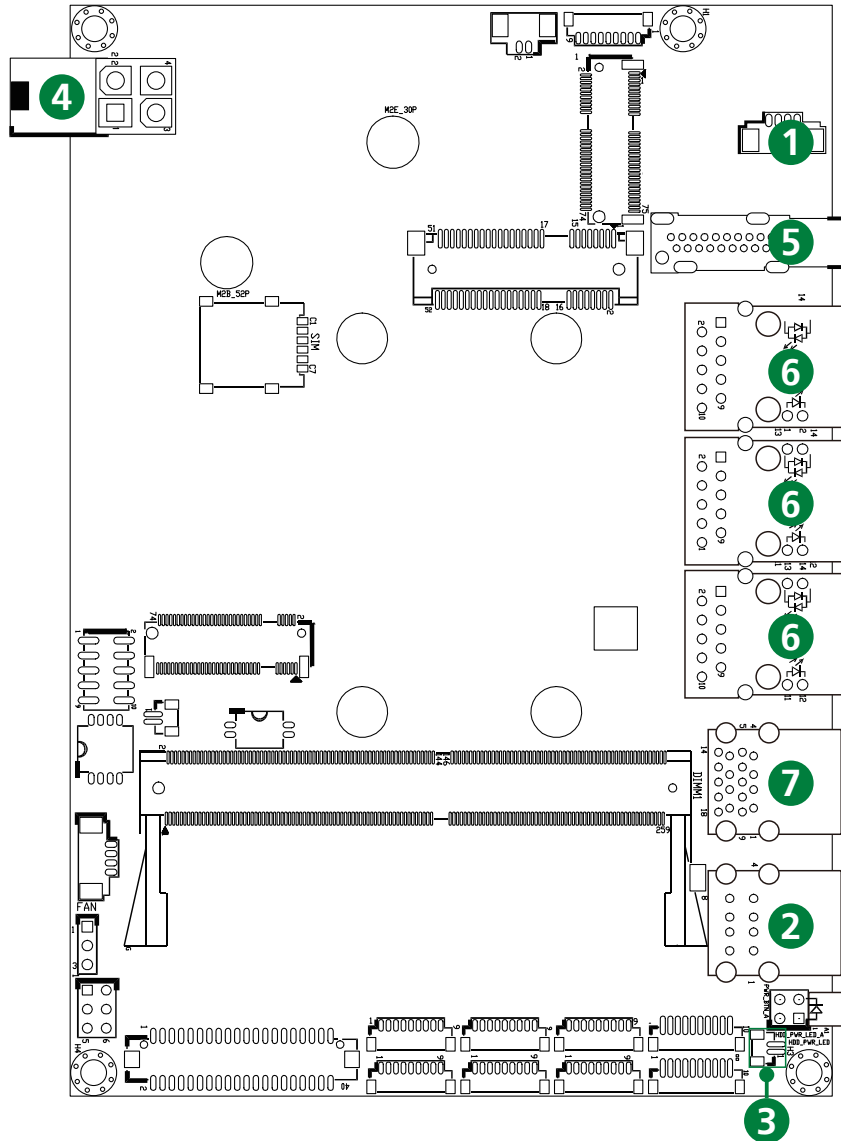


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1. SPK: Speaker Out Connector with Audio Amplifier

Pin	Definition
1	L+
2	L-
3	R+
4	R-

2. USB2_23P: USB 2.0 Connector

Pin	Definition
1	+5V
2	USB2_1N
3	USB2_1P
4	GND
5	+5V
6	USB2_2N
7	USB2_2P
8	GND
MH1	CGND
MH2	CGND
MH3	CGND
MH4	CGND

3. PWR_BTN: System Power Button

Pin	Definition
1	GND
2	PWRBTN#

4. DCIN: DC Power Input

Pin	Definition
1	GND
2	GND
3	+VIN
4	+VIN

5. HDMI1: HDMI Connector

Pin	Definition	Pin	Definition
1	HDMI1_TX2P	2	GND
3	HDMI1_TX2N	4	HDMI1_TX1P
5	GND	6	HDMI1_TX1N
7	HDMI1_TX0P	8	GND
9	HDMI1_TX0N	10	HDMI1_CLK_P
11	GND	12	HDMI1_CLK_N
13	NC	14	NC
15	HDMI1_SCL	16	HDMI1_SDA
17	GND	18	HDMI1_P5V
19	HDMI1_HPD	MH1	CGND
MH2	CGND	MH3	CGND
MH4	CGND		

6. LAN1, LAN2, LAN3: LAN Connector

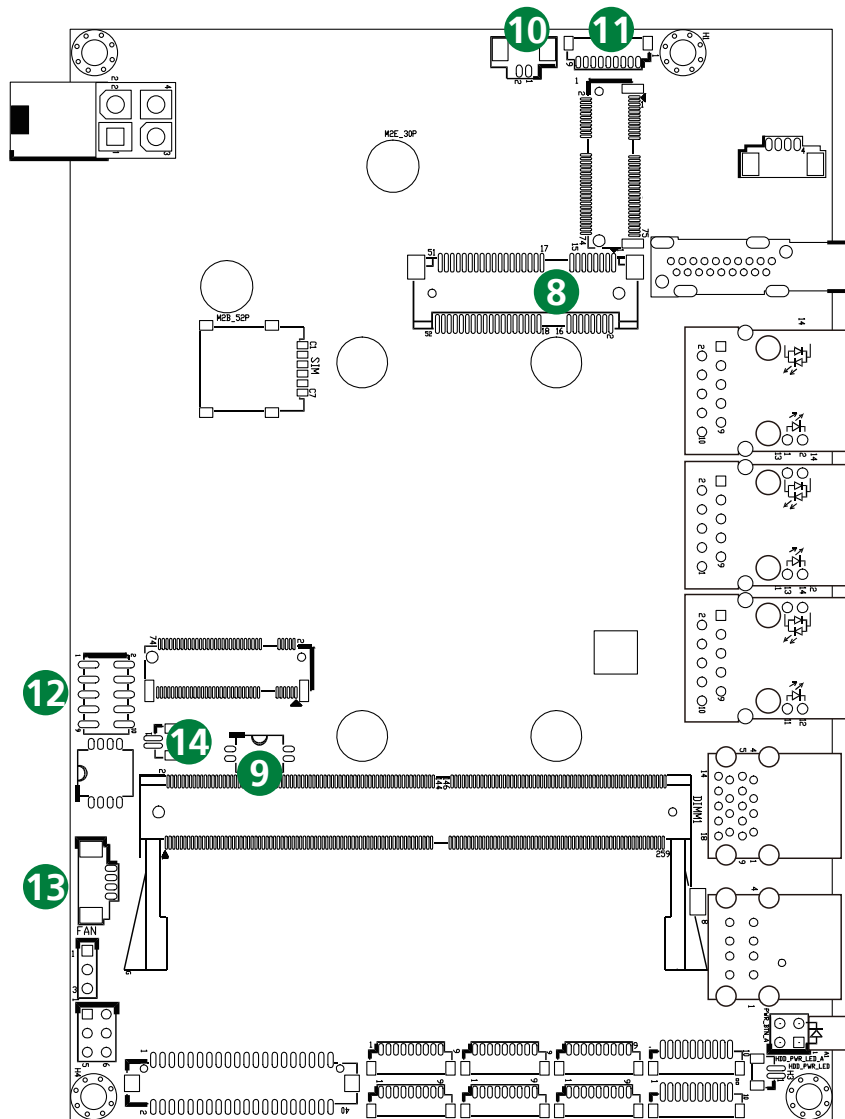
Pin	Definition	Pin	Definition
1	LAN1_MDI0P	2	LAN1_MDI0N
3	LAN1_MDI1P	4	LAN1_MDI1N
5	TCT	6	TCTG
7	LAN1_MDI2P	8	LAN1_MDI2N
9	LAN1_MDI3P	10	LAN1_MDI3N
11	LAN1_LED_ACT_POWER	12	LAN1_LED_ACT#
13	LAN1_LED_LINK2500#	14	LAN1_LED_LINK100#
MH1	CGND	MH2	CGND
NH1	NC	NH2	NC

7. USB3_01P: USB 3.2 Connector

Pin	Definition	Pin	Definition
1	+5V	2	USB2_3N
3	USB2_3P	4	GND
5	USB3_RX3N	6	USB3_RX3P
7	GND	8	USB3_TX3N
9	USB3_TX3P	10	+5V
11	USB2_4N	12	USB2_4P
13	GND	14	USB3_RX4N
15	USB3_RX4P	16	GND
17	USB3_TX4N	18	USB3_TX4P
MH1	CGND	MH2	CGND
MH3	CGND	MH4	CGND

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8. MINIPCI: Mini PCIe Card (PCIe+SATA)

Pin	Definition	Pin	Definition
1	WAKE#	2	3.3V
3	NC	4	GND
5	NC	6	1.5V
7	CLKREQ#	8	UIM_PWR
9	GND	10	UIM_DATA
11	CLKN0	12	UIM_CLK
13	CLKP0	14	UIM_RESET
15	GND	16	UIM_VPP
17	NC	18	GND
19	NC	20	W_DIS#
21	GND	22	RESET#
23	PCI5_RXN / SATA_RXP	24	3.3V
25	PCI5_RXP / SATA_RXN	26	GND
27	GND	28	1.5V
29	GND	30	SMB_CLK
31	PCI5_TXN / SATA_TXN	32	SMB_DATA
33	PCI5_TXP / SATA_TPN	34	GND
35	GND	36	USB2_6DN
37	GND	38	USB2_6DP
39	3.3V	40	GND
41	3.3V	42	NC
43	GND	44	NC
45	NC	46	NC
47	NC	48	1.5V
49	DAS (Device Activity Signal)	50	GND
51	mSATA Presece Detection	52	3.3V

9. CLR CMOS: Clear CMOS

Pin	Definition	Setting
1	OFF	Default
2	OFF	
3	ON	
4	ON	

10. BAT: Coin-cell Battery Connector

Pin	Definition
1	GND
2	BAT

11. MIC_LOUT: MIC-in LINE-out Connector

Pin	Definition
1	LINE_OUT-R
2	LINE_JD
3	AUDGND
4	LINE_OUT-L
5	AUDGND
6	MIC_OUT-R
7	MIC_JD
8	MIC_OUT-L
9	AUDGND

12. USB2_45P: USB 2.0x2 Port

Pin	Definition
1	+5V
2	GND
3	USB2_1N
4	GND
5	USB2_1P
6	USB2_2P
7	GND
8	USB2_2N
9	GND
10	+5V

13. FAN: Fan Connector

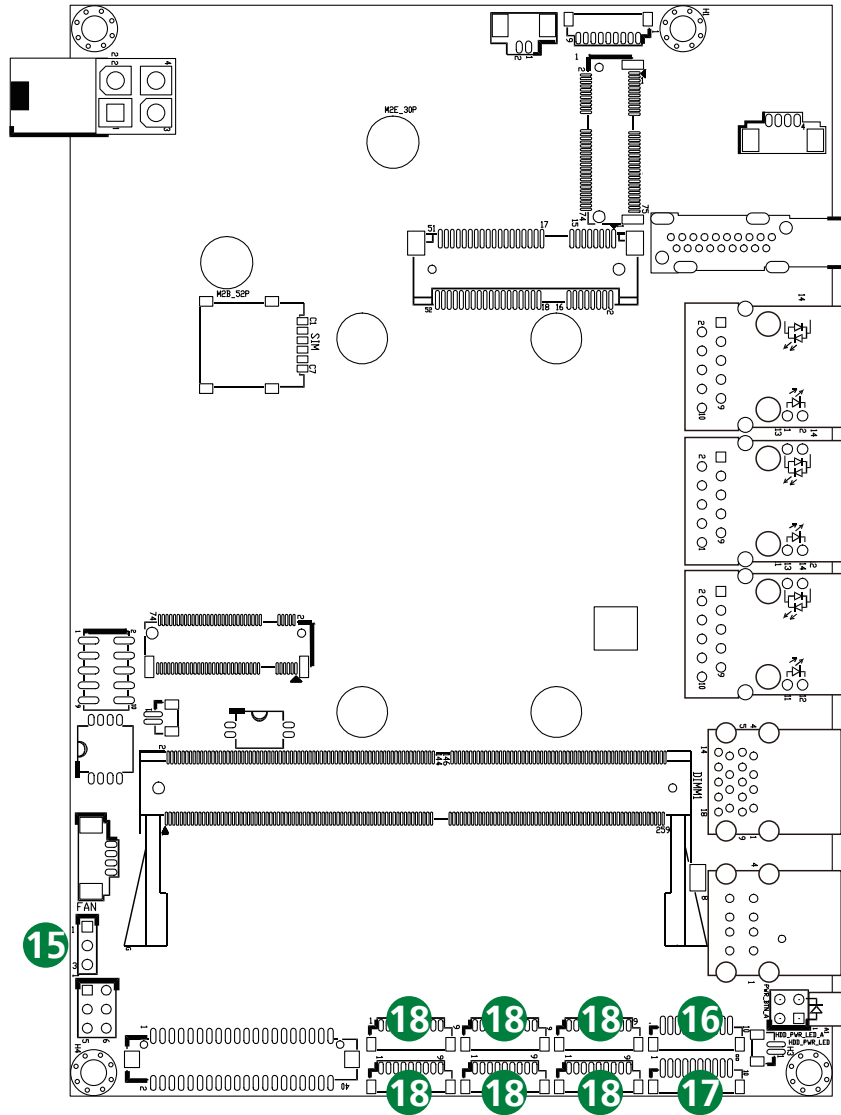
Pin	Definition
1	GND
2	+12V
3	FAN SPEED DETECT
4	FAN SPEED CONTROL

14. RESET_BTN: Reset Button

Pin	Definition
1	GND
2	RESET#

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15. LCD_PWR: LCD Panel Voltage Select Jumper

Pin	Definition	Setting
1	+3.3V	Default
2	Panel Power	
3	+5V	

16. GPIO: GPIO Connector

Pin	Definition	Pin	Definition
1	+5V	2	GND
3	GPO0	4	GPO1
5	GPO2	6	GPO3
7	GPI0	8	GPI1
9	GPI2	10	GPI3

17. Debug: 80 Debug Port Connector

Pin	Definition	Pin	Definition
1	GND	2	PLTRST#
3	ESPI_CLK	4	ESPI_CS#
5	ESPI_IO3	6	ESPI_IO2
7	ESPI_IO1	8	ESPI_IO0
9	ESPI_RST#	10	3.3V

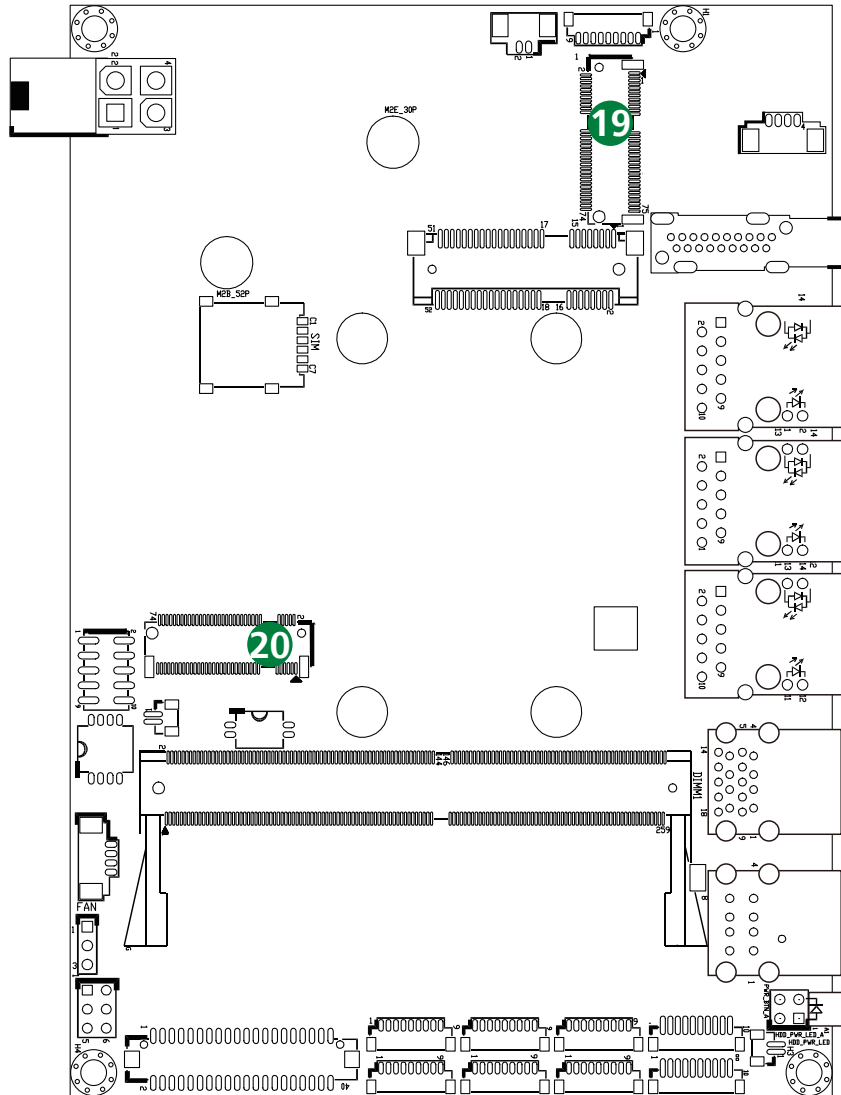
18. COM1, COM2 (RS232/RS422/RS485) COM3, COM4, COM5, COM6 (RS232)

Pin	RS232	RS422 (If supported)	RS485 (If supported)
1	RI		
2	CTS		
3	RTS		
4	DSR		
5	GND		
6	DTR	RX-	
7	TXD	RX+	
8	RXD	TX+	D+
9	DCD	TX-	D-



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19. M2E: M.2 Key E Connector (2230)

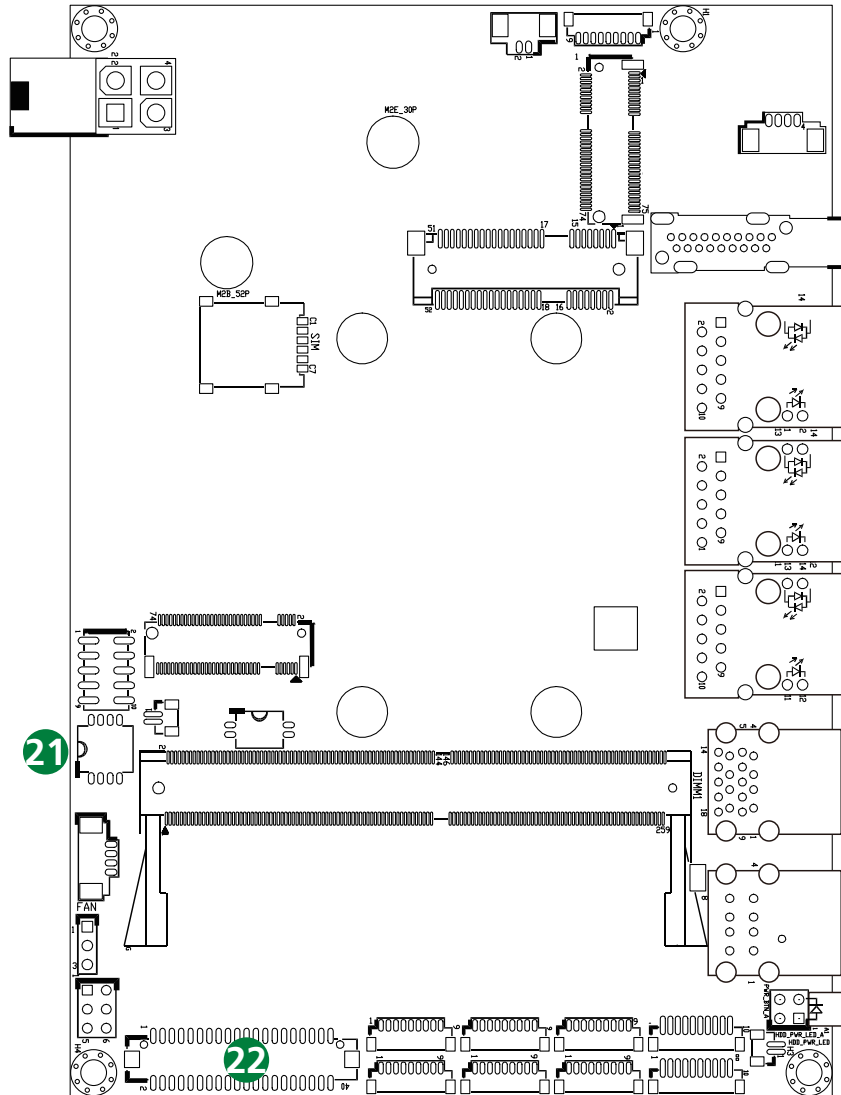
Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	GND	2	3.3V_1	41	PERP0	42	RESERVED_3
3	USB_D+	4	3.3V_2	43	PERN0	44	COEX3
5	USB_D-	6	LED1#	45	GND6	46	COEX2
7	GND2	8	PCM_CLK	47	REFCLKP0	48	COEX1
9	SDIO_CLK	10	PCM_SYNC	49	REFCLKN0	50	SUSCLK
11	SDIO_CMD	12	PCM_IN	51	GND7	52	PERST0#
13	SDIO_DATA0	14	PCM_OUT	53	CLKREQ0#	54	W_DISABLE2#
15	SDIO_DATA1	16	LED2#	55	PEWAKE0#	56	W_DISABLE1#
17	SDIO_DATA2	18	GND3	57	GND8	58	I2C_DATA
19	SDIO_DATA3	20	UART_WAKE#	59	PETP1	60	I2C_CLK
21	SDIO_WAKE#	22	UART_RXD	61	PETN1	62	ALERT#
23	SDIO_RESET#			63	GND9	64	RESERVED
Key				65	PERP1	66	UIM_SWP
		32	UART_TXD	67	PERN1	68	UIM_POWER_SNK
33	GND4	34	UART_CTS	69	GND10	70	UIM_POWER_SRC
35	PETP0	36	UART_RTS	71	PEFCLKP1	72	3.3V_3
37	PETN0	38	RESERVED_1	73	PEFCLKN1	74	3.3V_4
39	GND5	40	RESERVED_2	75	GND11		

20. M2B: M.2 Key B Connector (3042/3052)

Pin	Definition	Pin	Definition				
1	CONFIG3	2	3.3V	41	PCIE_RXN	42	NC
3	GND	4	3.3V	43	PCIE_RXP	44	NC
5	GND	6	POWER_OFF#	45	GND	46	NC
7	USB2_5P	8	WIFI_DIS#	47	PCIE_TXN	48	NC
9	USB2_5N	10	LED#	49	PCIE_TXP	50	RESET(3.3V)
11	NC			51	GND	52	CLKREQ#
Key				53	CLK_DN	54	WAKE#
		20	Telit FN980 PCIe/USB Select Pin	55	CLK_DP	56	NC
21	CONFIG0	22	NC	57	GND	58	NC
23	NC	24	NC	59	NC	60	NC
25	NC	26	WWAN_GPS_ON	61	NC	62	NC
27	GND	28	NC	63	NC	64	NC
29	USB3_RXN	30	UIM_RESET	65	NC	66	NC
31	USB3_RXP	32	UIM_CLK	67	RESET(1.8V)	68	SUS_CLK
33	GND	34	UIM_DATA	69	CONFIG1	70	3.3V
35	USB3_TXN	36	UIM_PWR	71	GND	72	3.3V
37	USB3_TXP	38	NC	73	GND	74	3.3V
39	GND	40	NC	75	CONFIG2		

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21. SW1: LVDS/eDP Panel EDID Select Jumper For LVDS (Resolution is determined by SW1 setting)

SW1 Position	SW1 Position			LVDS Panel			Setting
	Pin4	Pin3	Pin2	Pin1	Resolution	Channel	
ON	ON	ON	ON	ON	800x600	Single	6 bit
ON	ON	ON	OFF	OFF	1024x768	Single	6 bit
ON	ON	OFF	ON	ON	1024x768	Single	8 bit
ON	ON	OFF	OFF	OFF	1280x768	Single	6 bit
ON	OFF	ON	ON	ON	1280x800	Single	6 bit
ON	OFF	ON	OFF	OFF	1280x800	Single	8 bit
ON	OFF	OFF	ON	ON	1280x1024	Dual	8 bit
ON	OFF	OFF	OFF	OFF	1366x768	Single	6 bit
OFF	ON	ON	ON	ON	1366x768	Single	8 bit
OFF	ON	ON	OFF	OFF	1440x900	Dual	8 bit
OFF	ON	OFF	ON	ON	1400x1050	Dual	8 bit
OFF	ON	OFF	OFF	OFF	1600x900	Dual	8 bit
OFF	OFF	ON	ON	ON	1680x1050	Dual	8 bit
OFF	OFF	ON	OFF	OFF	1600x1200	Dual	8 bit
OFF	OFF	OFF	ON	ON	1920x1080	Dual	8 bit
OFF	OFF	OFF	OFF	OFF	1920x1200	Dual	8 bit
							Default

For eDP (Resolution is determined by eDP panel)

SW1 Position	SW1 Position				eDP Panel	Setting
	Pin4	Pin3	Pin2	Pin1	Max. Resolution	
Others					Not Supported.	
OFF	OFF	OFF	OFF	OFF	Up to 1920x1080	Default

22. LVDS_EDP: LVDS Connector

Pin	Definition	Pin	Definition
39	GND	40	GND
37	LVDS_DAT7N	38	LVDS_DAT7P
35	LVDS_CLK2N	36	LVDS_CLK2P
33	LVDS_DAT6N	34	LVDS_DAT6P
31	LVDS_DAT5N	32	LVDS_DAT5P
29	LVDS_DAT4N	30	LVDS_DAT4P
27	GND	28	GND
25	LVDS_DAT3N	26	LVDS_DAT3P
23	LVDS_CLK1N	24	LVDS_CLK1P
21	LVDS_DAT2N	22	LVDS_DAT2P
19	LVDS_DAT1N	20	LVDS_DAT1P
17	LVDS_DAT0N	18	LVDS_DAT0P
15	INV_BKLTEN	16	GND
13	INV_BKLTCTRL	14	Hot-Plug Detect
11	N.C	12	N.C
9	+V_PANEL	10	+V_PANEL
7	+V_PANEL	8	GND
5	+V_INV	6	GND
3	+V_INV	4	+V_INV
1	+V_INV	2	+V_INV