1.IO[27]	ALT5		
			anatop.USBPHY2_TSTO_RX_HS_RXD	ALT6		
			sim_m.HADDR[2]	ALT7		
			wdog1.WDOG_B	ALT8		
109	UART3_RX_DATA	H16	gpio1.IO[25]	Default	3.3V	
			uart3.RX	ALT0		
			enet2.RDATA[3]	ALT1		
			csi.DATA[0]	ALT3		
			uart2.RTS_B	ALT4		
			gpio1.IO[25]	ALT5		
			anatop.USBPHY1_TSTI_TX_EN	ALT6		
			sim_m.HADDR[0]	ALT7		
			epit1.OUT	ALT8		
110	UART3_TX_DATA	H17	gpio1.IO[24]	Default	3.3V	
			uart3.TX	ALT0		
			enet2.RDATA[2]	ALT1		
			csi.DATA[1]	ALT3		
			uart2.CTS_B	ALT4		
			gpio1.IO[24]	ALT5		
			anatop.USBPHY1_TSTI_TX_DP	ALT6		
			sjc.JTAG_ACT	ALT7		
			anatop.OTG1_ID	ALT8		
111	UART4_RX_DATA	G16	gpio1.IO[29]	Default	3.3V	
			uart4.RX	ALT0		
			enet2.TDATA[3]	ALT1		
			i2c1.SDA	ALT2		
			csi.DATA[13]	ALT3		
			csu.CSU_ALARM_AUT[1]	ALT4		
			gpio1.IO[29]	ALT5		
			anatop.USBPHY2_TSTO_P_LL_CLK20DIV	ALT6		
			sim_m.HADDR[4]	ALT7		
			ecspi2.SS0	ALT8		
			epdc.PWRCTRL[1]	ALT9		

112	UART4_TX_DATA	G17	gpio1.IO[28]	Default	3.3V	
			uart4.TX	ALT0		
			enet2.TDATA[2]	ALT1		
			i2c1.SCL	ALT2		
			csi.DATA[12]	ALT3		
			csu.CSU_ALARM_AUT[2]	ALT4		
			gpio1.IO[28]	ALT5		
			anatop.USBPHY1_TSTO_P	ALT6		
			LL_CLK20DIV			
			sim_m.HADDR[3]	ALT7		
			ecspi2.SCLK	ALT8		
113	UART5_TX_DATA	F17	gpio1.IO[30]	Default	3.3V	
			uart5.TX	ALT0		
			enet2.CRS	ALT1		
			i2c2.SCL	ALT2		
			csi.DATA[14]	ALT3		
			csu.CSU_ALARM_AUT[0]	ALT4		
			gpio1.IO[30]	ALT5		
			anatop.USBPHY2_TSTO_R	ALT6		
			X_SQUELCH			
			sim_m.HADDR[5]	ALT7		
			ecspi2.MOSI	ALT8		
			epdc.PWRCTRL[2]	ALT9		
			114	UART5_RX_DATA		
uart5.RX	ALT0					
enet2.COL	ALT1					
i2c2.SDA	ALT2					
csi.DATA[15]	ALT3					
csu.CSU_INT_DEB	ALT4					
gpio1.IO[31]	ALT5					
anatop.USBPHY2_TSTO_R	ALT6					
X_DISCON_DET						
sim_m.HADDR[6]	ALT7					
ecspi2.MISO	ALT8					
epdc.PWRCTRL[3]	ALT9					
115	GND					
116	ENET2_CRS_DV	B17	gpio2.IO[10]	Default	3.3V	
			enet2.RX_EN	ALT0		
			uart7.TX	ALT1		
			i2c4.SCL	ALT3		
			weim.ADDR[26]	ALT4		
			gpio2.IO[10]	ALT5		
			kpp.ROW[5]	ALT6		
			sim_m.HADDR[17]	ALT7		
			anatop.ENET_REF_CLK_25	ALT8		
			M			
			epdc.SDDO[10]	ALT9		
117	ENET2_RXER	D16	gpio2.IO[15]	Default	3.3V	
			enet2.RX_ER	ALT0		
			uart8.RTS_B	ALT1		
			ecspi4.SS0	ALT3		
			weim.ADDR[25]	ALT4		
			gpio2.IO[15]	ALT5		
			kpp.COL[7]	ALT6		
			sim_m.HADDR[22]	ALT7		
			global_wdog	ALT8		
			epdc.SDDO[15]	ALT9		
			118	ENET2_RXD1		
enet2.RDATA[1]	ALT0					
uart6.RX	ALT1					
i2c3.SDA	ALT3					
enet1.MDC	ALT4					
gpio2.IO[9]	ALT5					
kpp.COL[4]	ALT6					
sim_m.HADDR[16]	ALT7					
usb.OTG1_OC	ALT8					
epdc.SDDO[9]	ALT9					
119	ENET2_RXD0	C17			gpio2.IO[8]	Default
			enet2.RDATA[0]	ALT0		
			uart6.TX	ALT1		
			i2c3.SCL	ALT3		
			enet1.MDIO	ALT4		
			gpio2.IO[8]	ALT5		
			kpp.ROW[4]	ALT6		
			sim_m.HADDR[15]	ALT7		
			usb.OTG1_PWR	ALT8		
			epdc.SDDO[8]	ALT9		
						gpio2.IO[14]

120	ENET2_TX_CLK	D17	enet2.TX_CLK	ALT0	3.3V	
			uart8.CTS_B	ALT1		
			ecspi4.MISO	ALT3		
			anatop.ENET_REF_CLK2	ALT4		
			gpio2.IO[14]	ALT5		
			kpp.ROW[7]	ALT6		
			sim_m.HADDR[21]	ALT7		
			anatop.OTG2_ID	ALT8		
			epdc.SDDO[14]	ALT9		
121	ENET2_TXEN	B15	gpio2.IO[13]	Default	3.3V	
			enet2.TX_EN	ALT0		
			uart8.RX	ALT1		
			ecspi4.MOSI	ALT3		
			weim.ACLK_FREERUN	ALT4		
			gpio2.IO[13]	ALT5		
			kpp.COL[6]	ALT6		
			sim_m.HADDR[20]	ALT7		
			usb.OTG2_OC	ALT8		
			epdc.SDDO[13]	ALT9		
122	ENET2_TXD1	A16	gpio2.IO[12]	Default	3.3V	
			enet2.TDATA[1]	ALT0		
			uart8.TX	ALT1		
			ecspi4.SCLK	ALT3		
			weim.EB_B[3]	ALT4		
			gpio2.IO[12]	ALT5		
			kpp.ROW[6]	ALT6		
			sim_m.HADDR[19]	ALT7		
			usb.OTG2_PWR	ALT8		
			epdc.SDDO[12]	ALT9		
123	ENET2_TXD0	A15	gpio2.IO[11]	Default	3.3V	
			enet2.TDATA[0]	ALT0		
			uart7.RX	ALT1		
			i2c4.SDA	ALT3		
			weim.EB_B[2]	ALT4		
			gpio2.IO[11]	ALT5		
			kpp.COL[5]	ALT6		
			sim_m.HADDR[18]	ALT7		
			anatop.24M_OUT	ALT8		
			epdc.SDDO[11]	ALT9		
124	ENET_MDC	K17	gpio1.IO[7]	Default	3.3V	Can be used for ENET, if ENET1 is used!
			enet1.MDC	ALT0		
			enet2.MDC	ALT1		
125	ENET_MDIO		gpio1.IO[6]	Default	3.3V	Pulled up 1.5K ohm on module, Only be used for ENET,if ENET1 is used!
			enet1.MDIO	ALT0		
			enet2.MDIO	ALT1		
126	GND				GND	
127	ETH1X_LED2		LAN8720A Speed LED(100M or 10Mbps)		3.3V	Active Low (Drive C side of LED)
128	ETH1X_LED1		Lan8720A Link activity LED		3.3V	Active High (Drive A side of LED)