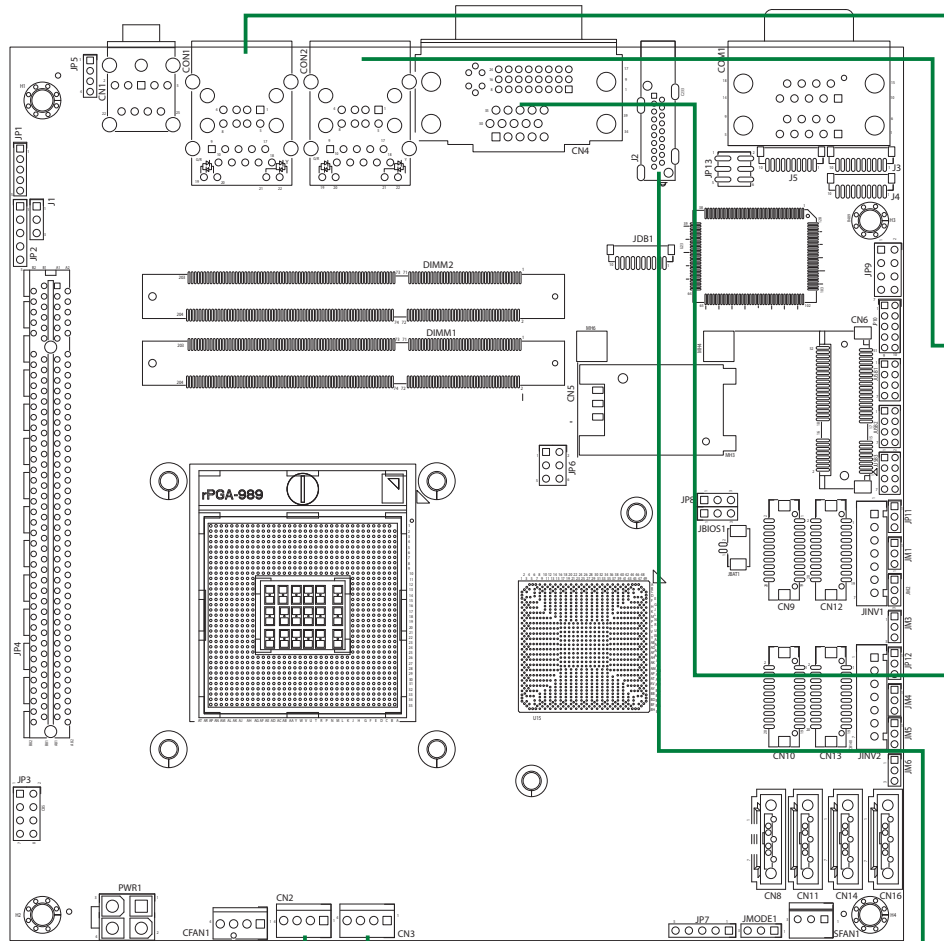


# NEX 607 Quick Reference Guide

Ver B. (P/N: 60177B0069X00)



**CN1: USB (Port0, Port1) + LAN2 (82574L) Connector**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	P5V_USB_P01	2	USB_0N	3	USB_0P	4	GND
5	USB3_RX0_N	6	USB3_RX0_P	7	GND	8	USB3_TX0_N
9	USB3_TX0_P	10	P5V_USB_P01	11	USB_1N	12	USB_1P
13	GND	14	USB3_RX1_N	15	USB3_RX1_P	16	GND
17	USB3_TX1_N	18	USB3_TX1_P	19	LAN2_1.9V	20	LAN2_MDI0P
21	LAN2_MDI0N	22	LAN2_MDI1P	23	LAN2_MDI1N	24	LAN2_MDI2P
25	LAN2_MDI2N	26	LAN2_MDI3P	27	LAN2_MDI3N	28	GND
29	LAN2_LED1P	30	LAN2_LED_ACT#	31	LAN2_LED_LINK100#	32	LAN2_LED_LINK1G#
MH1	Chassis_GND	MH2	Chassis_GND	MH3	Chassis_GND	MH4	Chassis_GND
MH5	Chassis_GND	MH6	Chassis_GND	MH7	Chassis_GND	MH8	Chassis_GND

**CN2: USB (Port2, Port3) + LAN1 (82579LM) Connector**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	P5V_USB_P23	2	USB_2N	3	USB_2P	4	GND
5	USB3_RX2_N	6	USB3_RX2_P	7	GND	8	USB3_TX2_N
9	USB3_TX2_P	10	P5V_USB_P23	11	USB_3N	12	USB_3P
13	GND	14	USB3_RX3_N	15	USB3_RX3_P	16	GND
17	USB3_TX3_N	18	USB3_TX3_P	19	VCT_LAN	20	LAN1_MDI0P
21	LAN1_MDI0N	22	LAN1_MDI1P	23	LAN1_MDI1N	24	LAN1_MDI2P
25	LAN1_MDI2N	26	LAN1_MDI3P	27	LAN1_MDI3N	28	GND
29	LAN1_LED1P	30	LAN1_LED_ACT#	31	LAN1_LED_LINK100#	32	LAN1_LED_LINK1G#
MH1	Chassis_GND	MH2	Chassis_GND	MH3	Chassis_GND	MH4	Chassis_GND
MH5	Chassis_GND	MH6	Chassis_GND	MH7	Chassis_GND	MH8	Chassis_GND

**CN4: VGA + DVI Connector**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	DVI_DATA2_N	2	DVI_DATA2_P	3	GND	4	NC
5	NC	6	DVI_CTRL_CLK	7	DVI_CTRL_DATA	8	NC
9	DVI_DATA1_N	10	DVI_DATA1_P	11	GND	12	NC
13	NC	14	DVI_PWR_S	15	GND	16	DVI_HPDET
17	DVI_DATA0_N	18	DVI_DATA0_P	19	GND	20	NC
21	NC	22	NC	23	DVI_CLK_P	24	DVI_CLK_N
C1	NC	C2	NC	C3	NC	C4	NC
C5A	GND	C5B	GND	25	CRT_RED	26	CRT_GREEN
27	CRT_BLUE	28	GND	29	GND	30	GND
31	GND	32	GND	33	VCC (VCC5)	34	GND
35	GND	36	DDC_DATA_VGA	37	HSYNC_VGA	38	VSYNC_VGA
39	DDC_CLK_VGA						

**J2: HDMI Connector**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	HDMI_DATA2_P	2	GND	3	HDMI_DATA2_N	4	HDMI_DATA1_P
5	GND	6	HDMI_DATA1_N	7	HDMI_DATA0_P	8	GND
9	HDMI_DATA0_N	10	HDMI_CLK_P	11	GND	12	HDMI_CLK_N
13	NC	14	NC	15	HDMI_CTRL_CLK	16	HDMI_CTRL_DATA
17	GND	18	HDMI_VCC5	19	DPD_HPD	MH1	GND
MH2	GND	MH3	GND	MH4	GND		

**CN2: SATA Power Connector**

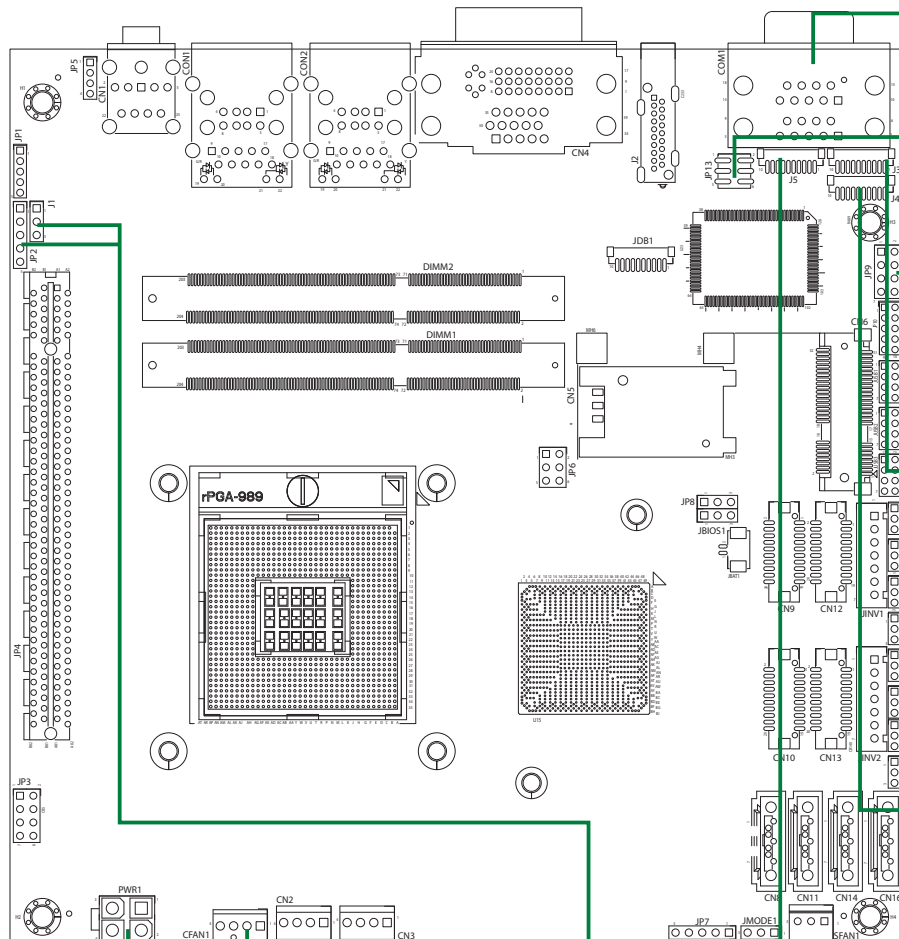
Pin	Definition
1	+12V
2	GND
3	GND
4	VCC5

**CN3: SATA Power Connector**

Pin	Definition
1	+12V
2	GND
3	GND
4	VCC5

# NEX 607 Quick Reference Guide

Ver B. (P/N: 60177B0069X00)



**COM1A: RS-232 Connector**

Pin	Definition	Pin	Definition
1	COM_DCD#1	2	COM_RXD1
3	COM_TXD1	4	COM_DTR#1
5	GND	6	COM_DSR#1
7	COM_RTS#1	8	COM_CTS#1
9	COM_RI#1		

**COM1B: RS-232/ RS-422/ RS-485 Connector**

Pin	Definition	Pin	Definition
10	COM_DCD#2	11	COM_RXD2
12	COM_TXD2	13	COM_DTR#2
14	GND	15	COM_DSR#2
16	COM_RTS#2	17	COM_CTS#2
18	COM_RI#2		

**JP13: RS-232 RI PWR Select ( VCC5:1-2 / +12V:3-4 / \* RI: 5-6)**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	COM2_RI#	2	VCC5	3	COM2_RI#	4	+12V
5	COM2_RI#	6	COM_RI#2				

**JP9: Keyboard and Mouse Pin Header**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	5V_KB	2	5V_KB	3	KDAT_R	4	MDAT_R
5	KCLK_R	6	MCLK_R	7	KBMS_GND	8	KBMS_GND

**J3: RS-232 Box Header Connector COM2**

Pin	Definition
1	COM_DCD#2
2	COM_RXD2
3	COM_TXD2
4	COM_DTR#2
5	GND
6	COM_DSR#2
7	COM_RTS#2
8	COM_CTS#2
9	COM_RI#2
10	GND
MH1	GND
MH2	GND

**RS422 Pin Definition**

Pin	Definition
1	TXD-
2	TXD+
3	RXD+
4	RXD-
5	GND
6	RTS-
7	RTS+
8	CTS-
9	CTS+

**RS422 Pin Definition**

Pin	Definition
1	TXD-
2	RXD-
3	TXD+
4	RXD+
5	Reserve
6	Reserve
7	Reserve
8	Reserve
9	Reserve

**J4: RS-232 Box Header Connector COM3**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	COM_DCD#3	2	COM_RXD3	3	COM_TXD3	4	COM_DTR#3
5	GND	6	COM_DSR#3	7	COM_RTS#3	8	COM_CTS#3
9	COM_RI#3	10	GND	MH1	GND	MH2	GND

**J5: RS-232 Box Header Connector COM4**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	COM_DCD#4	2	COM_RXD4	3	COM_TXD4	4	COM_DTR#4
5	GND	6	COM_DSR#4	7	COM_RTS#4	8	COM_CTS#4
9	COM_RI#4	10	GND	MH1	GND	MH2	GND

**PWR1: Power Input Connector**

Pin	Definition
1	GND
2	GND
3	+12V
4	+12V

**CFAN1: CPU Fan Connector**

Pin	Definition
1	GND
2	+12V
3	CPUFANIN
4	CPUFANOUT

**JP2: JTAG**

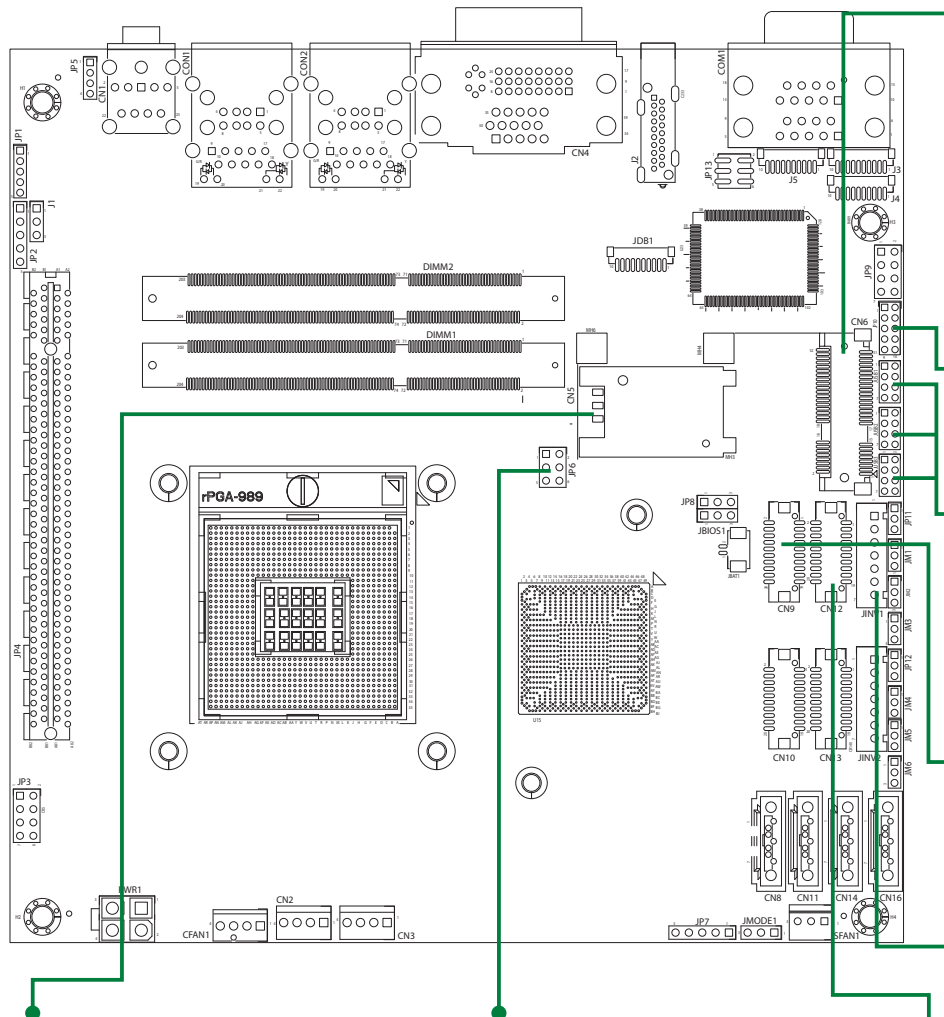
Pin	Definition	Pin	Definition
1	P_TRST	2	P_TCK
3	TDI	4	P_TDO
5	P_TMS		

**J1: SMBus Pin Header**

Pin	Definition	Pin	Definition
1	PCH_SMB_CLK	2	PCH_SMB_DATA
3	GND		

# NEX 607 Quick Reference Guide

Ver B. (P/N: 60177B0069X00)



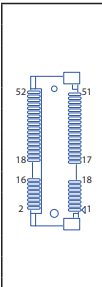
**CN5: SIM Slot**

Pin	Definition
C1	UIM_PWR
C2	UIM_RESET
C3	UIM_CLK
C5	GND
C6	UIM_VPP
C7	UIM_DATA

**JP6: SPI Programming Header**


Pin	Definition
1	VSP1
2	GND
3	SPI_CS#0
4	BIOS_SPI_CLK
5	BIOS_SPI_SO
6	BIOS_SPI_SI

**CN6: Mini-PCle Slot**



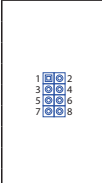
Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	PCIE_WAKE#	2	3VSB_MINI1	3	NC	4	GND
5	NC	6	P1V5_MINI1	7	CLKREQ#	8	UIM_PWR
9	GND	10	UIM_DATA	11	REFCLK-	12	UIM_CLK
13	REFCLK+	14	UIM_RESET	15	GND	16	UIM_VPP
17	NC	18	GND	19	NC	20	DISABLE#
21	GND	22	PERST#	23	PERn0	24	3VSB_MINI1
25	PERp0	26	GND	27	GND	28	P1V5_MINI1
29	GND	30	SMB_CLK	31	PETn0	32	SMB_DATA
33	PETp0	34	GND	35	GND	36	USB_D-
37	GND	38	USB_D+	39	3VSB_MINI1	40	GND
41	3VSB_MINI1	42	LED_WWAN#	43	GND	44	LED_WLAN#
45	NC	46	LED_WPAN#	47	NC	48	P1V5_MINI1
49	NC	50	GND	51	NC	52	3VSB_MINI1

**JP10: GPIO**



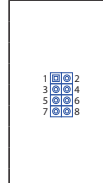
Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	VCC50	2	GND	3	SIO_GPO24	4	SIO_GPI20
5	SIO_GPO25	6	SIO_GPI21	7	SIO_GPO26	8	SIO_GPI22
9	SIO_GPO27	10	SIO_GPI23				

**JUSB1: USB Connector**



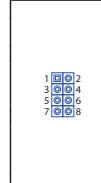
Pin	Definition
1	P5V_USB_P45
2	GND
3	USB4-
4	USB5+
5	USB4+
6	USB5-
7	GND
8	P5V_USB_P45

**JUSB2: USB Connector**



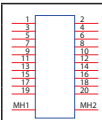
Pin	Definition
1	P5V_USB_P67
2	GND
4	USB6-
4	USB7+
5	USB6+
6	USB7-
7	GND
8	P5V_USB_P67

**JUSB3: USB Connector**




Pin	Definition
1	P5V_USB_P89
2	GND
4	USB8-
4	USB9+
5	USB8+
6	USB9-
7	GND
8	P5V_USB_P89

**CN9: LCD Panel CON**



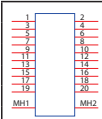
Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	LVDS_DDC_CLK	2	LVDS_DDC_DATA	3	VCC_LCD1	4	LVDSA_DATA0
5	LVDSA_DATA3	6	LVDSA_DATA#0	7	LVDSA_DATA#3	8	VCC_LCD1
9	GND	10	LVDSA_DATA1	11	LVDSA_CLK	12	LVDSA_DATA#1
13	LVDSA_CLK#	14	GND	15	GND	16	V_INV1
17	LVDSA_DATA2	18	V_INV1	19	LVDSA_DATA#2	20	LCD_GND1

**JIN1: LVDS CCFL Connector**



Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	VCC5	2	V_INV1	3	V_INV1	4	GFPDE_CCFL1
5	GND	6	GND	7	L_BKLT_EN		

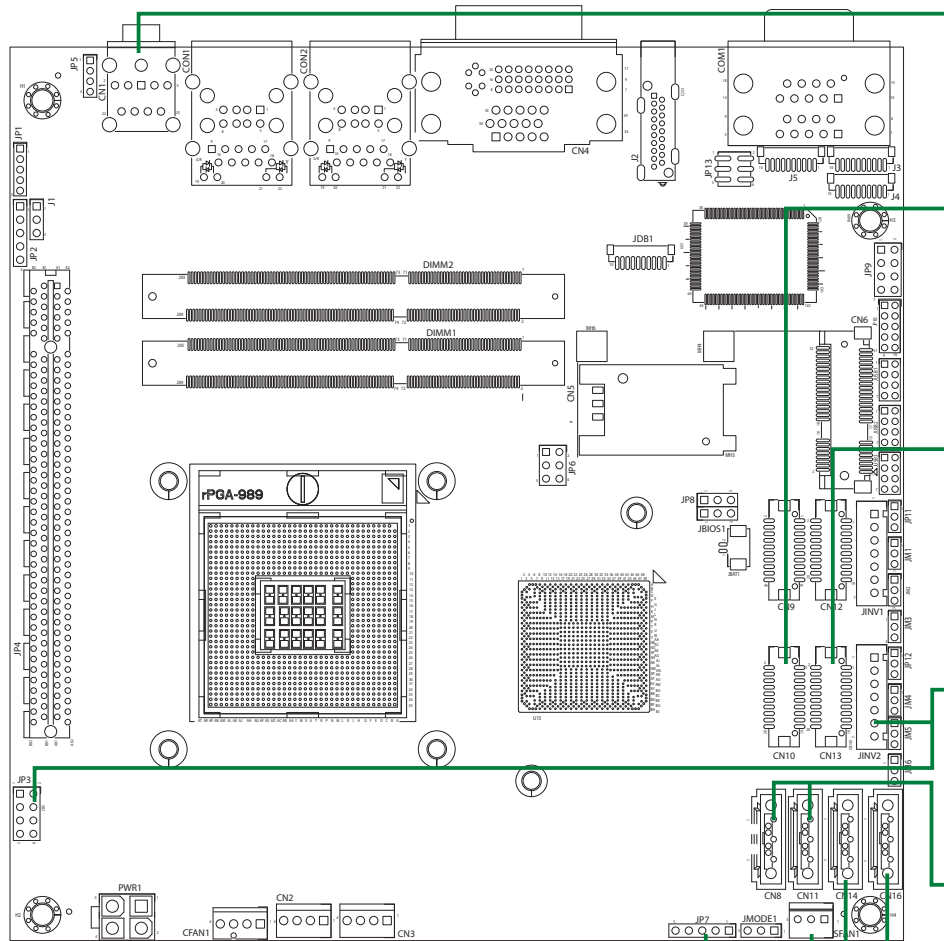
**CN12: LCD Panel CON**



Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	LVDS_DDC_CLK	2	LVDS_DDC_DATA	3	VCC_LCD1	4	LVDSB_DATA0
5	LVDSB_DATA3	6	LVDSB_DATA#0	7	LVDSB_DATA#3	8	VCC_LCD1
9	GND	10	LVDSB_DATA1	11	LVDSB_CLK	12	LVDSB_DATA#1
13	LVDSB_CLK#	14	GND	15	GND	16	V_INV1
17	LVDSB_DATA2	18	V_INV1	19	LVDSB_DATA#2	20	LCD_GND1

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**CN1: Mic-in & Line-out Phone Jack**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	AGND	2	MIC_OUT-L	3	MIC_JD	4	AGND
5	MIC_OUT-R	MH1	Chassis_GND	MH2	Chassis_GND	MH3	Chassis_GND
MH4	Chassis_GND	22	LINE_OUT_LC	23	LINEOUT_JD	24	AGND
25	LINE_OUT_RC	MH1	NC				

**CN10: LVDS2 Connector**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	NC	2	NC	3	VCC_LCD2	4	LVDSA_TXL4P
5	LVDSA_TXL7P	6	LVDSA_TXL4N	7	LVDSA_TXL7N	8	VCC_LCD2
9	LCD_GND2	10	LVDSA_TXL5P	11	LVDSA_CLK2P	12	LVDSA_TXL5N
13	LVDSA_CLK2N	14	GND	15	LCD_GND2	16	V_INV2
17	LVDSA_TXL6P	18	V_INV2	19	LVDSA_TXL6N	20	LCD_GND2
MH1	LCD_GND2	MH2	LCD_GND2				

**CN13: LVDS2 Connector**

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	NC	2	NC	3	VCC_LCD2	4	LVDSA_TXL0P
5	LVDSA_TXL3P	6	LVDSA_TXL0N	7	LVDSA_TXL3N	8	VCC_LCD2
9	LCD_GND2	10	LVDSA_TXL1P	11	LVDSA_CLK1P	12	LVDSA_TXL1N
13	LVDSA_CLK1N	14	GND	15	LCD_GND2	16	V_INV2
17	LVDSA_TXL2P	18	V_INV2	19	LVDSA_TXL2N	20	LCD_GND2
MH1	LCD_GND2	MH2	LCD_GND2				

**JP3: Power On/Reset & PWR/HDD LED Pin Header**

Pin	Definition	Pin	Definition
1	SATA_LED_P	2	PWR_LED_P
3	SATA_LED#	4	GND
5	GND	6	BTN_A#
7	RST_BTN#	8	GND

**JIN2: LVDS CCFL Connector**

Pin	Definition	Pin	Definition
1	VCC5	2	V_INV2
3	V_INV2	4	GFPDE_CCFL2
5	GND	6	GND
7	L_BKLT_EN2		

**CN8: SATA Connector**

Pin	Definition	Pin	Definition
1	GND	2	SATA_TXP1
3	SATA_TXN1	4	GND
5	SATA_RXN1	6	SATA_RXP1
7	GND		

**CN11: SATA Connector**

Pin	Definition	Pin	Definition
1	GND	2	SATA_TXP2
3	SATA_TXN2	4	GND
5	SATA_RXN2	6	SATA_RXP2
7	GND		

**JP7: CIR Pin Header**

Pin	Definition
1	VCC5
2	CIRRX
3	IRRX
4	GND
5	IRTX

**SFAN1: SYSTEM FAN Connector**

Pin	Definition
1	GND
2	+12V
3	SYSFANIN

**CN14: SATA Connector**

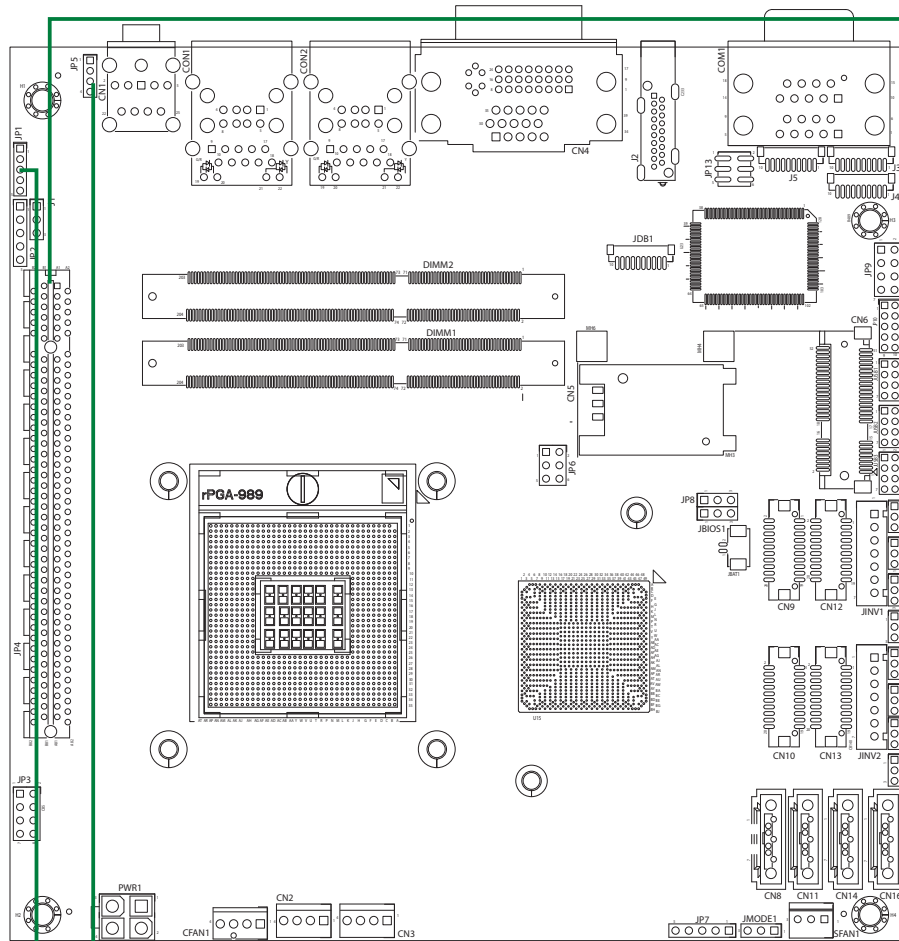
Pin	Definition	Pin	Definition
1	GND	2	SATA_TXP3
3	SATA_TXN3	4	GND
5	SATA_RXN3	6	SATA_RXP3
7	GND		

**CN16: SATA Connector**

Pin	Definition	Pin	Definition
1	GND	2	SATA_TXP0
3	SATA_TXN0	4	GND
5	SATA_RXN0	6	SATA_RXP0
7	GND		

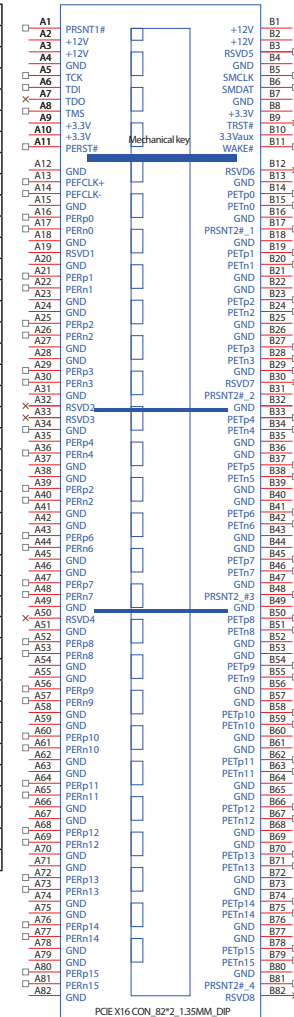
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Ver B. (P/N: 60177B0069X00)



JP4: PCI-Express X16 Slot

Pin	Definition	Pin	Definition
A1	NC	A2	+12V
A3	+12V	A4	GND
A5	NC	A6	NC
A7	NC	A8	NC
A9	VCC3	A10	VCC3
A11	PE_RESEET#	A12	GND
A13	REFCLK_P	A14	REFCLK_N
A15	GND	A16	RXP0
A17	RXN0	A18	GND
A19	Reserved	A20	GND
A21	RXP1	A22	RXN1
A23	GND	A24	GND
A25	RXP2	A26	RXN2
A27	GND	A28	GND
A29	RXP3	A30	RXN3
A31	GND	A32	Reserved
A33	Reserved	A34	GND
A35	RXP4	A36	RXN4
A37	GND	A38	GND
A39	RXP5	A40	RXN5
A41	GND	A42	GND
A43	RXP6	A44	RXN6
A45	GND	A46	GND
A47	RXP7	A48	RXN7
A49	GND	A50	Reserved
A51	GND	A52	RXP8
A53	RXN8	A54	GND
A55	GND	A56	RXP9
A57	RXN9	A58	GND
A59	GND	A60	RXP10
A61	RXN10	A62	GND
A63	GND	A64	RXP11
A65	RXN11	A66	GND
A67	GND	A68	RXP12
A69	RXN12	A70	GND
A71	GND	A72	RXP13
A73	RXN13	A74	GND
A75	GND	A76	RXP14
A77	RXN14	A78	GND
A79	GND	A80	RXP15



Pin	Definition	Pin	Definition
B1	+12V	B2	+12V
B3	Reserved	B4	GND
B5	SMBus clock	B6	SMBus data
B7	GND	B8	+3.3 volt power
B9	NC	B10	3.3VSB
B11	WAKE#	B12	Reserved
B13	GND	B14	TXP0
B15	TXN0	B16	GND
B17	PRSNT#_1	B18	GND
B19	TXP1	B20	TXN1
B21	GND	B22	GND
B23	TXP2	B24	TXN2
B25	GND	B26	GND
B27	TXP3	B28	TXN3
B29	GND	B30	Reserved
B31	PRSNT#_2	B32	GND
B33	TXP4	B34	TXN4
B35	GND	B36	GND
B37	TXP5	B38	TXN5
B39	GND	B40	GND
B41	TXP6	B42	TXN6
B43	GND	B44	GND
B45	TXP7	B46	TXN7
B47	GND	B48	PRSNT#_3
B49	GND	B50	TXP8
B51	TXN8	B52	GND
B53	GND	B54	TXP9
B55	TXN9	B56	GND
B57	GND	B58	TXP10
B59	TXN10	B60	GND
B61	GND	B62	TXP11
B63	TXN11	B64	GND
B65	GND	B66	TXP12
B67	TXN12	B68	GND
B69	GND	B70	TXP13
B71	TXN13	B72	GND
B73	GND	B74	TXP14
B75	TXN14	B76	GND
B77	GND	B78	TXP15
B79	TXN15	B80	GND
B81	PRSNT#_4	B82	NC

JP1: Speak Out Connector

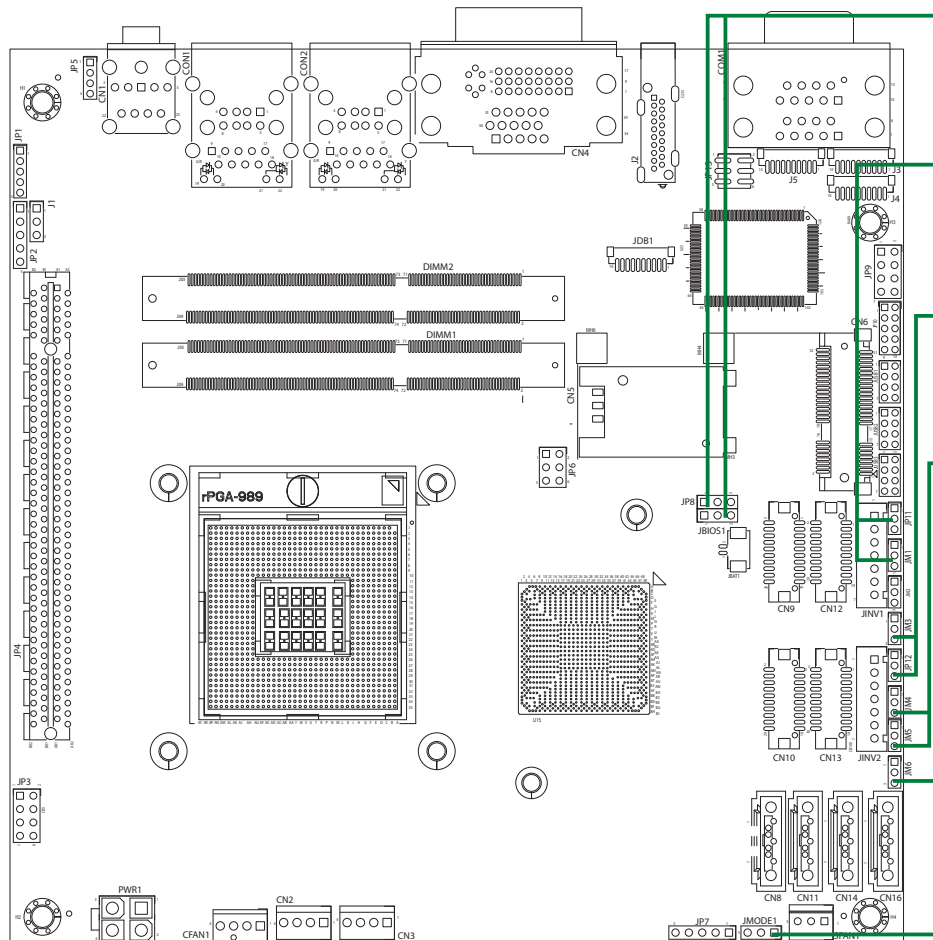
Pin	Definition
1	OUT-LR+
2	OUT-LR-
3	SPKR_GND
4	OUT-RR+
5	OUT-RR-

JP5: Line-in Connector

Pin	Definition
1	LINEIN_L
2	LINEIN_GND
3	LINEIN_JD
4	LINEIN_R

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Ver B. (P/N: 60177B0069X00)



### JP8: ME Clear Select

Pin No.	Status	Function Description
1-2 (*)	Short	Normal
2-3	Short	Clear ME Setting

### JP11: LVDS1 Power Select

Pin No.	Status	Function Description
1-2 (*)	Short	VCC5
2-3	Short	VCC3

### JM3: LVDS1 CCFL Power Select

Pin No.	Status	Function Description
1-2	Short	VCC3
2-3 (*)	Short	VCC5

### JM4: LVDS2 CCFL / PWM Mode Select

Pin No.	Status	Function Description
1-2	Short	PWM Mode
2-3 (*)	Short	CCFL Mode

### JMODE1: LVDS2 CCFL Power Select

Pin No.	Status	Function Description
1-2	Short	AT Mode
2-3 (*)	Short	ATX Mode

### JBIOS1: CMOS Clear Select

Pin No.	Status	Function Description
1-2 (*)	Short	Normal
2-3	Short	Clear BIOS Setting

### JM1: LVDS1 CCFL / PWM Mode Select

Pin No.	Status	Function Description
1-2	Short	PWM Mode
2-3 (*)	Short	CCFL Mode

### JP12: LVDS2 Power Select

Pin No.	Status	Function Description
1-2 (*)	Short	VCC5
2-3	Short	VCC3

### JM5: LVDS1 CCFL Mode Select

Pin No.	Status	Function Description
1-2	Short	Negative
2-3 (*)	Short	Positive

### JM6: LVDS2 CCFL Power Select

Pin No.	Status	Function Description
1-2	Short	VCC3
2-3 (*)	Short	VCC5