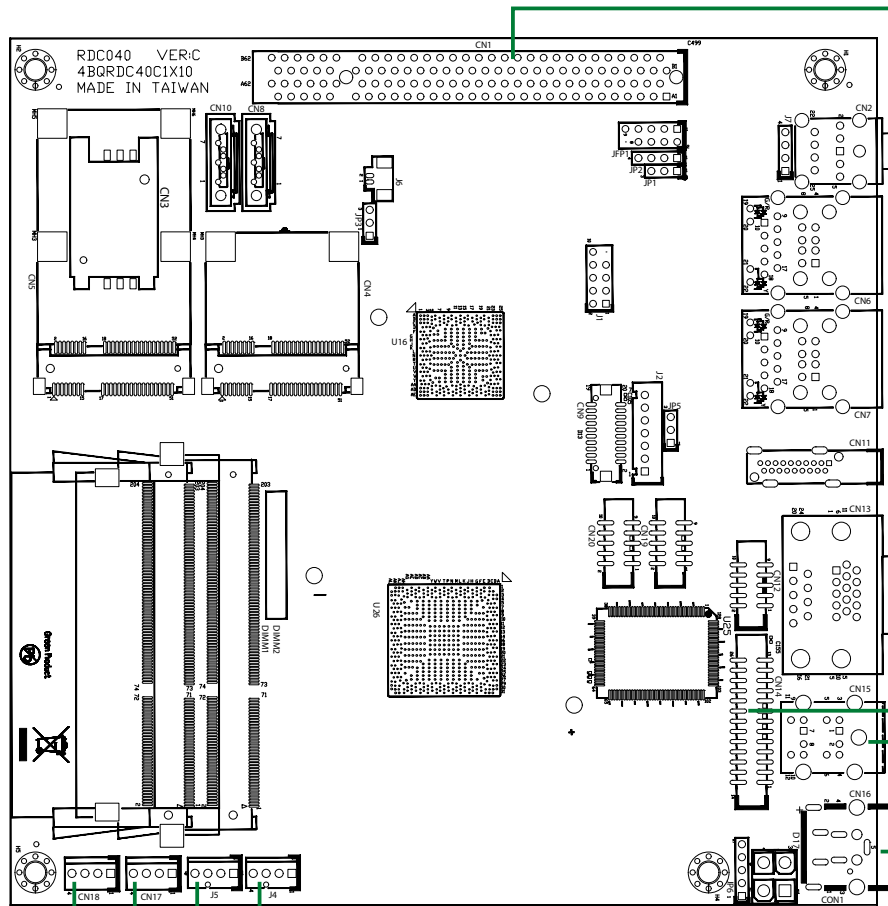
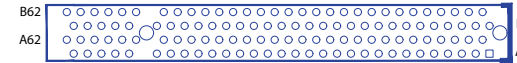


NEX 604 Quick Reference Guide

Ver A. (P/N: 60177A0272X00)



CN1: PCI 33 Slot



Pin	Signal Name	Pin	Signal Name
A1	Pull down 5.6K to GND	A2	+12V
A3	Pull high 1K to +5V	A4	Pull high 1K to +5V
A5	+5V	A6	Interrupt A#
A7	Interrupt C#	A8	+5V
A9	CLKRUN#	A10	+5V
A11	GNT#2	A12	GND
A13	GND	A14	3.3VAUX
A15	Reset#	A16	+5V
A17	GNT#1	A18	GND
A19	PME#	A20	Address and Data 30
A21	+3.3V	A22	Address and Data 28
A23	Address and Data 26	A24	GND
A25	Address and Data 24	A26	IDSEL
A27	+3.3V	A28	Address and Data 22
A29	Address and Data 20	A30	GND
A31	Address and Data 18	A32	Address and Data 16
A33	+3.3V	A34	Frame#
A35	GND	A36	TRDY#
A37	GND	A38	Stop#
A39	+3.3V	A40	Pull high 5.6K to +5V
A41	Pull high 5.6K to +5V	A42	GND
A43	PAR	A44	Address and Data 15
A45	+3.3V	A46	Address and Data 13
A47	Address and Data 11	A48	GND
A49	Address and Data 9	A50	Connector Key
A51	Connector Key	A52	CBE#0
A53	+3.3V	A54	Address and Data 6
A55	Address and Data 4	A56	GND
A57	Address and Data 2	A58	Address and Data 0
A59	+5V	A60	Pull high 2.7K to +3.3V
A61	+5V	A62	+5V

Pin	Signal Name	Pin	Signal Name
B1	-12V	B2	Pull down 5.6K to GND
B3	GND	B4	NC
B5	+5V	B6	+5V
B7	Interrupt B#	B8	Interrupt D#
B9	Connect 10nf to Ground	B10	REQ#2
B11	Connect 10nf to Ground	B12	GND
B13	GND	B14	Clock2
B15	GND	B16	Clock1
B17	GND	B18	REQ#1
B19	+5V	B20	Address and Data 31
B21	Address and Data 29	B22	GND
B23	Address and Data 27	B24	Address and Data 25
B25	+3.3V	B26	CBE #3
B27	Address and Data 23	B28	GND
B29	Address and Data 21	B30	Address and Data 19
B31	+3.3V	B32	Address and Data 17
B33	CBE#2	B34	GND
B35	IRDY#	B36	+3.3V
B37	DEVSEL#	B38	GND
B39	LOCK#	B40	PERR#
B41	+3.3V	B42	SERR#
B43	+3.3V	B44	CBE#1
B45	Address and Data 14	B46	GND
B47	Address and Data 12	B48	Address and Data 10
B49	GND	B50	Connector Key
B51	Connector Key	B52	Address and Data 8
B53	Address and Data 7	B54	+3.3V
B55	Address and Data 5	B56	Address and Data 3
B57	GND	B58	Address and Data 1
B59	+5V	B60	Pull high 2.7K to +3.3V
B61	+5V	B62	+5V

CN14: PIO Connector

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	STB#	2	D0	3	D1	4	D2	5	D3	6	D4
7	D5	8	D6	9	D7	10	ACK#	11	BUSY	12	PE
13	SLCT	14	AFD#	15	ERR#	16	INIT#	17	SLIN#	18	GND
19	GND	20	GND	21	GND	22	GND	23	GND	24	GND
25	GND	26	GND								

CN15: PS/2 KB/MS Connector

Pin	Definition	Pin	Definition
1	KB DATA	7	MS DATA
2	NC	8	NC
3	GND	9	GND
4	5VDUAL	10	5VDUAL
5	KB CLOCK	11	MS CLOCK
6	NC	12	NC

CN16: DC Power Input Connector

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

CN18, CN17: SATA Power Connector

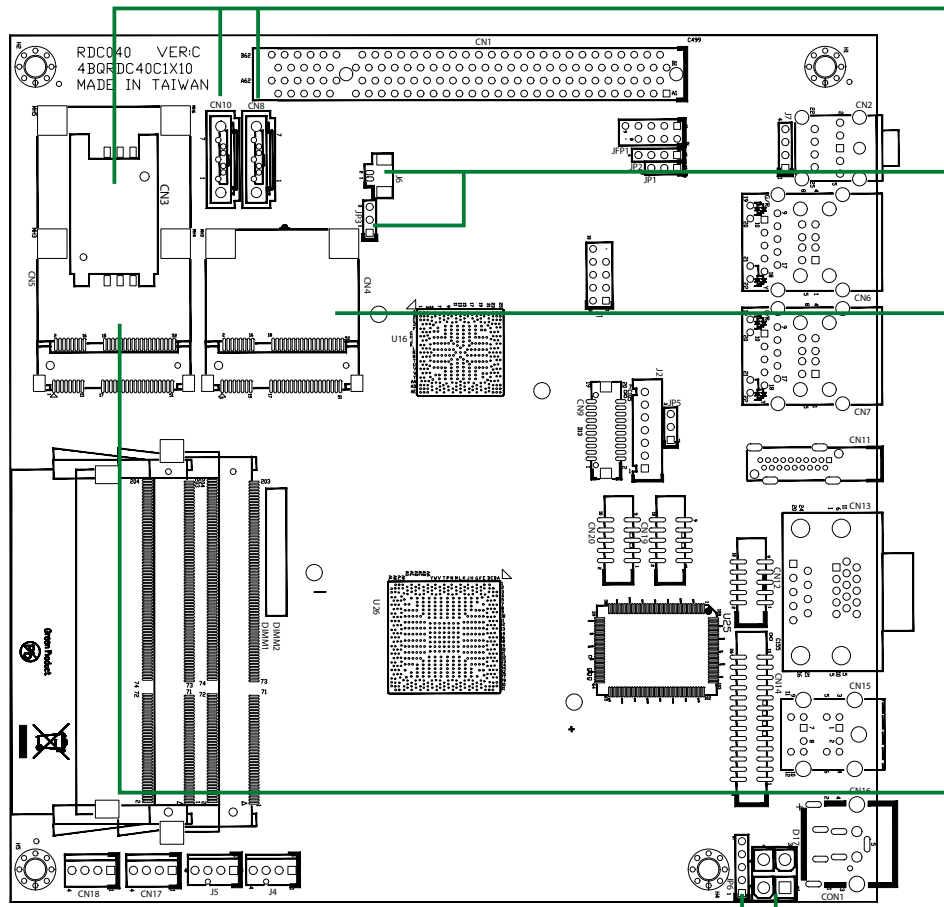
Pin	Definition
1	+12V
2	GND
3	GND
4	+5V

J5, J4: SATA Power Connector

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

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CN3: SIM Card Connector

Pin	Definition	Pin	Definition
C1	Power voltage	C2	RESET
C3	CLK	C5	GND
C6	Program voltage	C7	DATA

CN8 (SATA0), CN10 (SATA1): SATA 2.0 Connector

Pin	Signal Name	Pin	Signal Name
1	GND	2	SATA_TX_P
3	SATA_TX_N	4	GND
5	SATA_RX_P	6	SATA_RX_N
7	GND		

J6: RTC Battery IN Connector (2PIN)

Pin	Definition
1	GND
2	RTC battery IN

JP3: CMOS Clear Select

Pin	Status	Function Description
1-2 (*)	Short	Normal
2-3	Short*	Clear BIOS

CN4: Mini-PCIe Connector

Pin	Definition	Pin	Definition	Pin	Definition
1	WAKE#	2	3VSB	3	NC
4	GND	5	NC	6	1.5VSB
7	Pull high 10K to 3VSB	8	NC	9	GND
10	NC	11	REFCLK-	12	NC
13	REFCLK+	14	NC	15	GND
16	NC	17	NC	18	GND
19	NC	20	Pull high 100K to 3VSB	21	GND
22	PERST#	23	PE_RX-	24	3VSB
25	PE_RX+	26	GND	27	GND
28	1.5VSB	29	GND	30	NC
31	PE_TX-	32	NC	33	PE_TX+
34	GND	35	GND	36	USB-
37	GND	38	USB+	39	3VSB
40	GND	41	3VSB	42	NC
43	GND	44	NC	45	NC
46	NC	47	NC	48	1.5VSB
49	NC	50	GND	51	NC
52	3VSB				

CN5: Mini-PCIe Connector

Pin	Definition	Pin	Definition	Pin	Definition
1	WAKE#	2	3VSB	3	NC
4	GND	5	NC	6	1.5VSB
7	Pull high 10K to 3VSB	8	UIM_PWR	9	GND
10	UIM_DATA	11	REFCLK-	12	UIM_CLK
13	REFCLK+	14	UIM_RST	15	GND
16	UIM_VCCP	17	NC	18	GND
19	NC	20	Pull high 100K to 3VSB	21	GND
22	PERST#	23	PE_RX-	24	3VSB
25	PE_RX+	26	GND	27	GND
28	1.5VSB	29	GND	30	NC
31	PE_TX-	32	NC	33	PE_TX+
34	GND	35	GND	36	USB-
37	GND	38	USB+	39	3VSB
40	GND	41	3VSB	42	NC
43	GND	44	NC	45	NC
46	NC	47	NC	48	1.5VSB
49	NC	50	GND	51	NC
52	3VSB				

JP6: IR Connector

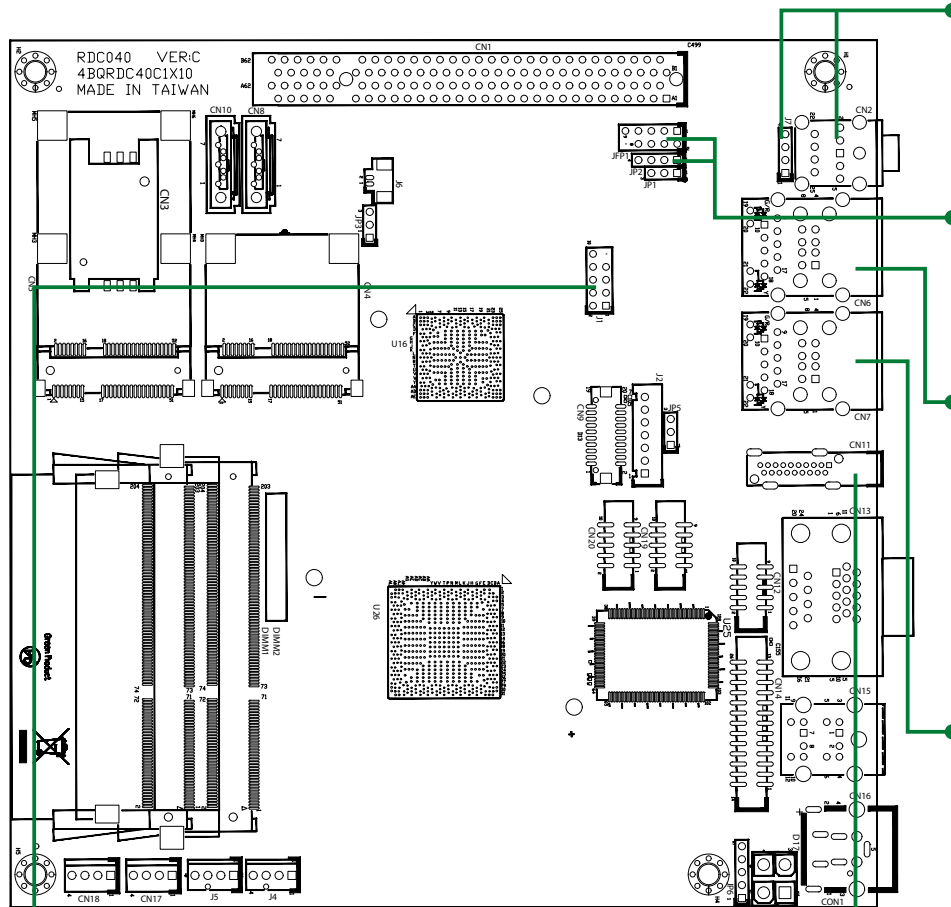
Pin	Definition
1	+5V
2	NC
3	IRRX
4	GND
5	IRTX

CN1: ATX Power Connector

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

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Ver A. (P/N: 60177A0272X00)



J1 (USB4, USB5): USB connector

Pin	Definition	Pin	Definition
1	5VDUAL	2	5VDUAL
3	DATA4_N	4	DATA5_N
5	DATA4_P	6	DATA5_P
7	GND	8	GND
9		10	NC

J7: Line-in Connector

Pin	Definition
1	LINEIN_R
2	LINEIN_JD
3	GND
4	LINEIN_L

CN2: Audio Connector

Pin	Signal Name	Pin	Signal Name
1	GND	2	MIC1_L
3	GND	4	MIC1_JD
5	MIC1_R	22	FRONT_L
23	GND	24	FRONT_JD
25	FRONT_R		

JFP1: FP Control Connector

Pin	Definition	Pin	Definition	Pin	Definition
1	SATA_LED_P	2	PWR_LED_P	3	SATA_LED_N
4	GND	5	GND	6	PWRBT_N
7	RST_BTN_N	8	GND	9	NC

JP2: SMBus Connector

Pin	Definition
1	3VSB
2	SMB_DATA
3	SMB_CLK
4	GND

CN6: Dual USB + LAN Connector

Pin	Definition	Pin	Definition
1	5VDUAL	2	USB2_N
3	USB2_P	4	GND
5	5VDUAL	6	USB3_N
7	USB3_P	8	GND
9	TCT	10	LAN2_MDI0P
11	LAN2_MDI0N	12	LAN2_MDI1P
13	LAN2_MDI1N	14	LAN2_MDI2P
15	LAN2_MDI2N	16	LAN2_MDI3P
17	LAN2_MDI3N	18	GND
19	LAN2_100M#	20	LAN2_1G#
21	LAN2_ACTLED#	22	LAN2_ACTLED# POWER

CN7: Dual USB + LAN Connector

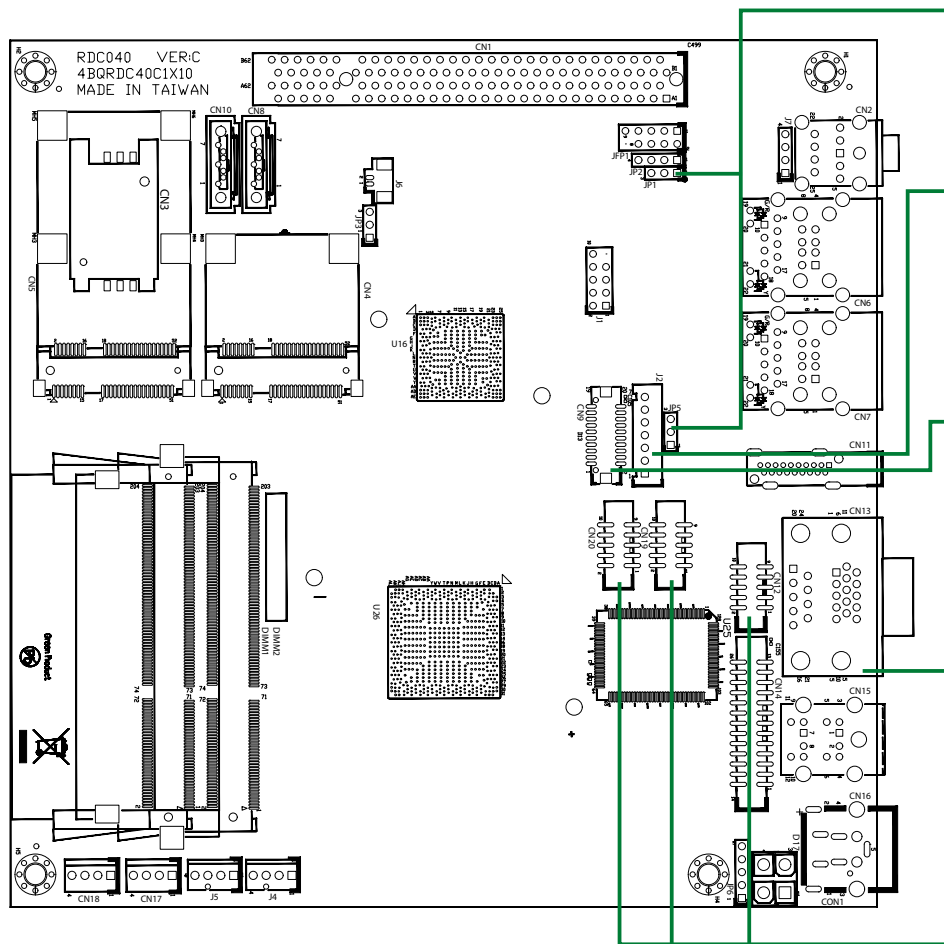
Pin	Definition	Pin	Definition
1	5VDUAL	2	USB0_N
3	USB0_P	4	GND
5	5VDUAL	6	USB1_N
7	USB1_P	8	GND
9	TCT	10	LAN1_MDI0P
11	LAN1_MDI0N	12	LAN1_MDI1P
13	LAN1_MDI1N	14	LAN1_MDI2P
15	LAN1_MDI2N	16	LAN1_MDI3P
17	LAN1_MDI3N	18	GND
19	LAN1_100M#	20	LAN1_1G#
21	LAN1_ACTLED#	22	LAN1_ACTLED# POWER

CN11: HDMI Connector

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	Data2+	2	GND	3	Data2-	4	Data1+
5	GND	6	Data1-	7	Data0+	8	GND
9	Data0-	10	Clock+	11	GND	12	Clock-
13	NC	14	NC	15	HDMI_SCL	16	HDMI_SDA
17	GND	18	+5V	19	HPD		

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Ver A. (P/N: 60177A0272X00)



JP1: ATX/AT Mode Select

Pin	Status	Function Description
1-2 (*)	Short	ATX mode
2-3	Short*	AT mode

JP5: LVDS Backlight Power Select

Pin	Status	Function Description
1-2 (*)	Short	Choose 3.3V
2-3	Short*	Choose 5V

J2: LVDS Panel Backlight Connector

Pin	Definition	Pin	Definition
1	+5V	2	Backlight power(+12V)
3	Backlight power(+12V)	4	Backlight brightness control
5	GND	6	GND
7	Backlight enable		

CN9: LVDS Connector

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	NC	2	NC	3	VCC_LCD	4	TX0+
5	TX3+	6	TX0-	7	TX3-	8	VCC_LCD
9	GND	10	TX1+	11	TXCLK+	12	TX1-
13	TXCLK-	14	GND+	15	GND	16	Backlight power(+12V)
17	TX2+	18	Backlight power(+12V)	19	TX2-	20	GND

CN13: VGA+COM1 Connector

Pin	Definition	Pin	Definition	Pin	Definition	Pin	Definition
1	RED	2	GREEN	3	BLUE	4	NC
5	GND	6	GND	7	GND	8	GND
9	+5V	10	GND	11	NC	12	DDC DATA
13	HSYNC	14	VSYNC	15	DDC CLOCK	16	DCD
17	RXD	18	TXD	19	DTR	20	GND
21	DSR	22	RTS	23	CTS	24	RI

CN20 (COM3): RS232 Connector

Pin	Definition
1	DCD3
2	RXD3
3	TXD3
4	DTR3
5	GND
6	DSR3
7	RTS3
8	CTS3
9	RI3
10	GND

CN19 (COM4): RS232 Connector

Pin	Definition
1	DCD4
2	RXD4
3	TXD4
4	DTR4
5	GND
6	DSR4
7	RTS4
8	CTS4
9	RI4
10	GND

CN12 (COM2): RS232 Connector

Pin	Definition
1	DCD2
2	RXD2
3	TXD2
4	DTR2
5	GND
6	DSR2
7	RTS2
8	CTS2
9	RI2
10	GND