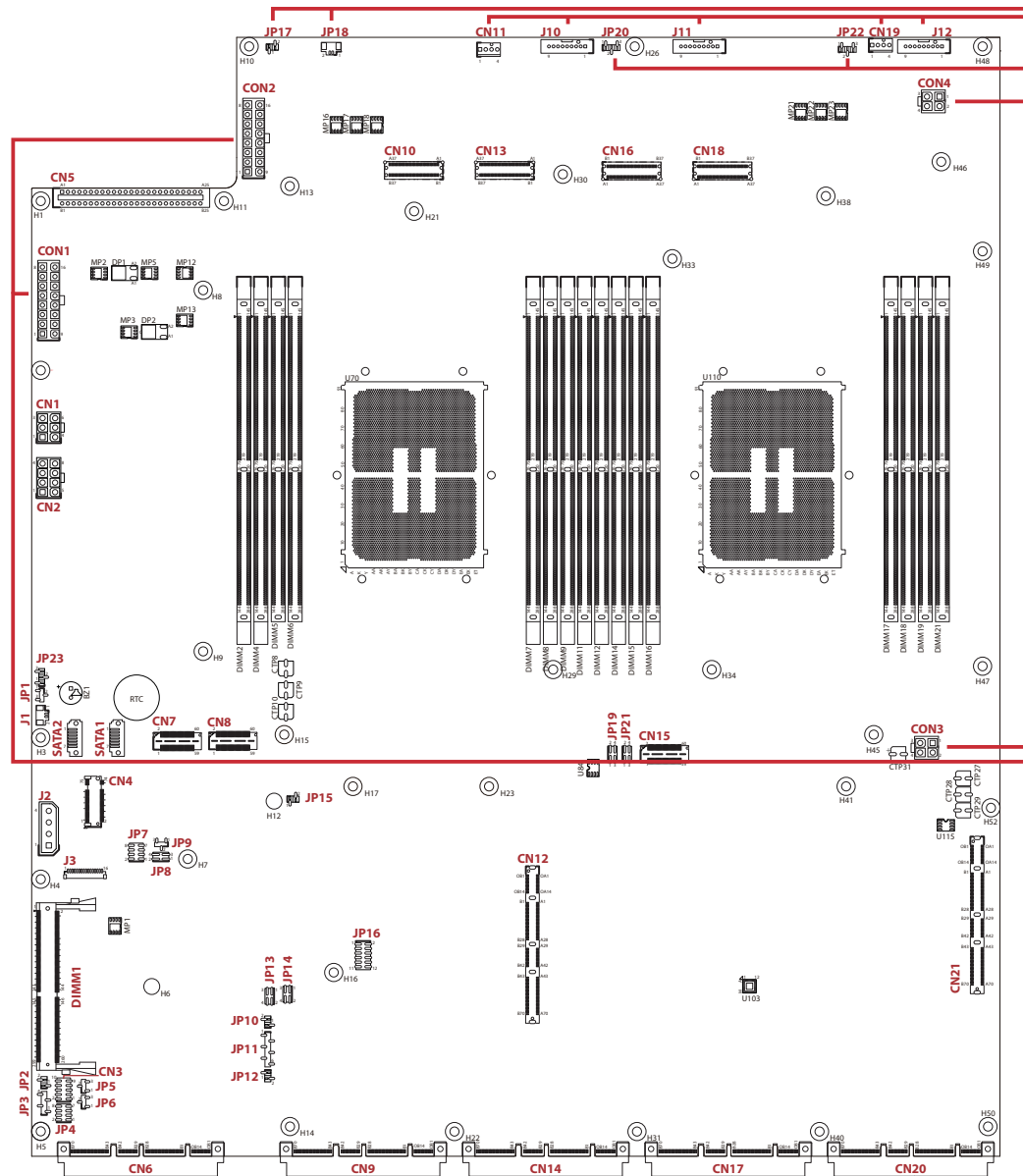


# NSA 7160R Quick Reference Guide



**JP17: Header to BTN Switch with Cable**

Pin	Description
1	PWRBTN_N
2	GND

**JP18: Header to LED with Cable**

Pin	Description
1	P3V3_CPLD
2	ID_LED_N

**CN11, CN19: FAN Wafer Conn. (RSVD)**

Pin	Description
1	GND
2	P12V
3	TACH
4	PWM

**J10, J11, J12: FAN Wafer Conn.**

Pin	Description
1	P12V
2	P12V
3	TACH FRONT
4	TACH REAR
5	N/C
6	PWM REAR
7	PWM FRONT
8	GND
9	GND

**JP20 (for CPU1), JP22 (for CPU2): Power Team Debug Header**

Pin	Description
1	SCL
2	SDA
3	GND

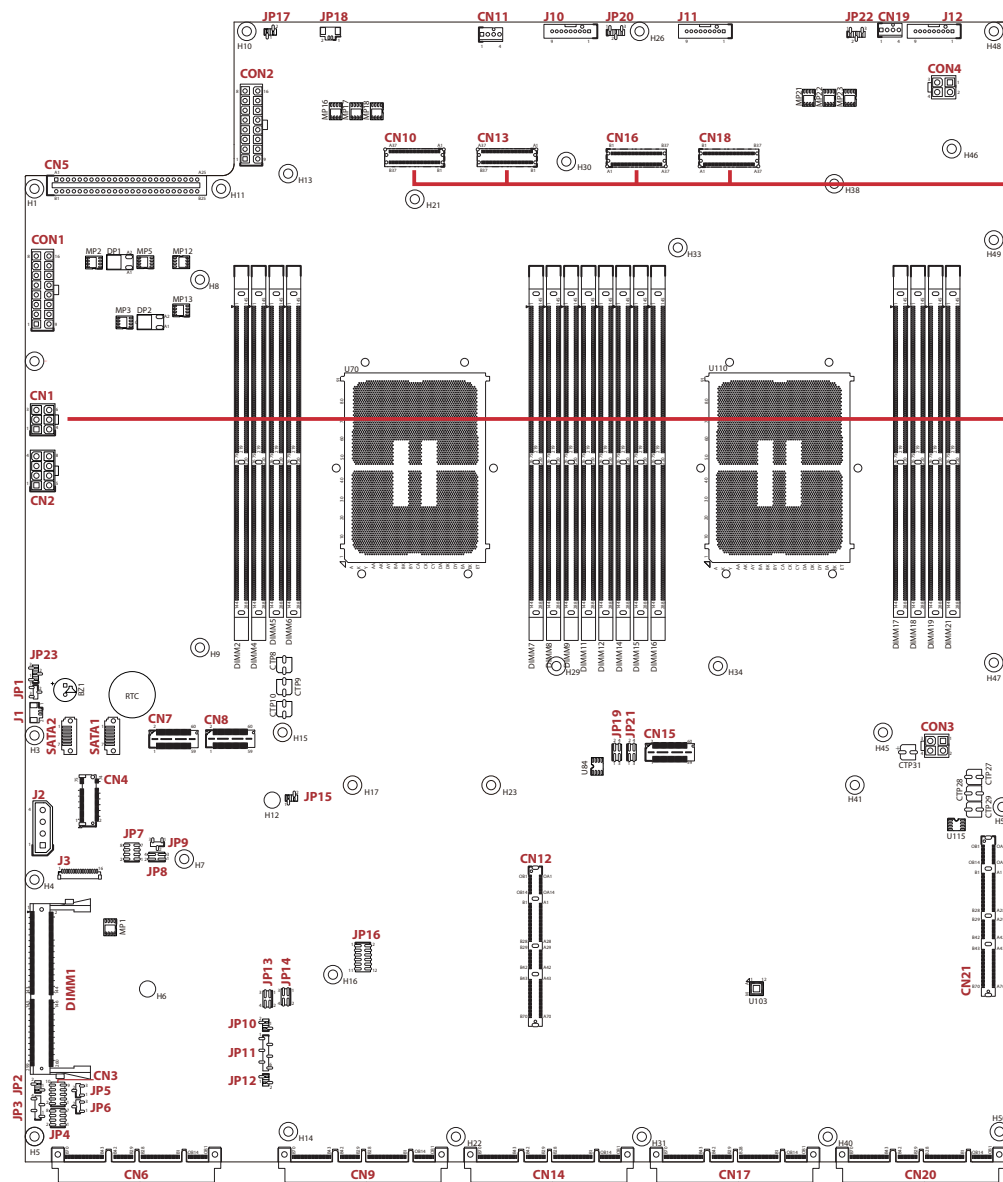
**CON3, CON4: PowerConnector (Internal Cable USE: CON3 to CON4)**

Pin	Description	Pin	Description
1	P12V_CPU1	3	P12V_S3_AUX_CPU1
2	P12V_CPU1	4	P12V_S3_AUX_CPU1

**CON1, CON2: Power Connector (Internal Cable USE: CON1 to CON2)**

Pin.	Signal	Pin.	Signal
1	P12V_CPU	9	P12V_CPU
2	P12V_CPU	10	P12V_CPU
3	P12V_CPU	11	P12V_CPU
4	P12V_CPU	12	P12V_CPU
5	P12V_CPU	13	P12V_CPU
6	P12V_CPU	14	P12V_CPU
7	P12V_CPU	15	P12V_CPU
8	P12V_CPU	16	P12V_CPU

# NSA 7160R Quick Reference Guide



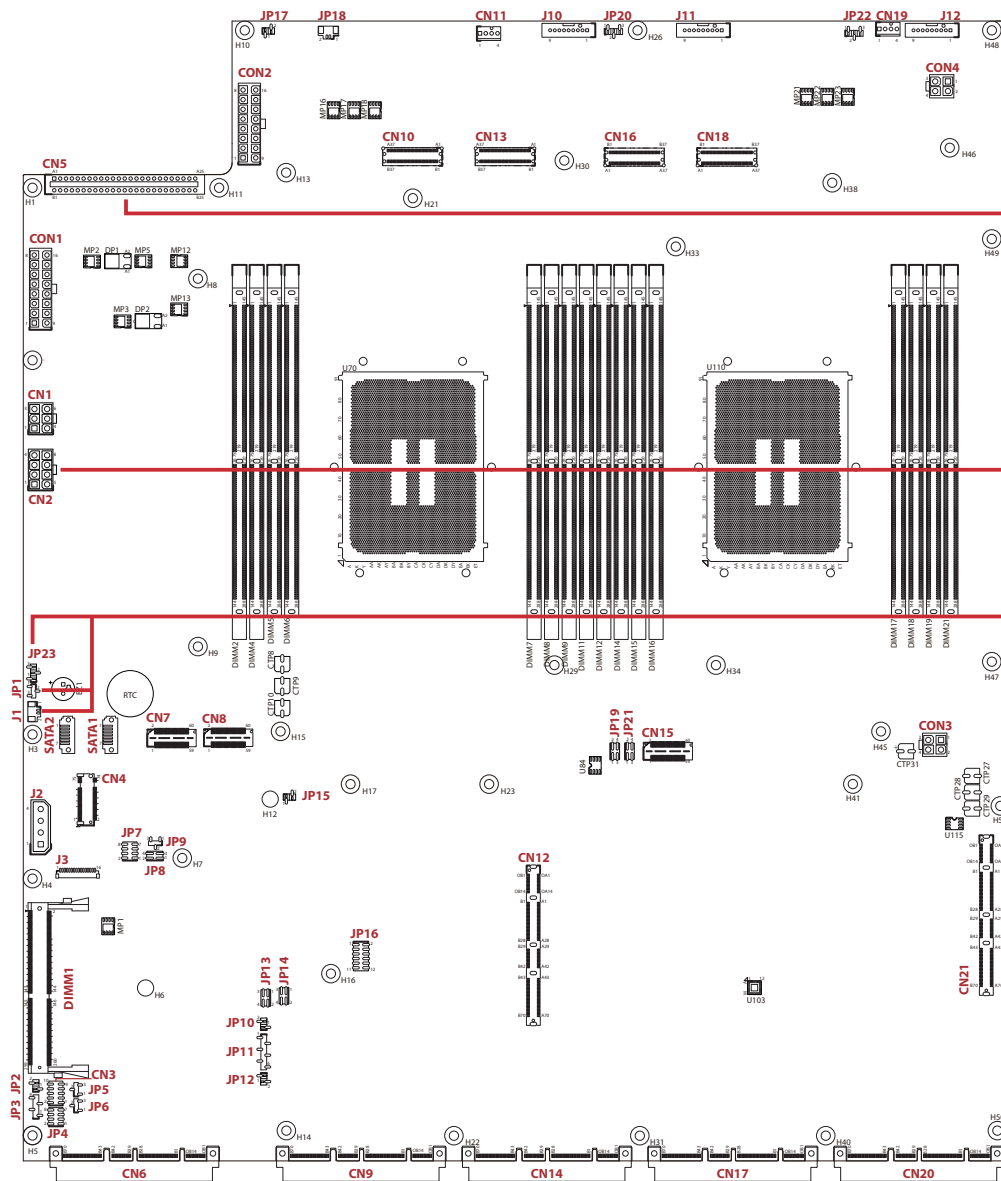
## CN10, CN13, CN16, CN18: MCIO Connector to NSK3552

Pin	Description	Pin	Description
A1	GND	B1	GND
A2	PE_SLOT_RX_DP0	B2	PE_SLOT_TX_C_DP0
A3	PE_SLOT_RX_DN0	B3	PE_SLOT_TX_C_DN0
A4	GND	B4	GND
A5	PE_SLOT_RX_DP1	B5	PE_SLOT_TX_C_DP1
A6	PE_SLOT_RX_DN1	B6	PE_SLOT_TX_C_DN1
A7	GND	B7	GND
A8	NC	B8	NC
A9	NC	B9	NC
A10	GND	B10	GND
A11	NC	B11	NC
A12	NC	B12	NC
A13	GND	B13	GND
A14	PE_SLOT_RX_DP2	B14	PE_SLOT_TX_C_DP2
A15	PE_SLOT_RX_DN2	B15	PE_SLOT_TX_C_DN2
A16	GND	B16	GND
A17	PE_SLOT_RX_DP3	B17	PE_SLOT_TX_C_DP3
A18	PE_SLOT_RX_DN3	B18	PE_SLOT_TX_C_DN3
A19	GND	B19	GND
A20	PE_SLOT_RX_DP4	B20	PE_SLOT_TX_C_DP4
A21	PE_SLOT_RX_DN4	B21	PE_SLOT_TX_C_DN4
A22	GND	B22	GND
A23	PE_SLOT_RX_DP5	B23	PE_SLOT_TX_C_DP5
A24	PE_SLOT_RX_DN5	B24	PE_SLOT_TX_C_DN5
A25	GND	B25	GND
A26	NC	B26	NC
A27	NC	B27	NC
A28	GND	B28	GND
A29	NC	B29	NC
A30	NC	B30	NC
A31	GND	B31	GND
A32	PE_SLOT_RX_DP6	B32	PE_SLOT_TX_C_DP6
A33	PE_SLOT_RX_DN6	B33	PE_SLOT_TX_C_DN6
A34	GND	B34	GND
A35	PE_SLOT_RX_DP7	B35	PE_SLOT_TX_C_DP7
A36	PE_SLOT_RX_DN7	B36	PE_SLOT_TX_C_DN7
A37	GND	B37	GND

## CN1: Power Connector to Riser Board

Pin	Description	Pin	Description
1	GND	4	P12V
2	GND	5	P12V
3	GND	6	P12V

# NSA 7160R Quick Reference Guide



## CN5: Power Connector to Power Board

Pin	Description	Pin	Description
A1	GND	B1	GND
A2	GND	B2	GND
A3	GND	B3	GND
A4	GND	B4	GND
A5	GND	B5	GND
A6	GND	B6	GND
A7	GND	B7	GND
A8	GND	B8	GND
A9	GND	B9	GND
A10	P12V	B10	P12V
A11	P12V	B11	P12V
A12	P12V	B12	P12V
A13	P12V	B13	P12V
A14	P12V	B14	P12V
A15	P12V	B15	P12V
A16	P12V	B16	P12V
A17	P12V	B17	P12V
A18	P12V	B18	P12V
A19	SMB_PFR_PMB1_STBY_LVC3_CRPS_SDA	B19	GND
A20	SMB_PFR_PMB1_STBY_LVC3_CRPS_SCL	B20	FM_PS_EN_PSU_N
A21	GND	B21	P12V_STBY_PSU
A22	IRQ_SML1_PMBUS_BMC_ALERT_N	B22	RETURN_SENSE
A23	PWRGD_PS_PWROK	B23	CRPS_PRESEND1
A24	AC_FAIL_PSU	B24	12V_REMOTE_SENSE
A25	P3V3_CPLD	B25	CRPS_PRESEND2

## CN2: Power Connector to FHFL Card

Pin	Description	Pin	Description
1	GND	5	P12V
2	GND	6	P12V
3	GND	7	P12V
4	GND	8	P12V

## JP1: RTC Clear

Pin	Description
1	NC
2	RST_RTCRST_N
3	GND

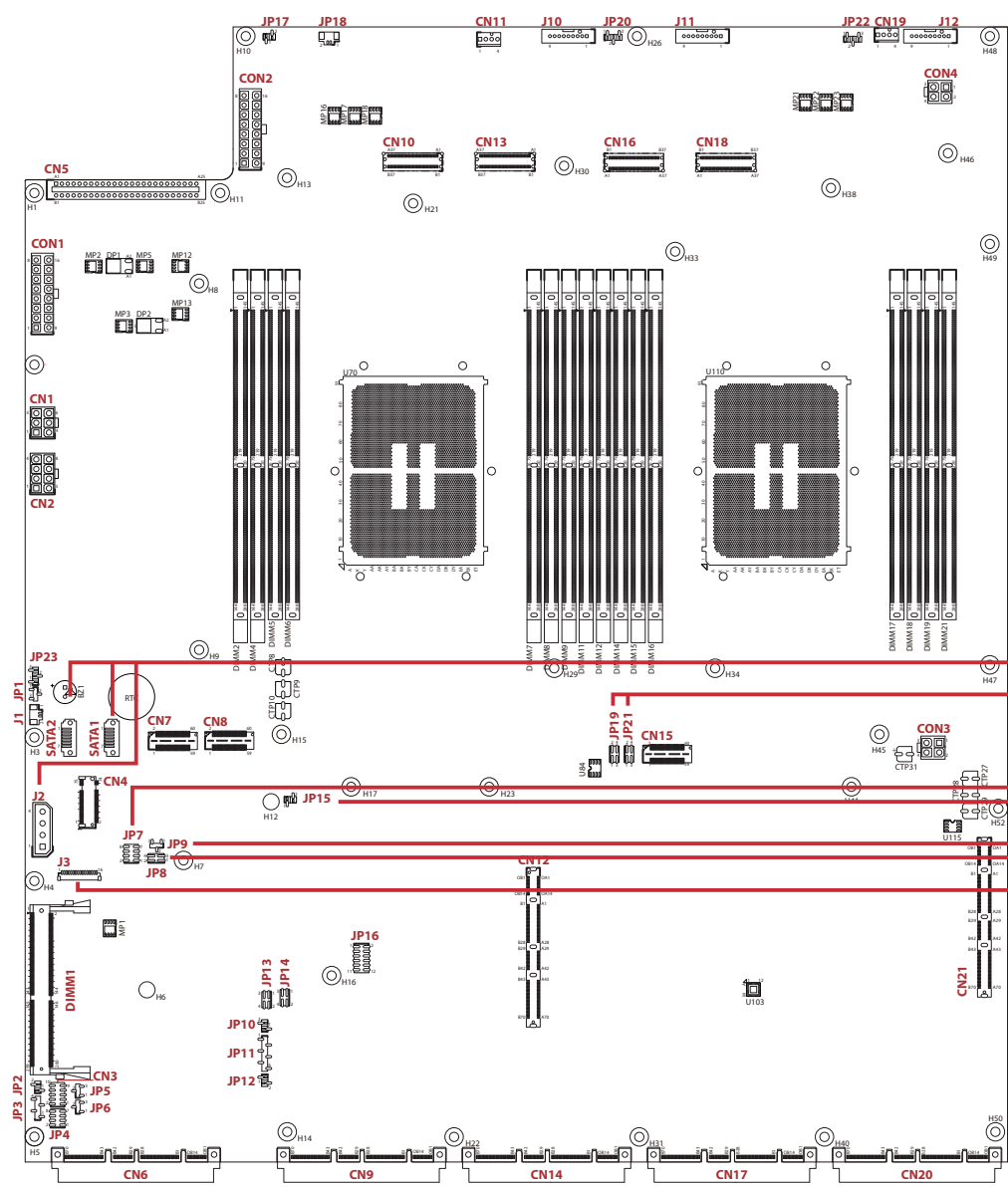
## JP23: BMC Enable Boot

Pin	Description
1	NC
2	P3V3_SPI_BMC_IO
3	SPI_PFR_BMC_BOOT_MUXED_CLK

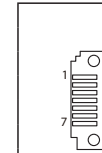
## J1: SYS RTC Header

Pin	Description
1	GND
2	3V3_BAT

# NSA 7160R Quick Reference Guide

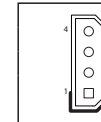


## SATA1, SATA2: SATA Connector



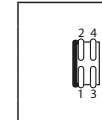
Pin	Description
1	GND
2	TXP
3	TXN
4	GND
5	RXN
6	RXP
7	GND

## J2: SATA Power Connector



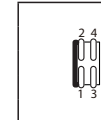
Pin	Description
1	P12V
2	GND
3	GND
4	P5V

## JP19: XDP Debug Headers



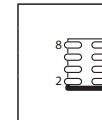
Pin	Description
1	FM_CPU1_SKTOCC_LVT3_N
2	FM_CPU1_SKTOCC_N
3	FM_CPU2_SKTOCC_LVT3_N
4	FM_CPU2_SKTOCC_N

## JP21: Boot Guard Debug Strap Connector



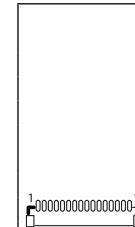
Pin	Description
1	GND
2	PD_CPU0_TXT_PLTEN
3	GND
4	PD_CPU1_TXT_PLTEN

## JP7: PCH Strap Debug Use



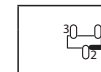
Pin	Description	Pin	Description
1	GND	2	FM_PASSWORD_CLEAR_N
3	GND	4	FM_ME_RCVR_N
5	P1V05_PCH_AUX	6	FM_BIOS_ADV_FUNCTIONS
7	P1V05_PCH_AUX	8	FM_PCH_BIOS_RCVR_MODE

## J3: VGA Connector



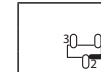
Pin	Description
1	VGA_VCC
2	GND
3	NC
4	SMB_BMC_DDC_SCL_R1
5	SMB_BMC_DDC_SDA_R1
6	NC
7	V_BMC_GFX_REAR_VSYN_R3
8	GND
9	V_BMC_GFX_REAR_HSYN_R3
10	NC
11	GND
12	V_BMC_GFX_REAR_BLU_R1
13	GND
14	V_BMC_GFX_REAR_GRN_R1
15	GND
16	V_BMC_GFX_REAR_RED_R1

## JP15: BMC Remote SPD Debug Header



Pin	Description
1	P3V3_BMC
2	FM_SPD_SWITCH_CTRL_N

## JP9: PFR Strap Debug Use



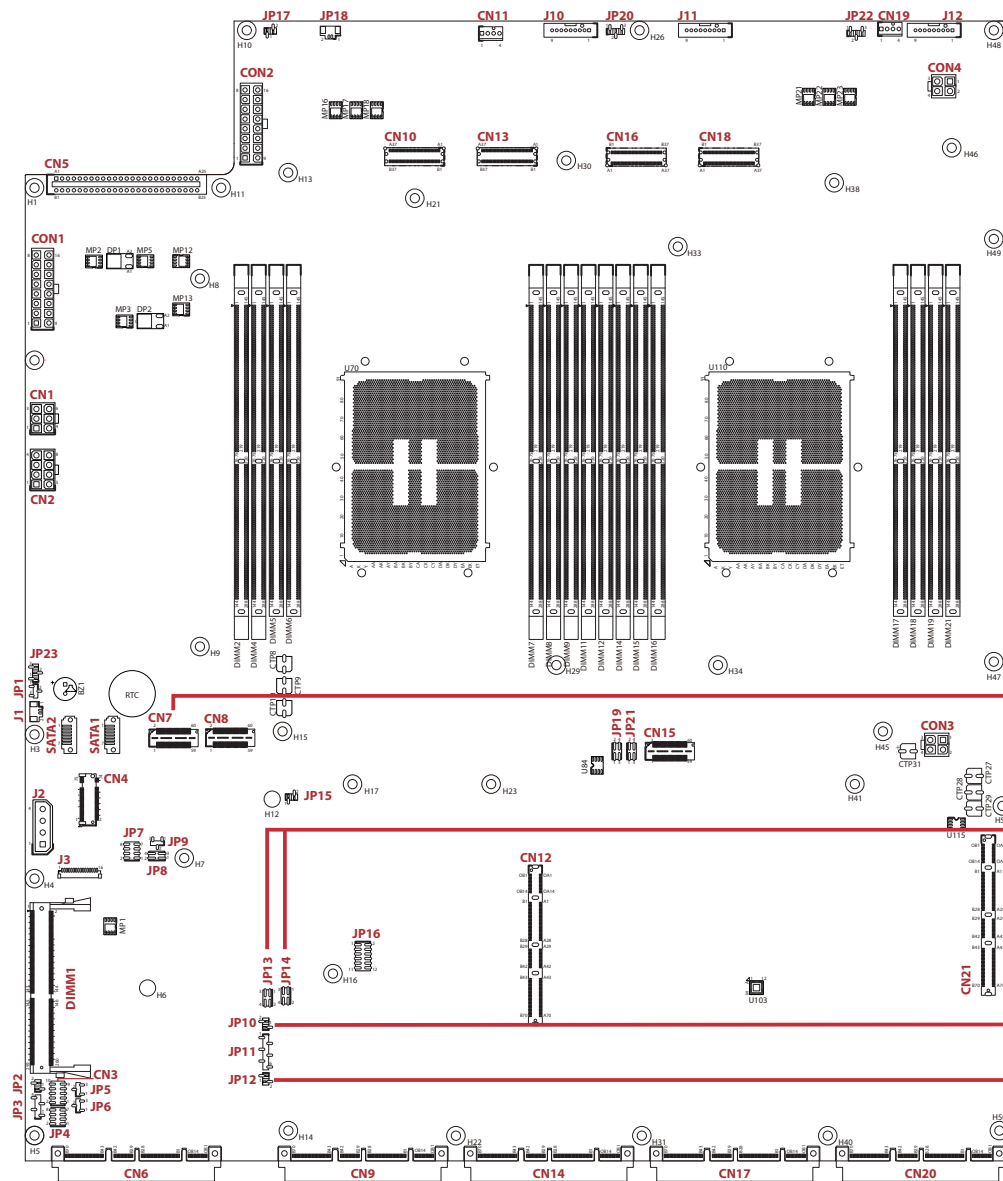
Pin	Description
1	FM_P3V3_STBY_DSW_EN_R3
2	FM_P3V3_STBY_DSW_EN
3	FM_P3V3_STBY_DSW_EN_R2

## JP8: PCH Strap Debug Use

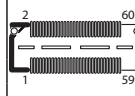


Pin	Description
1	P3V3_AUX
2	FM_FLASH_SECURITY_STRAP
3	GND
4	FM_PCH_EXTERNALCLKMODE

# NSA 7160R Quick Reference Guide




## CN7: XDP Debug Connector SAMTEC




Pin	Description	Pin	Description
1	P1V05_PCH_AUX	2	JTAG_DBP_TMS_R
3	JTAG_DBP_CPU_TCK_R	4	JTAG_DBP_TDO_R
5	JTAG_DBP_TDI_R	6	RST_DBP_RST_CO_N
7	DBP_PMODE	8	PD_TRST_PD3
9	NC	10	H_DBP_PREQ_N_R
11	H_DBP_PRDY_R_N	12	P1V8_PCH_AUX
13	TRC_PCH_PTIO_CLK	14	GND
15	DBP_PCH_DEBUG_CONSENT_N	16	GND
17	FM_DBP_PRESENT_R_N	18	NC
19	TRC_PCH_PTIO	20	NC
21	TRC_PCH_PTII	22	NC
23	TRC_PCH_PTII2	24	NC
25	TRC_PCH_PTII3	26	NC
27	TRC_PCH_PTII4	28	NC
29	TRC_PCH_PTII 5	30	NC
31	TRC_PCH_PTII 6	32	NC
33	TRC_PCH_PTII 7	34	NC
35	TRC_PCH_PTII 8	36	DBP_BOOT_HALT_N
37	TRC_PCH_PTII 9	38	FM_CPU_FBRK_DEBUG_N
39	TRC_PCH_PTII10	40	DBP_POWER_BTN_N
41	TRC_PCH_PTII11	42	RST_DBP_RSMRST_N
43	TRC_PCH_PTII12	44	NC
45	TRC_PCH_PTII13	46	NC
47	TRC_PCH_PTII14	48	SMB_HOST_STBY_LVC3_XDP_SCL
49	TRC_PCH_PTII15	50	SMB_HOST_STBY_LVC3_XDP_SDA
51	JTAG_DBP_PCH_R_TCK	52	P3V3_AUX
53	DBP_CPU_HOOK9_MBP3_N	54	NC
55	DBP_CPU_HOOK8_MBP2_N	56	NC
57	GND	58	GND
59	TRC_PCH_PTII1_CLK	60	GND

## JP13: PFR Strap Debug Use




Pin	Description
1	RST_PFR_OVR_RTC
2	RST_RTCRST_N
3	RST_PFR_OVR_SRTC
4	RST_SRTCST_N

## JP14: PFR Strap Debug Use




Pin	Description
1	FP_ID_BTN_PFR_N
2	RSTN_I_PLD
3	GND
4	GND

## JP10: Debug Only



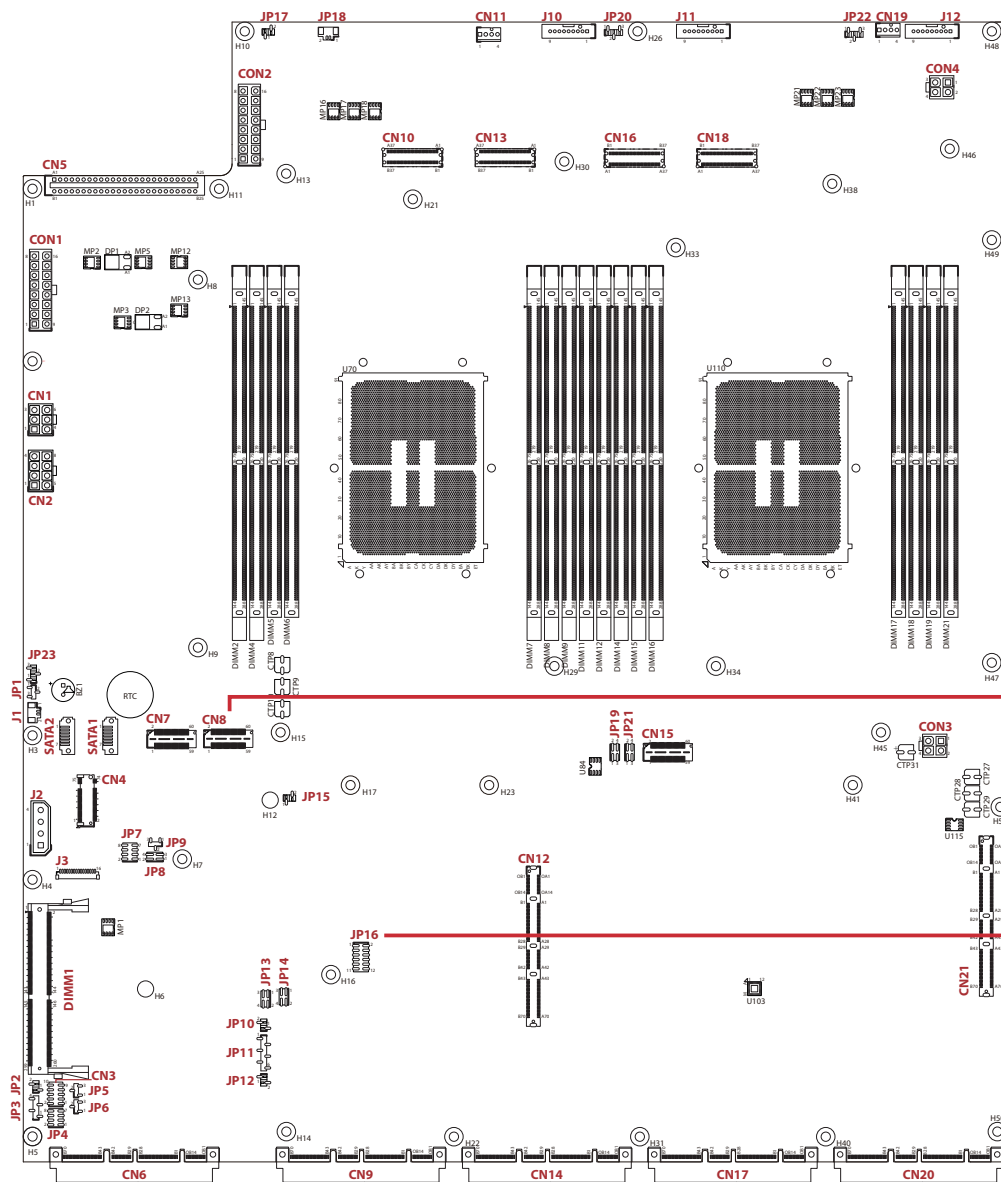
Pin	Description
1	P3V3_STBY_DSW
2	FM_PCH_SLP_SUS_N

## JP12: CPLD JTAG Select



Pin	Description
1	JTAG_SEL
2	GND

# NSA 7160R Quick Reference Guide



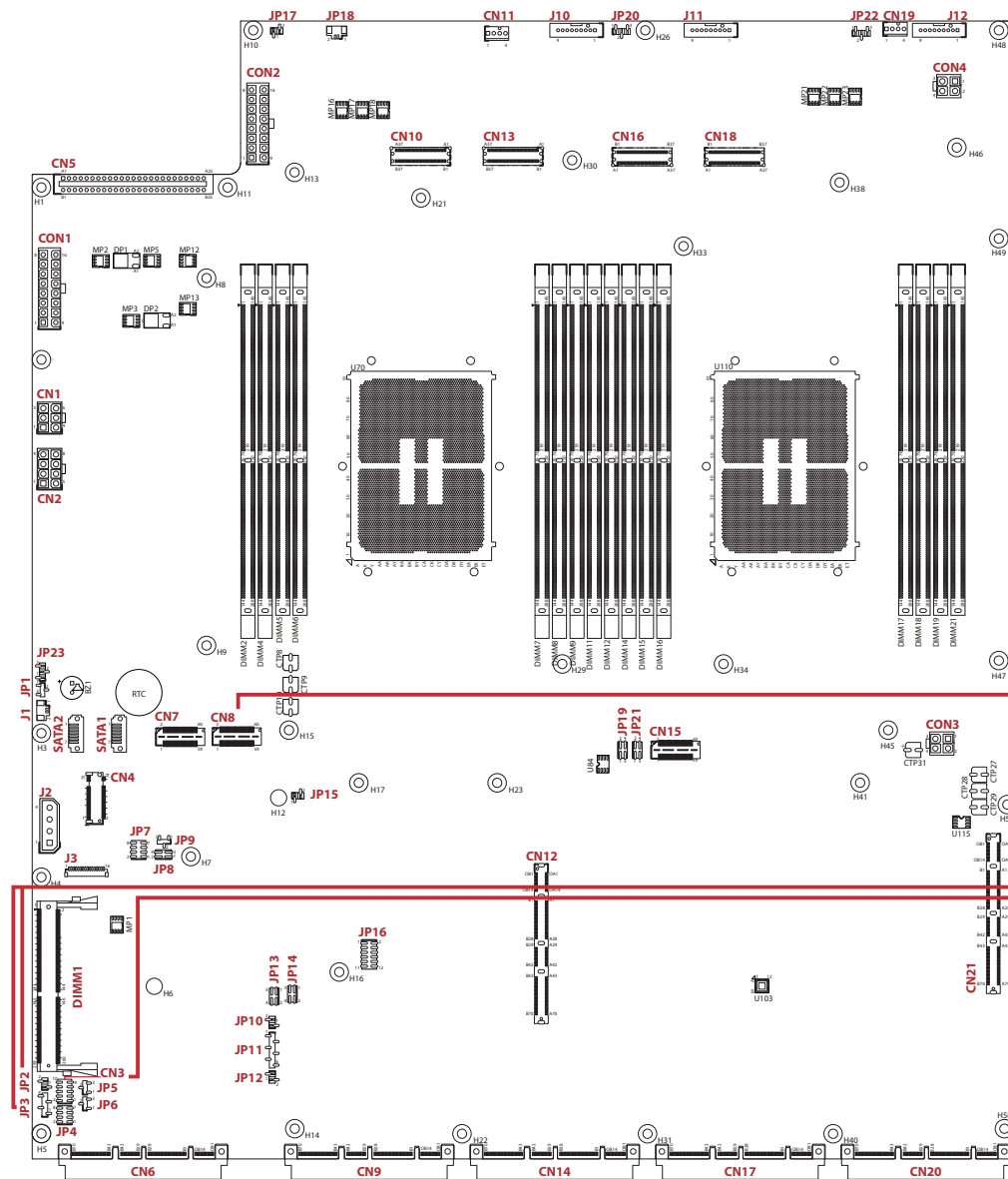
**CN8: XDP Debug Connector SAMTEC**

Pin	Description	Pin	Description
1	PD_CPU0_DBP_PIN1	2	NC
3	NC	4	NC
5	NC	6	NC
7	NC	8	PD_TRST_CPU0
9	NC	10	NC
11	NC	12	PVNN_TERM_CPU0
13	TRC_CPU0_PTIO_CLK0	14	TRC_CPU0_PT11_CLK0
15	GND	16	GND
17	GND	18	TRC_CPU0_PT110
19	TRC_CPU0_PT100	20	TRC_CPU0_PT111
21	TRC_CPU0_PT101	22	TRC_CPU0_PT112
23	TRC_CPU0_PT102	24	TRC_CPU0_PT113
25	TRC_CPU0_PT103	26	TRC_CPU0_PT114
27	TRC_CPU0_PT104	28	TRC_CPU0_PT115
29	TRC_CPU0_PT105	30	TRC_CPU0_PT116
31	TRC_CPU0_PT106	32	TRC_CPU0_PT117
33	TRC_CPU0_PT107	34	NC
35	TRC_CPU0_PT108	36	NC
37	TRC_CPU0_PT109	38	TRC_CPU0_PT118
39	TRC_CPU0_PT1010	40	TRC_CPU0_PT119
41	TRC_CPU0_PT1011	42	PWRGD_CPU0_LVC1_MIP160
43	TRC_CPU0_PT1012	44	TRC_CPU0_PT1110
45	TRC_CPU0_PT1013	46	TRC_CPU0_PT1111
47	TRC_CPU0_PT1014	48	TRC_CPU0_PT1112
49	TRC_CPU0_PT1015	50	TRC_CPU0_PT1113
51	NC	52	P3V3_AUX
53	DBP_CPU0_HOOK9_MBP3_QS_R1_N	54	TRC_CPU0_PT1114
55	DBP_CPU0_HOOK8_MBP2_QS_R1_N	56	TRC_CPU0_PT1115
57	GND	58	GND
59	TRC_CPU0_PTIO_CLK1	60	TRC_CPU0_PT11_CLK1

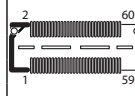
**JP16: PFR Strap Debug Use**

Pin	Description	Pin	Description
1	PCA9546_SCL0_R3	2	PCA9546_SCL0_PFR_R
3	PCA9546_SDA0_R3	4	PCA9546_SDA0_PFR_R
5	SMB_PMBUS_SML1_STBY_LVC3_SCL	6	SMB_PFR_PMB1_STBY_LVC3_SCL
7	SMB_PMBUS_SML1_STBY_LVC3_SDA	8	SMB_PFR_PMB1_STBY_LVC3_SDA
9	SMB_PCH_PMBUS2_STBY_LVC3_R_SCL	10	SMB_PFR_PMBUS2_STBY_LVC3_SCL
11	SMB_PCH_PMBUS2_STBY_LVC3_R_SDA	12	SMB_PFR_PMBUS2_STBY_LVC3_SDA

# NSA 7160R Quick Reference Guide




## CN15: XDP Debug Connector SAMTEC



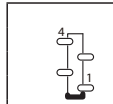
Pin	Description	Pin	Description
1	PD_CPU1_DBP_PIN1	2	NC
3	NC	4	NC
5	NC	6	NC
7	NC	8	PD_TRST_CPU1
9	NC	10	
11	NC	12	PVNN_TERM_CPU1
13	TRC_CPU1_PTIO0_CLK0	14	TRC_CPU1_PTIO0_CLK0
15	GND	16	GND
17	GND	18	TRC_CPU1_PTIO0
19	TRC_CPU1_PTIO0	20	TRC_CPU1_PTIO1
21	TRC_CPU1_PTIO1	22	TRC_CPU1_PTIO2
23	TRC_CPU1_PTIO2	24	TRC_CPU1_PTIO3
25	TRC_CPU1_PTIO3	26	TRC_CPU1_PTIO4
27	TRC_CPU1_PTIO4	28	TRC_CPU1_PTIO5
29	TRC_CPU1_PTIO5	30	TRC_CPU1_PTIO6
31	TRC_CPU1_PTIO6	32	TRC_CPU1_PTIO7
33	TRC_CPU1_PTIO7	34	NC
35	TRC_CPU1_PTIO8	36	NC
37	TRC_CPU1_PTIO9	38	TRC_CPU1_PTIO10
39	TRC_CPU1_PTIO10	40	TRC_CPU1_PTIO11
41	TRC_CPU1_PTIO11	42	PWRGD_CPU1_LVC1_MIP160
43	TRC_CPU1_PTIO12	44	TRC_CPU1_PTIO13
45	TRC_CPU1_PTIO13	46	TRC_CPU1_PTIO14
47	TRC_CPU1_PTIO14	48	TRC_CPU1_PTIO15
49	TRC_CPU1_PTIO15	50	TRC_CPU1_PTIO16
51	NC	52	P3V3_AUX
53	DBP_CPU1_HOOK9_MBP3_QS_R1_N	54	TRC_CPU1_PTIO17
55	DBP_CPU1_HOOK8_MBP2_QS_R1_N	56	TRC_CPU1_PTIO18
57	GND	58	GND
59	TRC_CPU1_PTIO0_CLK1	60	TRC_CPU1_PTIO0_CLK1

## JP2: PFR Strap Debug Use



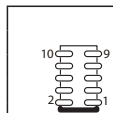
Pin	Description
1	RST_PFR_EXTRST_N
2	RST_PFR_EXTRST_R_N

## JP3: BMC Debug Header



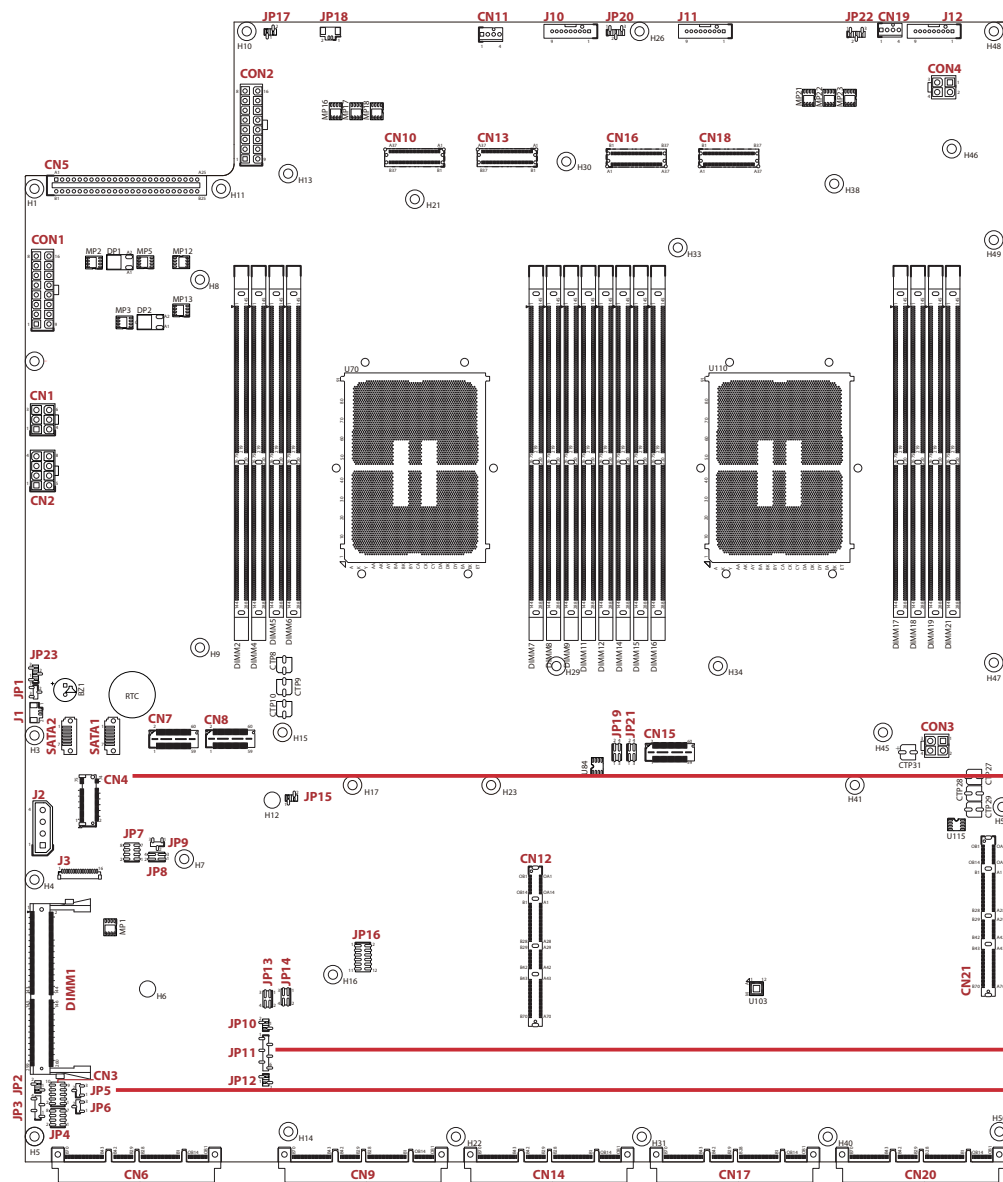
Pin	Description
1	3.3V
2	UART_RX
3	UART_TX
4	GND

## CN3: GPIO Header

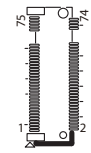


Pin	Description	Pin	Description
1	P3V3_CPLD	2	GND
3	CPLD_GPIO1	4	CPLD_GPO01
5	CPLD_GPIO2	6	CPLD_GPO02
7	CPLD_GPIO3	8	CPLD_GPO03
9	CPLD_GPIO4	10	CPLD_GPO04

# NSA 7160R Quick Reference Guide

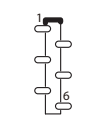


## CN4: M.2 Key M Connector



Pin	Description	Pin	Description
1	NGFF_CONFIG_3	2	P3V3
3	GND	4	P3V3
5	PCIE_RX_M2_R_3_DN	6	NC
7	PCIE_RX_M2_R_3_DP	8	NC
9	GND	10	NGFF_DSSN
11	PCIE_TX_M2_R_3_DN	12	P3V3
13	PCIE_TX_M2_R_3_DP	14	P3V3
15	GND	16	P3V3
17	PCIE_RX_M2_R_2_DN	18	P3V3
19	PCIE_RX_M2_R_2_DP	20	NC
21	NGFF_CONFIG_0	22	NC
23	PCIE_TX_M2_R_2_DN	24	NC
25	PCIE_TX_M2_R_2_DP	26	NC
27	GND	28	NC
29	PCIE_RX_M2_R_1_DN	30	NC
31	PCIE_RX_M2_R_1_DP	32	NC
33	GND	34	NC
35	PCIE_TX_M2_R_1_DN	36	NC
37	PCIE_TX_M2_R_1_DP	38	NGFF_DEVSLP
39	GND	40	N30398252
41	PCIE_RX_M2_R_0_DP	42	N30398249
42	N30398249	44	NC
43	PCIE_RX_M2_R_0_DN	46	NC
45	GND	48	NC
47	PCIE_TX_M2_R_0_DN	50	PE_RST_M2_N
49	PCIE_TX_M2_R_0_DP	52	FM_CLKREQ_M2_1_N
51	GND	54	IRQ_LVC3_WAKE_N
53	CLK_100M_M2_DN	56	NC
55	CLK_100M_M2_DP	58	NC
57	GND	68	PCH_SUSCLK_33K_R_SSD
67	NC	70	P3V3
69	FM_M2_1_PEDT	72	P3V3
71	GND	74	P3V3
73	GND		
75	NGFF_CONFIG_2		

## JP11: CPLD JTAG for Programming CPLD Code



Pin	Description
1	P3V3_CPLD
2	GND
3	JTAG_TCK_CPLD
4	JTAG_TDO_CPLD
5	JTAG_TDI_CPLD
6	JTAG_TMS_CPLD

## JP5: PCH Strap Debug Use

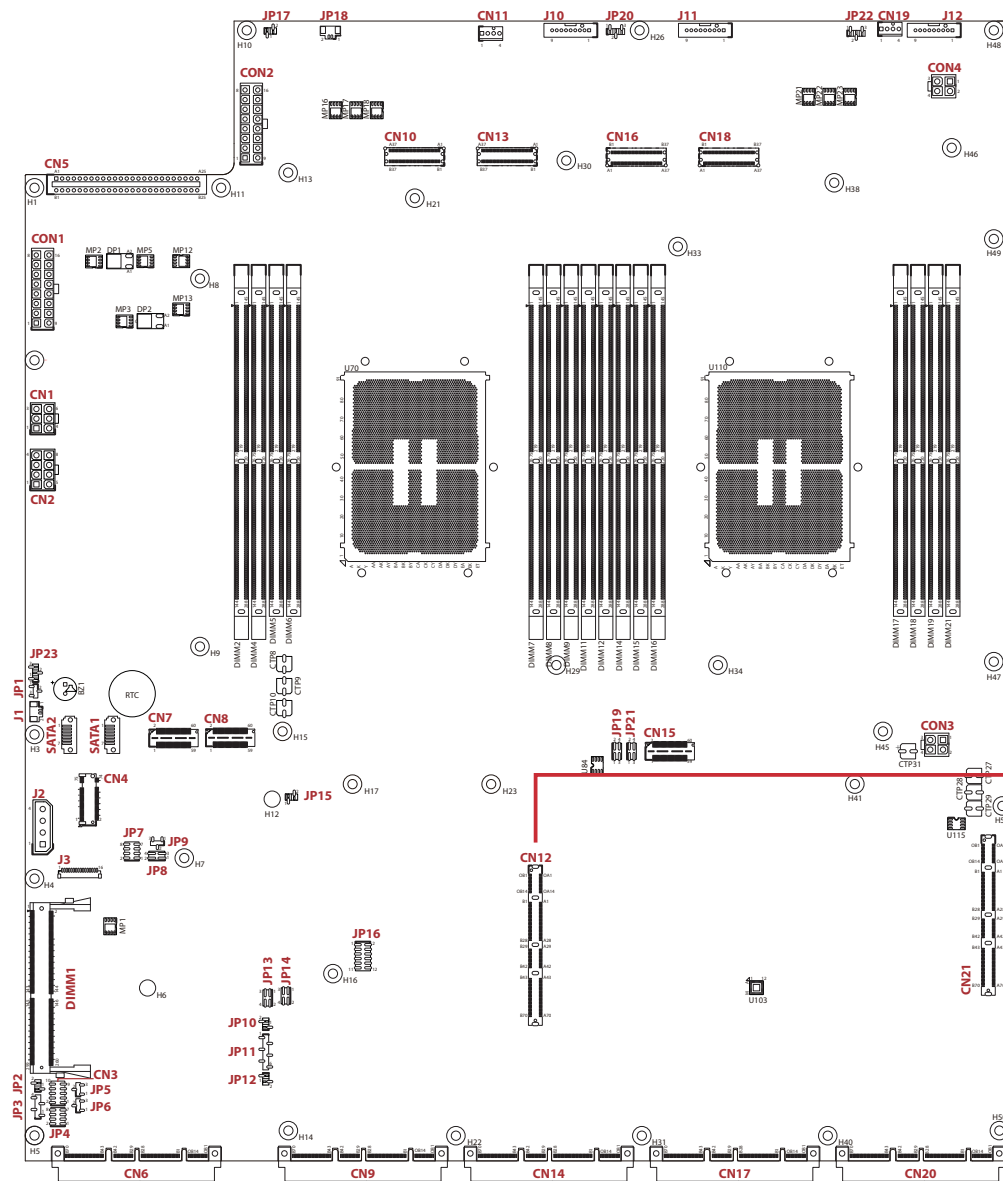


Pin	Description
1	P3V3_AUX
2	FM_NO_REBOOT_SPKR
3	GND





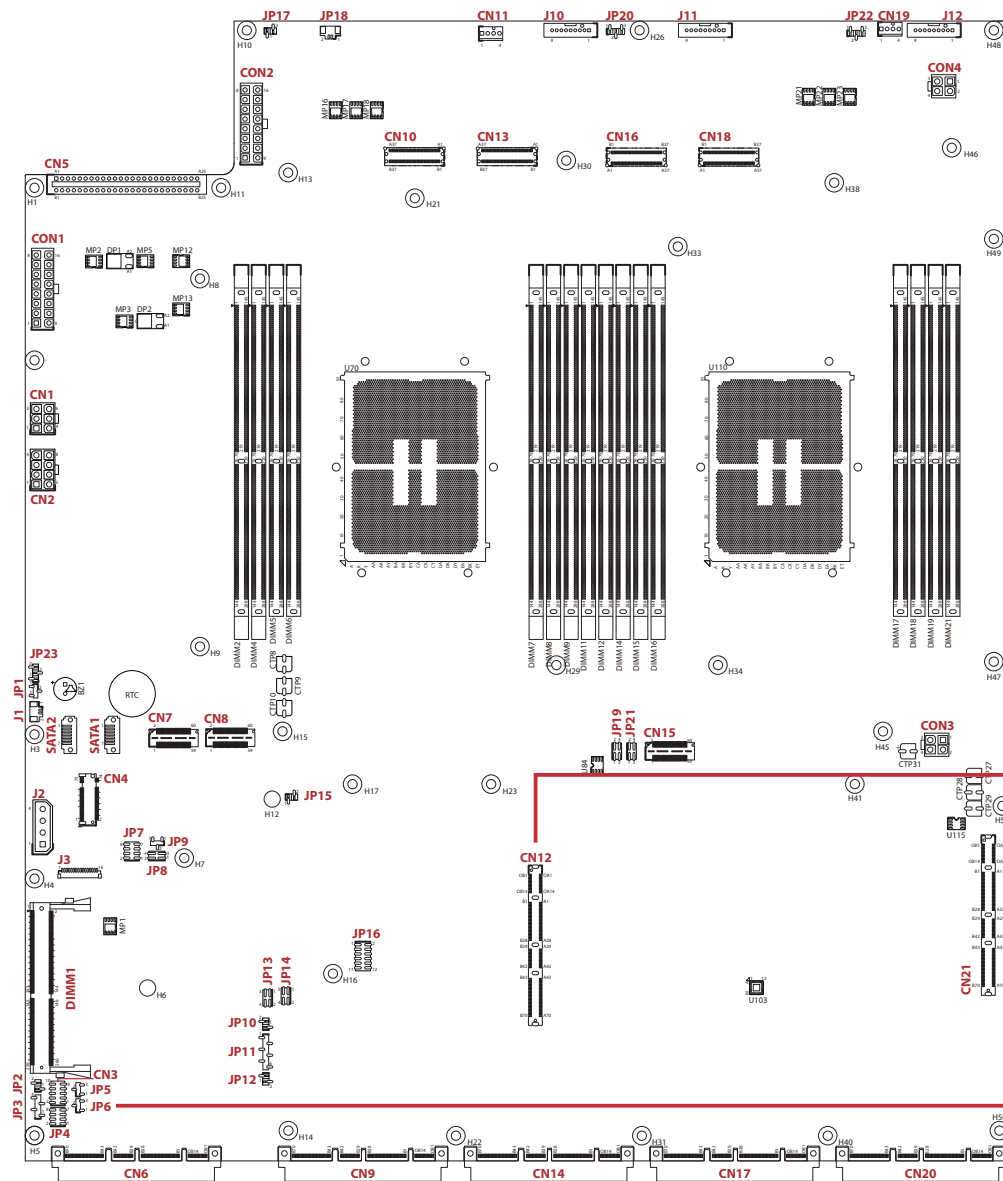
# NSA 7160R Quick Reference Guide



## CN12: Riser Left Connector

Pin	Description	Pin	Description
OA1	NC	OB1	PE_SLOT3_NIC_PWR_GOOD
OA2	NC	OB2	MAIN_PWR_EN_SLOT
OA3	FM_LAN_WAKE_SLOT3_N	OB3	PE_SLOT4_NIC_PWR_GOOD_R
OA4	GND	OB4	PE_SLOT4_R_PRSNTB0#
OA5	PE_SLOT4_CLK_RETIMER_DN	OB5	PE_SLOT4_R_PRSNTB1#
OA6	PE_SLOT4_CLK_RETIMER_DP	OB6	PE_SLOT4_R_PRSNTB2#
OA7	GND	OB7	GND
OA8	SLOT4_R2_SCL	OB8	PE_SLOT3_CLK_RETIMER_DN
OA9	SLOT4_R2_SDA	OB9	PE_SLOT3_CLK_RETIMER_DP
OA10	GND	OB10	GND
OA11	PE_SLOT4_CLK1_DN	OB11	PE_SLOT4_CLK0_DN
OA12	PE_SLOT4_CLK1_DP	OB12	PE_SLOT4_CLK0_DP
OA13	GND	OB13	GND
OA14	NC	OB14	PE_SLOT4_R_PRSNTB3#
A1	GND	B1	P3V3
A2	GND	B2	P3V3
A3	GND	B3	P3V3
A4	GND	B4	P3V3
A5	GND	B5	P3V3
A6	GND	B6	P3V3
A7	SLOT3_R2_SCL	B7	P3V3_AUX
A8	SLOT3_R2_SDA	B8	NC
A9	RST_SMB_HOST_MUX_PE_BUFF_N	B9	NC
A10	GND	B10	PE_SLOT34_RST_N
A11	NC	B11	P3V3_AUX
A12	PE_SLOT3_PRSNTB2#	B12	AUX_PWR_EN_SLOT
A13	GND	B13	GND
A14	PE_SLOT3_CLK1_DN	B14	PE_SLOT3_CLK0_DN
A15	PE_SLOT3_CLK1_DP	B15	PE_SLOT3_CLK0_DP
A16	GND	B16	GND
A17	PE_SLOT3_RX_DP15	B17	PE_SLOT3_TX_DP15
A18	PE_SLOT3_RX_DN15	B18	PE_SLOT3_TX_DN15
A19	GND	B19	GND
A20	PE_SLOT3_RX_DP14	B20	PE_SLOT3_TX_DP14
A21	PE_SLOT3_RX_DN14	B21	PE_SLOT3_TX_DN14
A22	GND	B22	GND
A23	PE_SLOT3_RX_DP13	B23	PE_SLOT3_TX_DP13
A24	PE_SLOT3_RX_DN13	B24	PE_SLOT3_TX_DN13
A25	GND	B25	GND
A26	PE_SLOT3_RX_DP12	B26	PE_SLOT3_TX_DP12
A27	PE_SLOT3_RX_DN12	B27	PE_SLOT3_TX_DN12
A28	GND	B28	GND
A29	GND	B29	GND
A30	PE_SLOT3_RX_DP11	B30	PE_SLOT3_TX_DP11

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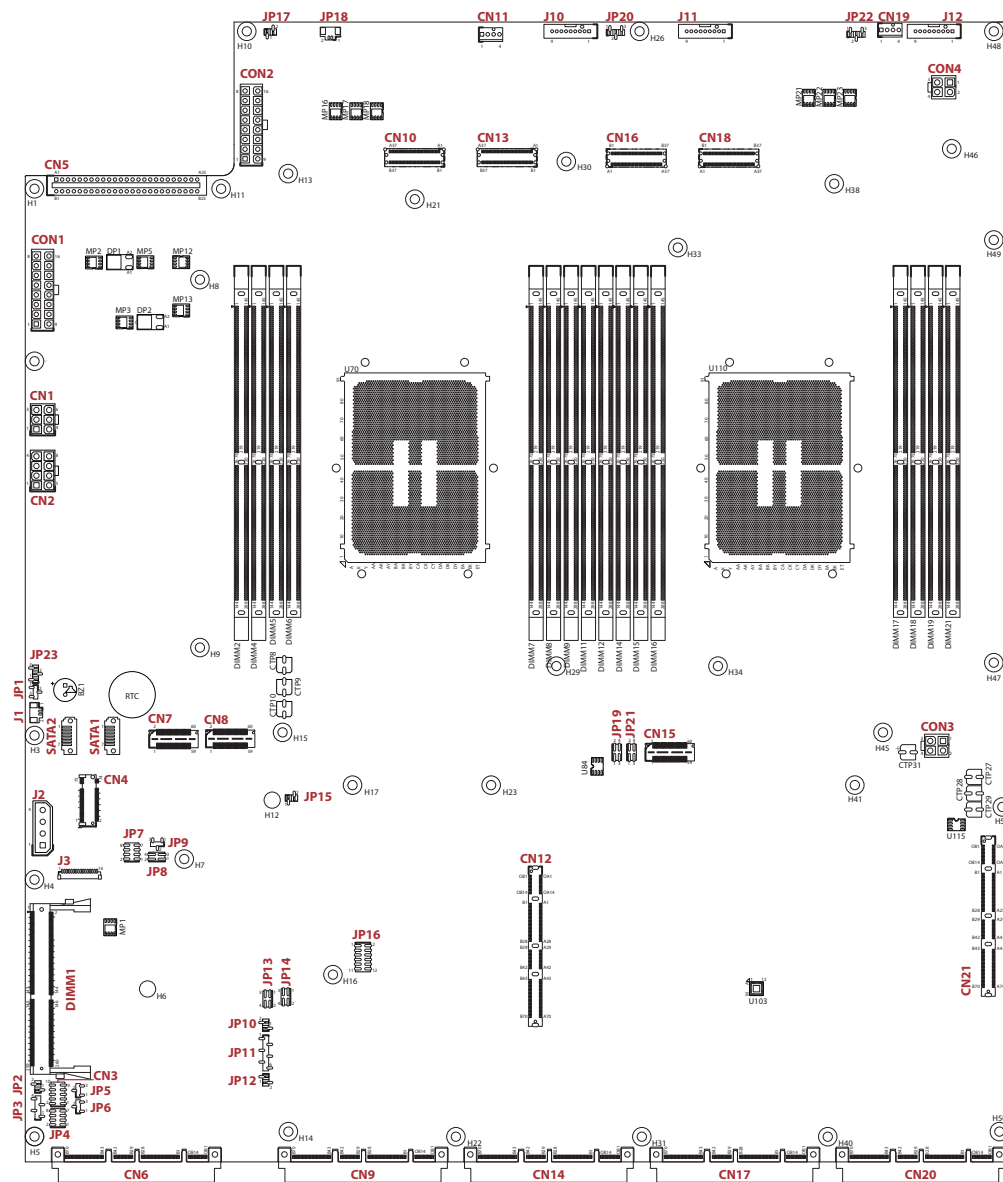
## CN12: Riser Left Connector

Pin	Description	Pin	Description
A31	PE_SLOT3_RX_DN11	B31	PE_SLOT3_TX_DN11
A32	GND	B32	GND
A33	PE_SLOT3_RX_DP10	B33	PE_SLOT3_TX_DP10
A34	PE_SLOT3_RX_DN10	B34	PE_SLOT3_TX_DN10
A35	GND	B35	GND
A36	PE_SLOT3_RX_DP9	B36	PE_SLOT3_TX_DP9
A37	PE_SLOT3_RX_DN9	B37	PE_SLOT3_TX_DN9
A38	GND	B38	GND
A39	PE_SLOT3_RX_DP8	B39	PE_SLOT3_TX_DP8
A40	PE_SLOT3_RX_DN8	B40	PE_SLOT3_TX_DN8
A41	GND	B41	GND
A42	PE_SLOT3_PRSNB1#	B42	PE_SLOT3_PRSNB0#
A43	GND	B43	GND
A44	PE_SLOT3_RX_DP7	B44	PE_SLOT3_TX_DP7
A45	PE_SLOT3_RX_DN7	B45	PE_SLOT3_TX_DN7
A46	GND	B46	GND
A47	PE_SLOT3_RX_DP6	B47	PE_SLOT3_TX_DP6
A48	PE_SLOT3_RX_DN6	B48	PE_SLOT3_TX_DN6
A49	GND	B49	GND
A50	PE_SLOT3_RX_DP5	B50	PE_SLOT3_TX_DP5
A51	PE_SLOT3_RX_DN5	B51	PE_SLOT3_TX_DN5
A52	GND	B52	GND
A53	PE_SLOT3_RX_DP4	B53	PE_SLOT3_TX_DP4
A54	PE_SLOT3_RX_DN4	B54	PE_SLOT3_TX_DN4
A55	GND	B55	GND
A56	PE_SLOT3_RX_DP3	B56	PE_SLOT3_TX_DP3
A57	PE_SLOT3_RX_DN3	B57	PE_SLOT3_TX_DN3
A58	GND	B58	GND
A59	PE_SLOT3_RX_DP2	B59	PE_SLOT3_TX_DP2
A60	PE_SLOT3_RX_DN2	B60	PE_SLOT3_TX_DN2
A61	GND	B61	GND
A62	PE_SLOT3_RX_DP1	B62	PE_SLOT3_TX_DP1
A63	PE_SLOT3_RX_DN1	B63	PE_SLOT3_TX_DN1
A64	GND	B64	GND
A65	PE_SLOT3_RX_DP0	B65	PE_SLOT3_TX_DP0
A66	PE_SLOT3_RX_DN0	B66	PE_SLOT3_TX_DN0
A67	GND	B67	GND
A68	NC	B68	NC
A69	NC	B69	NC
A70	PE_SLOT34_PWRBRK0#	B70	PE_SLOT3_PRSNB3#

## JP6: AT/ATX Header ; CPLD JTAG PROG Enable Header

Pin	Description
1	P3V3_CPLD
2	AT_ATX_SEL
3	GND

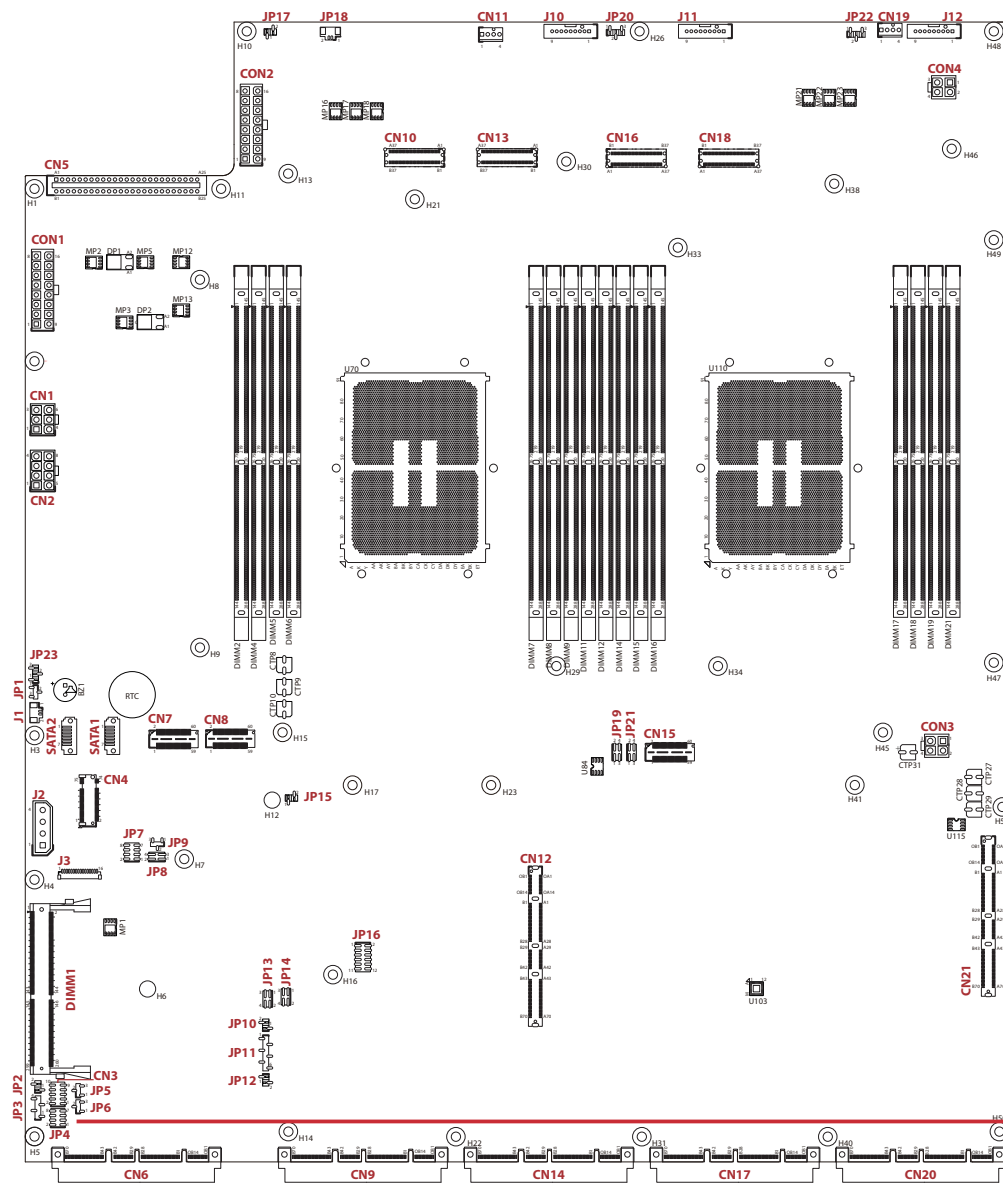
# NSA 7160R Quick Reference Guide



## CN21: Riser Right Connector

Pin	Description	Pin	Description
OA1	PE_SLOT7_R_PRSNB0#	OB1	PE_SLOT8_NIC_PWR_GOOD
OA2	PE_SLOT7_R_PRSNB1#	OB2	MAIN_PWR_EN_SLOT
OA3	FM_LAN_WAKE_SLOT78_N	OB3	PE_SLOT7_NIC_PWR_GOOD_R
OA4	PE_SLOT7_R_PRSNB2#	OB4	NC
OA5	PE_SLOT7_R_PRSNB3#	OB5	SLOT7_R2_SCL
OA6	NC	OB6	SLOT7_R2_SDA
OA7	GND	OB7	GND
OA8	PE_SLOT78_CLK_RETIMER_DN	OB8	PE_SLOT9_CLK0_DN
OA9	PE_SLOT78_CLK_RETIMER_DP	OB9	PE_SLOT9_CLK0_DP
OA10	GND	OB10	GND
OA11	PE_SLOT7_CLK1_DN	OB11	PE_SLOT7_CLK0_DN
OA12	PE_SLOT7_CLK1_DP	OB12	PE_SLOT7_CLK0_DP
OA13	GND	OB13	GND
OA14	NC	OB14	PE_SLOT9_PWRBRK0#
A1	GND	B1	P3V3
A2	GND	B2	P3V3
A3	GND	B3	P3V3
A4	GND	B4	P3V3
A5	GND	B5	P3V3
A6	GND	B6	P3V3
A7	SLOT8_EXPANSION_R2_SCL	B7	P3V3_AUX
A8	SLOT8_EXPANSION_R2_SDA	B8	RETIMER_CPLD_SMB_SCL_R2
A9	RST_SMB_HOST_MUX_PE_BUFF_N	B9	RETIMER_CPLD_SMB_SDA_R2
A10	GND	B10	PE_SLOT78_RST_N
A11	PE_EXPANSION_RST_N	B11	P3V3_AUX
A12	PE_SLOT8_R_PRSNB2#	B12	AUX_PWR_EN_SLOT
A13	GND	B13	GND
A14	PE_SLOT8_CLK1_DN	B14	PE_SLOT8_CLK0_DN
A15	PE_SLOT8_CLK1_DP	B15	PE_SLOT8_CLK0_DP
A16	GND	B16	GND
A17	PE_SLOT8_RX_DP7	B17	PE_SLOT8_TX_DP7
A18	PE_SLOT8_RX_DN7	B18	PE_SLOT8_TX_DN7
A19	GND	B19	GND
A20	PE_SLOT8_RX_DP6	B20	PE_SLOT8_TX_DP6
A21	PE_SLOT8_RX_DN6	B21	PE_SLOT8_TX_DN6
A22	GND	B22	GND
A23	PE_SLOT8_RX_DP5	B23	PE_SLOT8_TX_DP5
A24	PE_SLOT8_RX_DN5	B24	PE_SLOT8_TX_DN5
A25	GND	B25	GND
A26	PE_SLOT8_RX_DP4	B26	PE_SLOT8_TX_DP4
A27	PE_SLOT8_RX_DN4	B27	PE_SLOT8_TX_DN4
A28	GND	B28	GND
A29	GND	B29	GND
A30	PE_SLOT8_RX_DP3	B30	PE_SLOT8_TX_DP3

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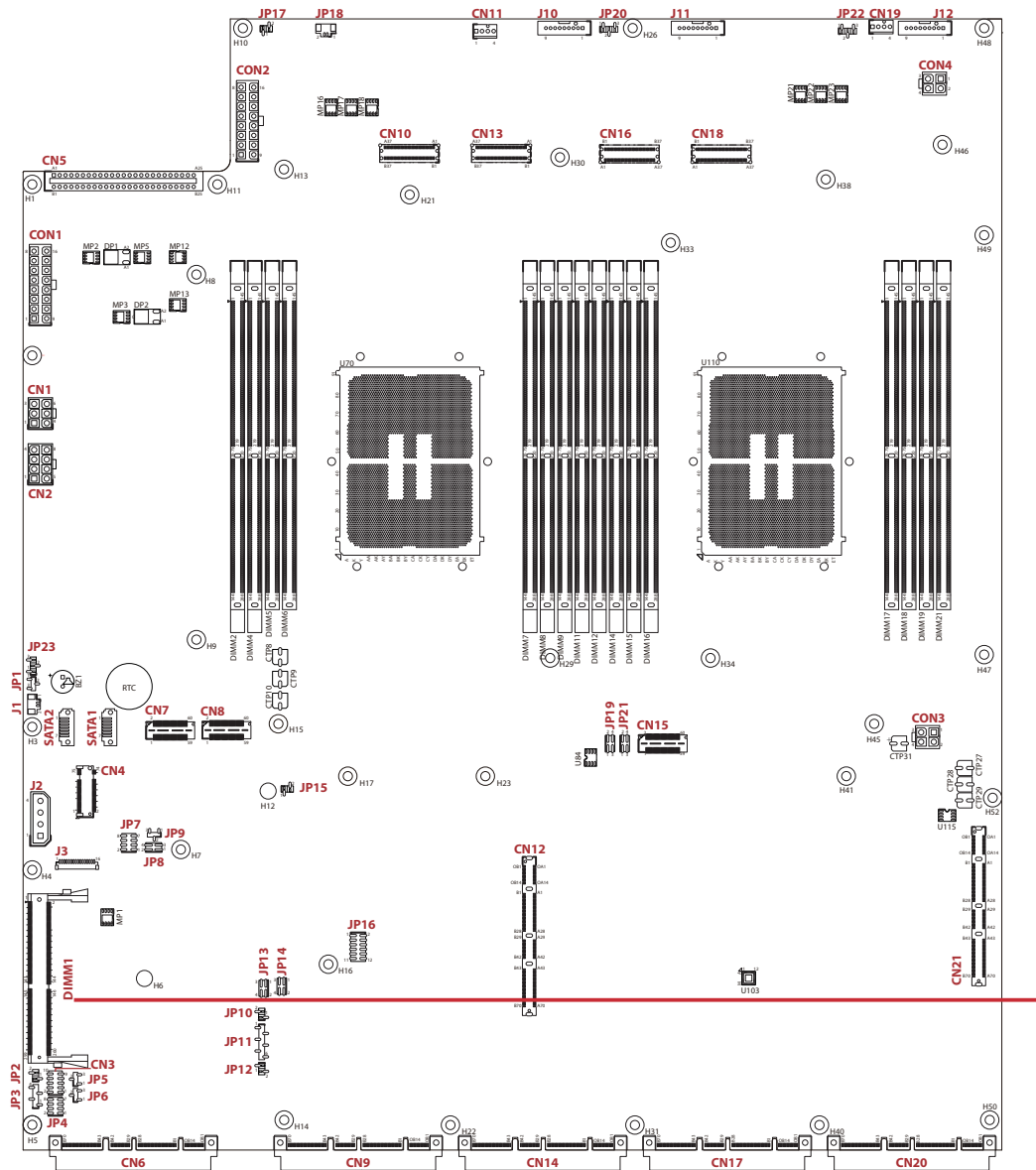
## CN21: Riser Right Connector

Pin	Description	Pin	Description
A31	PE_SLOT8_RX_DN3	B31	PE_SLOT8_TX_DN3
A32	GND	B32	GND
A33	PE_SLOT8_RX_DP2	B33	PE_SLOT8_TX_DP2
A34	PE_SLOT8_RX_DN2	B34	PE_SLOT8_TX_DN2
A35	GND	B35	GND
A36	PE_SLOT8_RX_DP1	B36	PE_SLOT8_TX_DP1
A37	PE_SLOT8_RX_DN1	B37	PE_SLOT8_TX_DN1
A38	GND	B38	GND
A39	PE_SLOT8_RX_DP0	B39	PE_SLOT8_TX_DP0
A40	PE_SLOT8_RX_DN0	B40	PE_SLOT8_TX_DN0
A41	GND	B41	GND
A42	PE_SLOT8_R_PRSNB1#	B42	PE_SLOT8_R_PRSNB0#
A43	GND	B43	GND
A44	PE_SLOT7_RX_DP7	B44	PE_SLOT7_TX_DP7
A45	PE_SLOT7_RX_DN7	B45	PE_SLOT7_TX_DN7
A46	GND	B46	GND
A47	PE_SLOT7_RX_DP6	B47	PE_SLOT7_TX_DP6
A48	PE_SLOT7_RX_DN6	B48	PE_SLOT7_TX_DN6
A49	GND	B49	GND
A50	PE_SLOT7_RX_DP5	B50	PE_SLOT7_TX_DP5
A51	PE_SLOT7_RX_DN5	B51	PE_SLOT7_TX_DN5
A52	GND	B52	GND
A53	PE_SLOT7_RX_DP4	B53	PE_SLOT7_TX_DP4
A54	PE_SLOT7_RX_DN4	B54	PE_SLOT7_TX_DN4
A55	GND	B55	GND
A56	PE_SLOT7_RX_DP3	B56	PE_SLOT7_TX_DP3
A57	PE_SLOT7_RX_DN3	B57	PE_SLOT7_TX_DN3
A58	GND	B58	GND
A59	PE_SLOT7_RX_DP2	B59	PE_SLOT7_TX_DP2
A60	PE_SLOT7_RX_DN2	B60	PE_SLOT7_TX_DN2
A61	GND	B61	GND
A62	PE_SLOT7_RX_DP1	B62	PE_SLOT7_TX_DP1
A63	PE_SLOT7_RX_DN1	B63	PE_SLOT7_TX_DN1
A64	GND	B64	GND
A65	PE_SLOT7_RX_DP0	B65	PE_SLOT7_TX_DP0
A66	PE_SLOT7_RX_DN0	B66	PE_SLOT7_TX_DN0
A67	GND	B67	GND
A68	NC	B68	NC
A69	NC	B69	NC
A70	PE_SLOT7_PWRBRK0#	B70	PE_SLOT8_R_PRSNB3#

## JP4: PFR Strap Debug Use

Pin	Description	Pin	Description
1	QSPI_MON0_SW_EN_R_N	2	GND
3	SPI_BMC_QSPI_DATA_SW_ISO	4	GND
5	QSPI_MON1_SW_EN_R_N	6	GND
7	SPI_PCH_QSPI_DATA_SW_ISO	8	GND

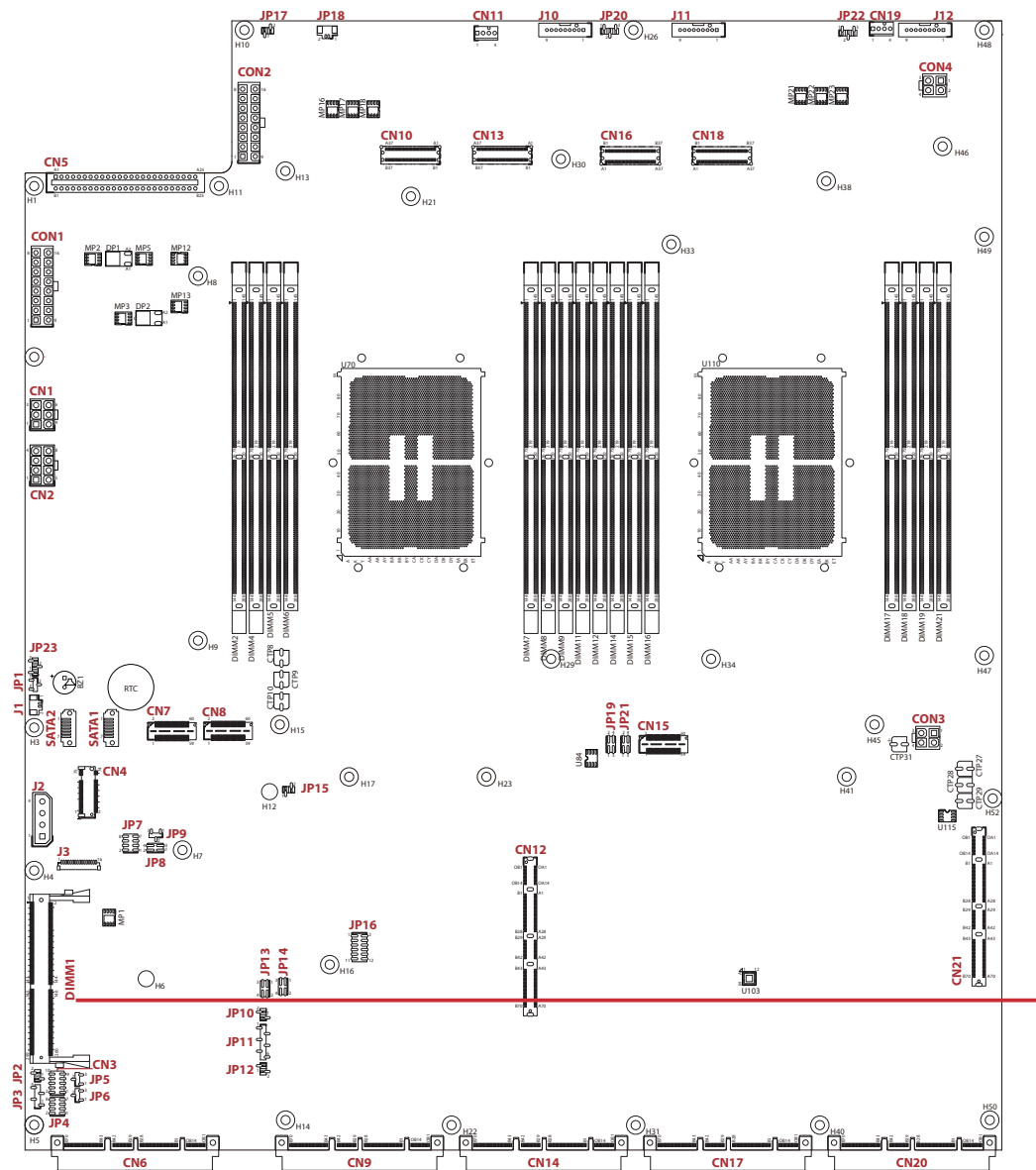
# NSA 7160R Quick Reference Guide



## DIMM1: Run BMC Connector

Pin	Description	Pin	Description
1	P12V_AUX	2	NC
3	P3V3_BMC	4	P3V3_BMC
5	P3V3_BMC	6	P3V3_BMC
7	P3V3_BMC	8	GND
9	GND	10	V_BMC_GFX_REAR_GRN
11	GND	12	V_BMC_GFX_REAR_BLU
13	SGPIO_BMC_LD_R_N	14	V_BMC_GFX_REAR_RED
15	SGPIO_BMC_DIN	16	V_BMC_GFX_REAR_HSYN
17	SGPIO_BMC_DOUT	18	V_BMC_GFX_REAR_VSYN
19	SGPIO_BMC_CLK_R	20	SMB_BMC_DDC_SCL_R
21	BMC_RXD5	22	SMB_BMC_DDC_SDA_R
23	BMC_TXD5	24	GND
25	FP_ID_LED_R_N	26	BMC_FAN1_PWM
27	BMC_FAN3_PWM	28	BMC_FAN2_PWM
29	BMC_FAN5_PWM	30	BMC_FAN4_PWM
31	IRQ_BMC_CPU_NMI_R	32	BMC_FAN6_PWM
33	RNBMC_R1_PRSN#	34	CPLD_BMC_SMI_R#
35	IRQ_BMC_PCH_SMI_LPC_N_BMC	36	BMC_GPIO19
37	FM_P1V2_BMC_AUX_EN_R	38	BMC_CPLD_UART1_R_CTS#
39	GND	40	BMC_CPLD_UART1_R_NDCD
41	BMC_CPLD_UART1_R_RXD	42	ID_LED_BMC_OUT
43	BMC_CPLD_UART1_R_TXD	44	BMC_GPIO24
45	GND	46	BMC_CPLD_UART1_R_NDSR
47	SMB_CPLD_STBY_LVC3_MM8_R3_CLK	48	SMB_CPU_PiROM_BMC_SCL
49	SMB_CPLD_STBY_LVC3_MM8_R3_DATA	50	SMB_CPU_PiROM_BMC_SDA
51	GND	52	GND
53	SMB_SENSOR_STBY_LVC3_R1_CLK	54	SMB_SMLINK0_STBY_LVC3_R2_SCL
55	SMB_SENSOR_STBY_LVC3_R1_DATA	56	SMB_SMLINK0_STBY_LVC3_R2_SDA
57	GND	58	GND
59	FM_CPU_ERR0_LVT3_BMC_N	60	SMB_BMC_STBY_LVC3_MM5_R_CLK
61	FM_CPU_ERR1_LVT3_BMC_N	62	SMB_BMC_STBY_LVC3_MM5_R_DATA
63	SPI_BMC_BOOT_CS0_R_N	64	GND
65	SPI_BMC_BOOT_R_MOSI	66	BMC_CPLD_UART1_R_RI
67	SPI_BMC_BOOT_R_MISO	68	BMC_CPLD_UART1_R_DTR
69	SPI_BMC_BOOT_R_IO2	70	BMC_CPLD_UART1_R_RTS#
71	SPI_BMC_BOOT_R_IO3	72	FP_LED_STATUS_GREEN_R_N
73	SPI_BMC_BOOT_R_CLK	74	FM_BIOS_POST_CPLT_BMC_N
75	SPI_BMC_BOOT_CS1_R_N	76	IRQ_BMC_PCH_NMI_R
77	PWRGD_BMC_PS_PWROK_R	78	BMC_FAN1_TACH
79	FM_BMC_CRASHLOG_TRIG_N_BMC	80	BMC_FAN2_TACH
81	FM_CPU1_SKT0CC_LVT3_R1_N	82	BMC_FAN3_TACH
83	BMC_GPIO49	84	BMC_FAN4_TACH
85	FM_CPU_CATERR_R2_N	86	BMC_FAN5_TACH
87	RST_PFR_EXTRST_N	88	BMC_FAN6_TACH
89	FM_BMC_PCH_SCI_LPC_R2_N	90	FM_SLPS3_R_N

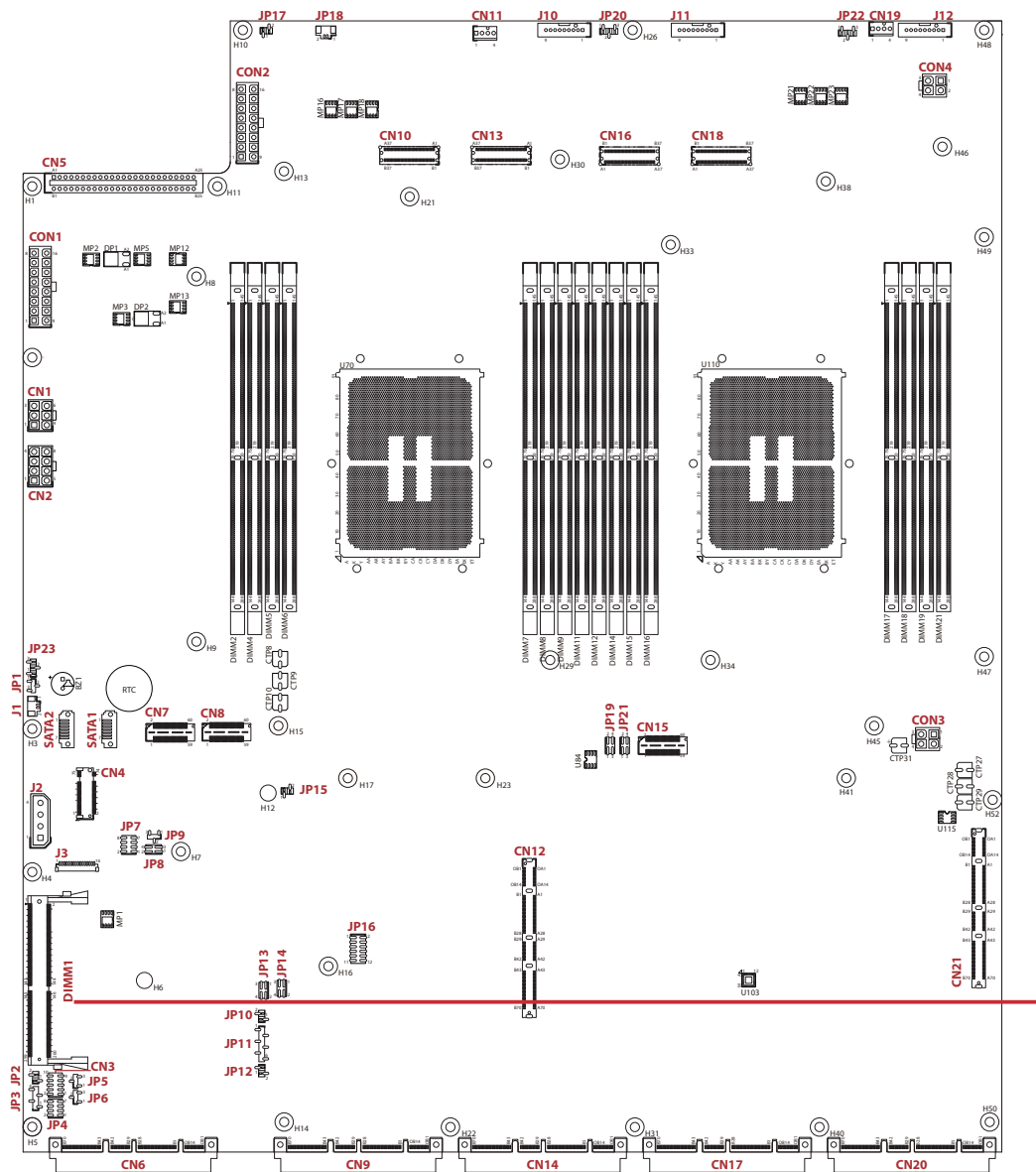
# NSA 7160R Quick Reference Guide



## DIMM1: Run BMC Connector

Pin	Description	Pin	Description
91	FM_PCHHOT_N_BMC	92	FM_SLP54_R_N
93	FM_PLT_BMC_THERMTRIP_N_BMC	94	CRPS_BMC_PRESEND1
95	A_VBAT_DETECT	96	FM_BMC_PCH_SPARE_R2
97	RST_CPU0_LVC1_N_BMC	98	I3C_SPD_DDRABCD_CPU0_BMC_R2_SCL
99	PWRGD_P1V2_BMC_AUX_R	100	I3C_SPD_DDRABCD_CPU0_BMC_R2_SDA
101	GPIOH1_CPLD_BMC_R	102	I3C_SPD_DDREFGH_CPU0_BMC_R2_SCL
103	FM_PFR_ACTIVE_N_BMC	104	I3C_SPD_DDREFGH_CPU0_BMC_R2_SDA
105	IRQ_SML1_PMBUS_BMC_ALERT_R2_N	106	I3C_SPD_DDRABCD_CPU1_BMC_R2_SCL
107	JTAG_SEL_BMC	108	I3C_SPD_DDRABCD_CPU1_BMC_R2_SDA
109	BMC_GPIO114	110	GND
111	PVNN_TERM_CPU0	112	PECL_BMC_R
113	GPIOAA0	114	GND
115	IRQ_SML0_ALERT_BMC_N	116	CRPS_BMC_PRESEND2
117	FM_SPD_SWITCH_CTRL_N_BMC	118	FM_P2V5_BMC_EN
119	FM_CPU1_DISABLE_COD_N	120	I3C_SPD_DDREFGH_CPU1_BMC_R2_SCL
121	BMC_GPIO83	122	I3C_SPD_DDREFGH_CPU1_BMC_R2_SDA
123	SMB_IPMB_STBY_LVC3_CLK	124	BMC_GPIO86
125	SMB_IPMB_STBY_LVC3_DATA	126	GND
127	GND	128	SMB_BMC_SPD_ACCESS_STBY_LVC3_SCL_R1
129	GPIOH0_CPLD_BMC_R	130	SMB_BMC_SPD_ACCESS_STBY_LVC3_SDA_R1
131	BMC_READY	132	GND
133	GND	134	SMB_PMBUS_BMC_STBY_LVC3_R4_SCL
135	IRQ_SMI_ACTIVE_BMC_R_N	136	SMB_PMBUS_BMC_STBY_LVC3_R4_SDA
137	IRQ_NMI_EVENT_BMC_N	138	FP_LED_STATUS_AMBER_R_N
139	GND	140	H_CPU0_MEMHOT_OUT_LVC1_BMC_N
141	FP_SYS_RESET_R1_N	142	RST_PLTRST_B_N
143	RST_BTN_BMC_N	144	BMC_GPIO100
145	GND	146	BMC_GPIO101
147	PE_BMC_TXN	148	NC
149	PE_BMC_TXP	150	NC
151	GND	152	PGPPA_AUX
153	PCIE_RX_BMC_DN	154	FM_CPU1_MEMHOT_OUT_BMC_N
155	PCIE_RX_BMC_DP	156	FM_BMC_ONCTL_N_PLD_R
157	GND	158	BMC_GPIO106
159	CLK_100M_GEN3_BMC_PE_DN	160	DBP_PRESENT_IN_R2_N
161	CLK_100M_GEN3_BMC_PE_DP	162	BMCJTAG1TRST
163	GND	164	JTAG_TDO_BMC
165	RST_LPC_LRST_ESPI_RST_BMC_R_N	166	JTAG_TDI_BMC
167	ESPI_IO1_LPC_LAD1_R	168	BMC_JTAG1RTCK
169	ESPI_IO0_LPC_LAD0_R	170	JTAG_TCK_BMC
171	IRQ_LPC_SERIRQ_ESPI_ALERT_N_BMC	172	JTAG_TMS_BMC
173	ESPI_CS1_N_LFRAME_N_BMC	174	A_P12V_SCALED
175	ESPI_IO3_LPC_LAD3_R	176	A_P3V3_SCALED
177	ESPI_IO2_LPC_LAD2_R	178	A_P5V_SCALED
179	PCICKL_BMC	180	A_P1V05_PCH_AUX_SCALED

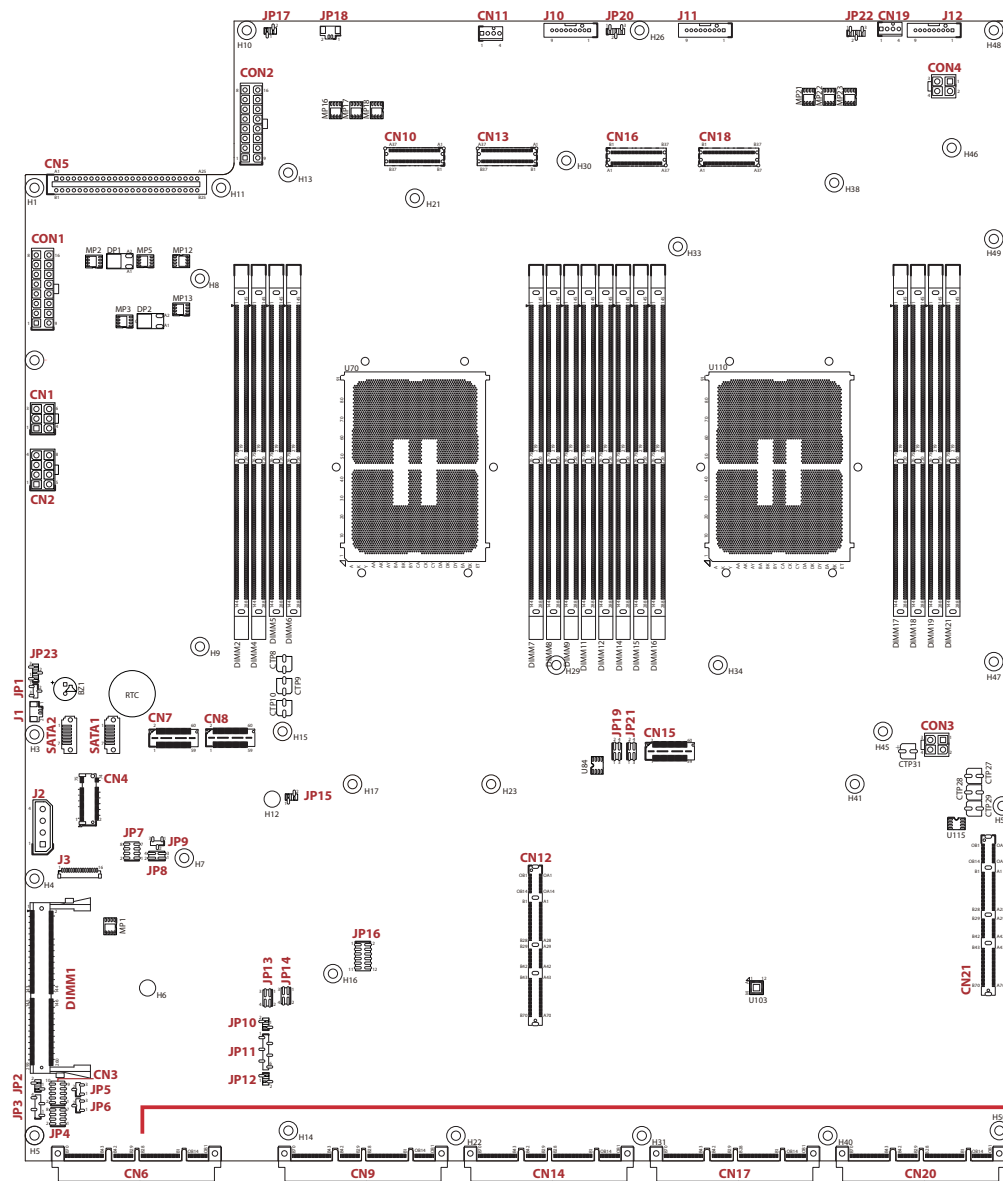
# NSA 7160R Quick Reference Guide



## DIMM1: Run BMC Connector

Pin	Description	Pin	Description
181	BMC_I2C9SCL_R	182	A_PVNN_PCH_AUX_SCALED
183	BMC_I2C9SDA_R	184	A_VCC_CPU0_SCALED
185	GND	186	A_VCC_CPU1_SCALED
187	PWRGD_PCH_PWROK_R2	188	PVCCFA_EHV_FIVRA_CPU0_SCALED
189	FM_CPU0_SKT0CC_LVT3_R1_N	190	SPI_PFR_PCH_RNBMC_CS0_N
191	GND	192	BMC_GPO1
193	FM_CPU_ERR2_LVT3_BMC_N	194	BMC_GPO2
195	AC_FAIL_PSU_BMC	196	BMC_GPIO16
197	GND	198	SPI_IBMC_SSB_CS0_N
199	FP_BMC_PWR_BTN_R_N	200	SPI_BMC_MUXED_BIOS_IO0_R
201	PWR_BTN_BMC_N	202	SPI_BMC_MUXED_BIOS_IO1_R
203	GND	204	SPI_BMC_MUXED_BIOS_IO2_R
205	BMC_I2C03SCL	206	SPI_BMC_MUXED_BIOS_IO3_R
207	BMC_I2C03SDA	208	SPI_BMC_MUXED_BIOS_CLK_R
209	FP_ID_BTN_PFR_BMC_N	210	SPI_IBMC_SSB_CS1_N
211	PWRGD_P2V5_BMC_AUX_R	212	GND
213	FM_P1V0_BMC_AUX_EN_R	214	RMIIMDIO
215	GND	216	NCSI_CRS_DV_A
217	USB2_P10_DN	218	RMIIMDC
219	USB2_P10_DP	220	NCSI_IBMC_CLK_A
221	GND	222	BMC_RMIIRXER
223	USB2_P12_BMC_DN	224	NCSI_TX_EN_A
225	USB2_P12_BMC_DP	226	GND
227	GND	228	NCSI_RXD0_A
229	NCSI_TXD0_B	230	NCSI_RXD1_A
231	NCSI_RXD0_B	232	GND
233	GND	234	NCSI_TXD0_A
235	NCSI_RXD1_B	236	NCSI_TXD1_A
237	NCSI_TXD1_B	238	GND
239	GND	240	NCSI_TXCLK_B
241	NCSI_CRS_DV_B	242	PHYLED2_RGMIIRXCTL
243	NCSI_RXD2_B	244	NCSI_TXCTL_B
245	GND	246	FM_BMC_BMCINIT_R
247	TRD3N_RGMIIRXD3	248	BMC_AUX_PWRGD_R2
249	NCSI_TXD3_B	250	NCSI_IBMC_CLK_B
251	GND	252	PVCCFA_EHV_FIVRA_CPU1_SCALED
253	RST_SRST_BMC_PLD_N	254	A_PVCCFA_EHV_CPU1_SCALED
255	A_P3V_BAT_SCALED	256	A_PVCCFA_EHV_CPU0_SCALED
257	A_PVCCINFAON_CPU1_SCALED	258	A_PVCCINFAON_CPU0_SCALED
259	GPIO_ADC15	260	GPIO_ADC14

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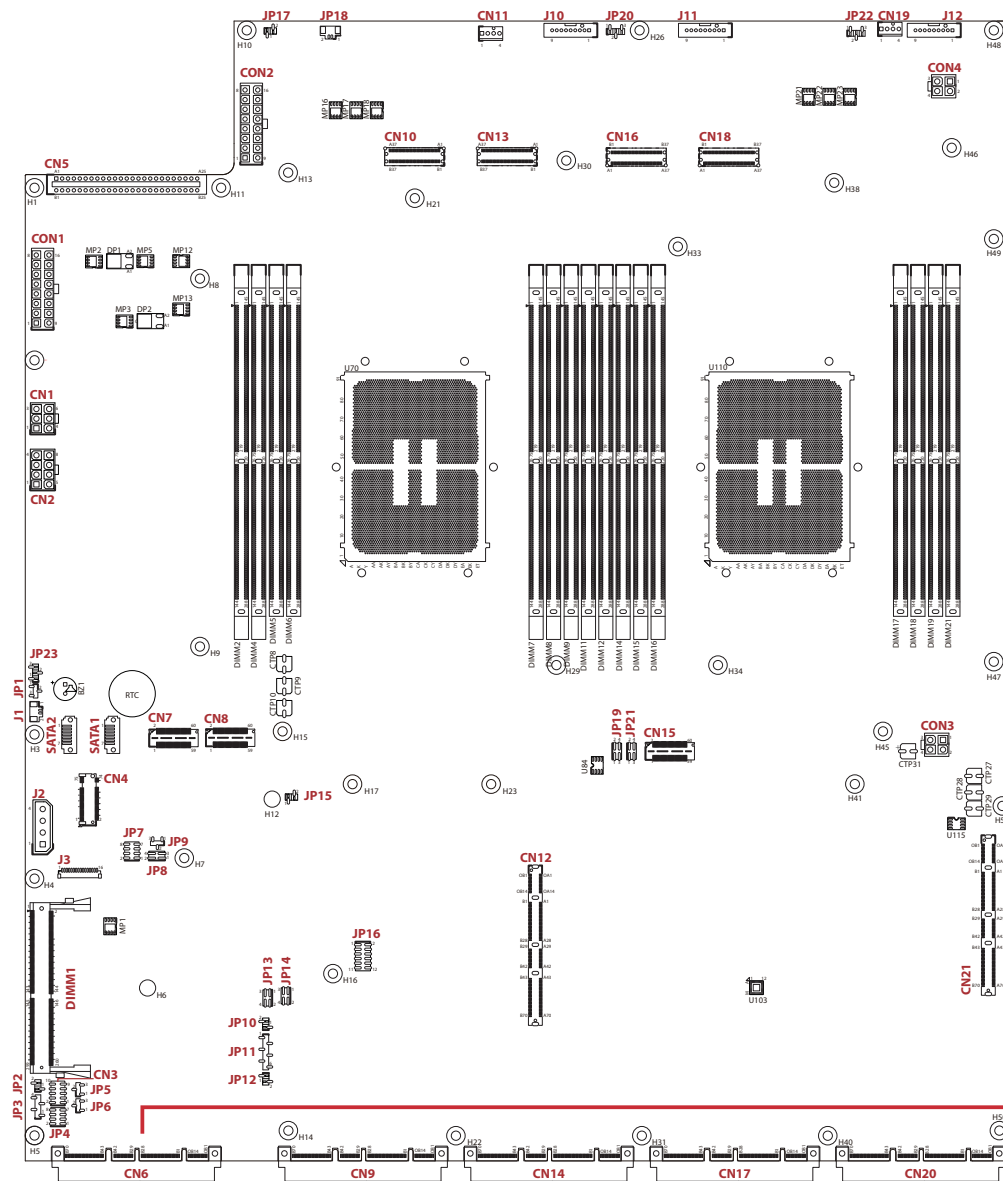


## CN6: I/O Slot Connector

Pin	Description	Pin	Description
OA1	P3V3_AUX	OB1	P12V
OA2	P3V3_AUX	OB2	P12V
OA3	P3V3_AUX	OB3	GND
OA4	GND	OB4	P3V3_CPLD
OA5	P3V3_BMC	OB5	P3V3_CPLD
OA6	P3V3_BMC	OB6	P3V3_CPLD
OA7	GND	OB7	GND
OA8	NVM_SO_A	OB8	P3V3
OA9	NVM_SI_A	OB9	P3V3
OA10	GND	OB10	GND
OA11	NVM_SK_B	OB11	NVM_SK_A
OA12	GND	OB12	GND
OA13	GND	OB13	GND
OA14	GND	OB14	GND
A1	GND	B1	P5V
A2	GND	B2	P5V
A3	GND	B3	P5V
A4	GND	B4	P5V
A5	GND	B5	P5V
A6	GND	B6	P5V
A7	NVM_CS_N_A	B7	GND
A8	NVM_CS_N_B	B8	GND
A9	NVM_SO_B	B9	GND
A10	GND	B10	GND
A11	NVM_SI_B	B11	GND
A12	GND	B12	GND
A13	GND	B13	GND
A14	USB3_P06_TXN	B14	USB3_P06_RXN
A15	USB3_P06_TXP	B15	USB3_P06_RXP
A16	GND	B16	GND
A17	USB3_P07_TXN	B17	USB3_P07_RXN
A18	USB3_P07_TXP	B18	USB3_P07_RXP
A19	GND	B19	GND
A20	USB2_P7_IO_DN	B20	USB2_P6_IO_DN
A21	USB2_P7_IO_DP	B21	USB2_P6_IO_DP
A22	GND	B22	GND
A23	CLK_100M_I210_LANA_DP	B23	CLK_100M_I210_LANB_DP
A24	CLK_100M_I210_LANA_DN	B24	CLK_100M_I210_LANB_DN
A25	GND	B25	GND
A26	PCIE_TX_LANB_DP	B26	PCIE_RX_LANB_DP
A27	PCIE_TX_LANB_DN	B27	PCIE_RX_LANB_DN
A28	GND	B28	GND
A29	GND	B29	GND
A30	PCIE_TX_LANA_DP	B30	PCIE_RX_LANA_DP



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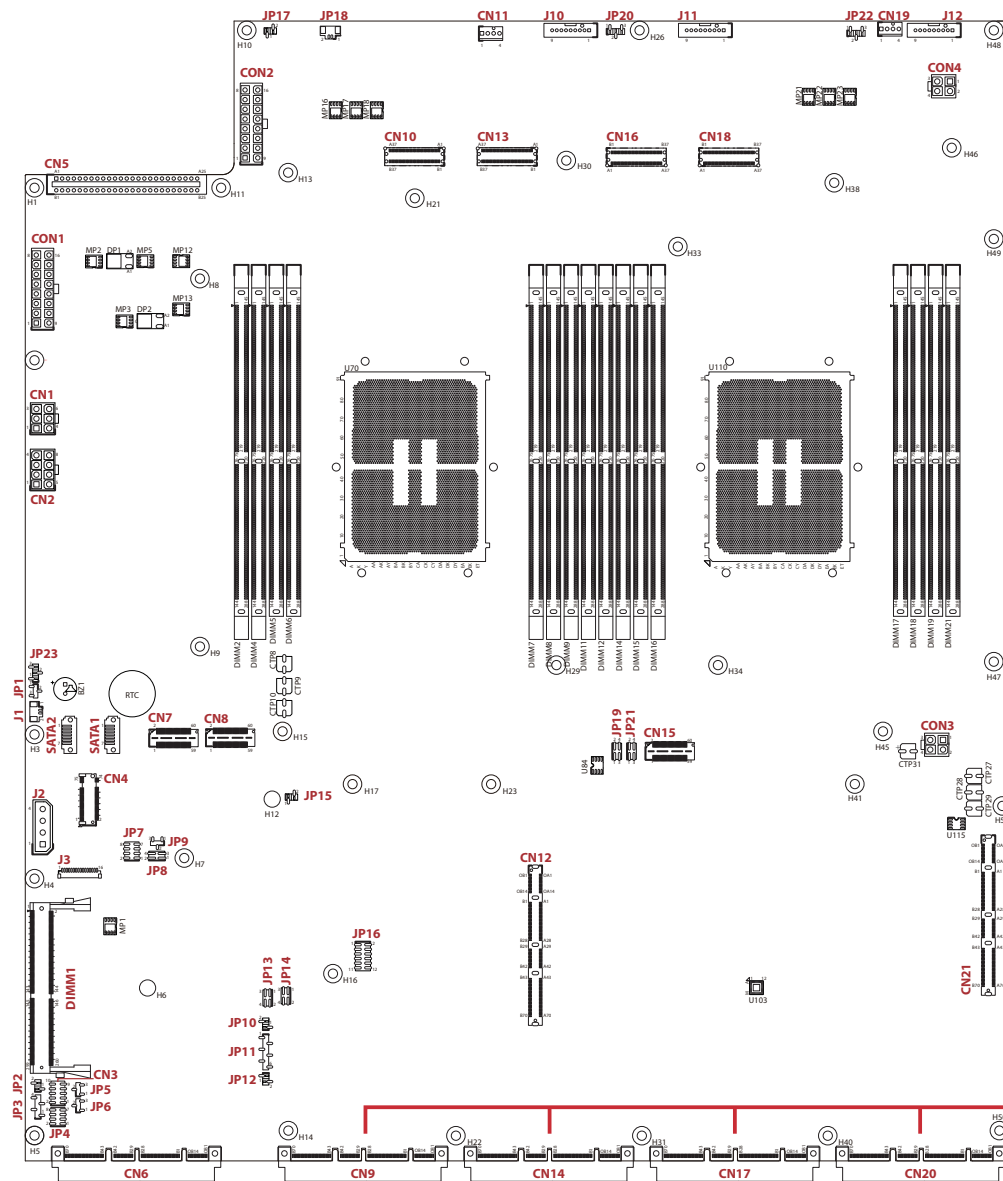


**CN6: I/O Slot Connector**

Pin	Description	Pin	Description
A31	PCIE_TX_LANA_DN	B31	PCIE_RX_LANA_DN
A32	GND	B32	GND
A33	SMB_LANA_CLK_R	B33	NCSI_TXD0_A
A34	SMB_LANA_DATA_R	B34	GND
A35	GND	B35	GND
A36	BMC_R_TXD5	B36	NCSI_TXD1_A
A37	BMC_R_RXD5	B37	GND
A38	GND	B38	GND
A39	CPLD_UART_TXD	B39	NCSI_CLK_I210_R1_A
A40	CPLD_UART_RXD	B40	GND
A41	GND	B41	GND
A42	GND	B42	NCSI_TX_EN_A
A43	GND	B43	GND
A44	SIO_LCM_TXD	B44	NCSI_RXD0_A
A45	SIO_LCM_RXD	B45	GND
A46	GND	B46	GND
A47	SIO_LCM_LED_KR	B47	NCSI_RXD1_A
A48	SIO_LCM_LED_KG	B48	GND
A49	GND	B49	GND
A50	LED_PCH_HDD_IOCARD	B50	NCSI_CRS_DV_A
A51	IO_ALERT_LED#	B51	GND
A52	GND	B52	GND
A53	POWER_ERROR_LED	B53	LED_PWR_STBY_ON
A54	GND	B54	GND
A55	GND	B55	GND
A56	GND	B56	NMI_BTN_N_L
A57	GND	B57	GND
A58	GND	B58	GND
A59	GND	B59	FM_OC3_USB_N
A60	GND	B60	GND
A61	GND	B61	GND
A62	GND	B62	FM_I210_WAKE_N
A63	GND	B63	GND
A64	GND	B64	GND
A65	GND	B65	PE_RST_LAN_N
A66	GND	B66	GND
A67	GND	B67	GND
A68	GND	B68	FP_RST_BTN_N_L
A69	GND	B69	GND
A70	GND	B70	GND



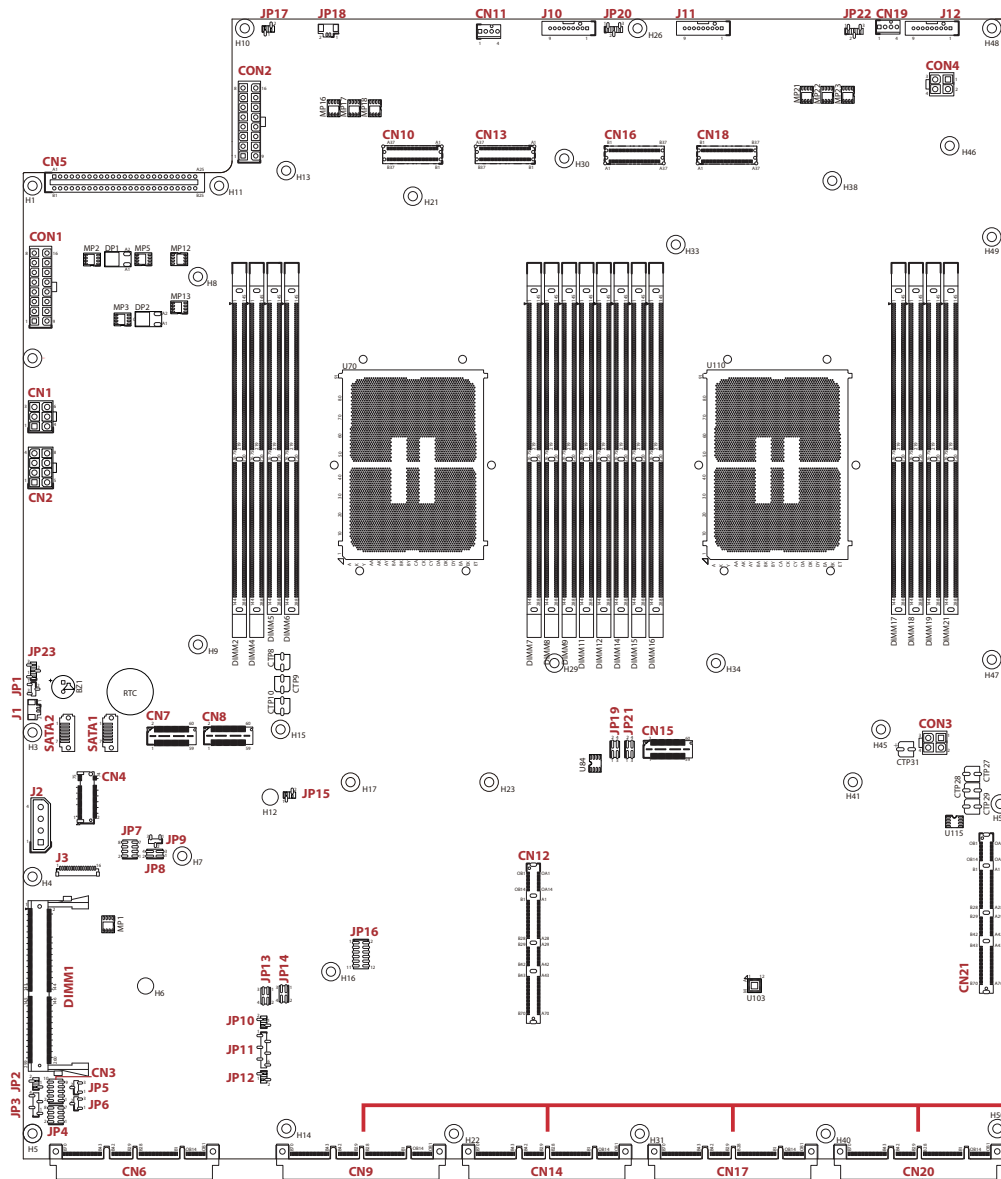
# NSA 7160R Quick Reference Guide



## CN9, CN14, CN17, CN20: OCP Slot Connector

Pin	Description	Pin	Description
OA1	PE_SLOT_RST2_N	OB1	NO USE
OA2	PE_SLOT_RST3_N	OB2	NO USE
OA3	IRQ_LVC3_WAKE_N	OB3	NO USE
OA4	NO USE	OB4	NC
OA5	NO USE	OB5	NO USE
OA6	NO USE	OB6	NO USE
OA7	NO USE	OB7	NO USE
OA8	NO USE	OB8	NO USE
OA9	NO USE	OB9	NO USE
OA10	GND	OB10	GND
OA11	PE_SLOT_CLK3_DN	OB11	PE_SLOT_CLK2_DN
OA12	PE_SLOT_CLK3_DP	OB12	PE_SLOT_CLK2_DP
OA13	GND	OB13	GND
OA14	NO USE	OB14	NO USE
A1	GND	B1	P12V
A2	GND	B2	P12V
A3	GND	B3	P12V
A4	GND	B4	P12V
A5	GND	B5	P12V
A6	GND	B6	P12V
A7	SLOT_R_SCL	B7	NO USE
A8	SLOT_R_SDA	B8	NO USE
A9	NO USE	B9	NO USE
A10	GND	B10	PE_SLOT_RST0_N
A11	PE_SLOT_RST1_N	B11	P3V3_SLOT
A12	NO USE	B12	NO USE
A13	GND	B13	GND
A14	PE_SLOT_CLK1_DN	B14	PE_SLOT_CLK0_DN
A15	PE_SLOT_CLK1_DP	B15	PE_SLOT_CLK0_DP
A16	GND	B16	GND
A17	PE_SLOT_RX_DN0	B17	PE_SLOT_TX_C_DN0
A18	PE_SLOT_RX_DP0	B18	PE_SLOT_TX_C_DP0
A19	GND	B19	GND
A20	PE_SLOT_RX_DN1	B20	PE_SLOT_TX_C_DN1
A21	PE_SLOT_RX_DP1	B21	PE_SLOT_TX_C_DP1
A22	GND	B22	GND
A23	PE_SLOT_RX_DN2	B23	PE_SLOT_TX_C_DN2
A24	PE_SLOT_RX_DP2	B24	PE_SLOT_TX_C_DP2
A25	GND	B25	GND
A26	PE_SLOT_RX_DN3	B26	PE_SLOT_TX_C_DN3
A27	PE_SLOT_RX_DP3	B27	PE_SLOT_TX_C_DP3
A28	GND	B28	GND
A29	GND	B29	GND
A30	PE_SLOT_RX_DN4	B30	PE_SLOT_TX_C_DN4

# NSA 7160R Quick Reference Guide



**CN9, CN14, CN17, CN20: OCP Slot Connector**

Pin	Description	Pin	Description
A31	PE_SLOT_RX_DP4	B31	PE_SLOT_TX_C_DP4
A32	GND	B32	GND
A33	PE_SLOT_RX_DN5	B33	PE_SLOT_TX_C_DN5
A34	PE_SLOT_RX_DP5	B34	PE_SLOT_TX_C_DP5
A35	GND	B35	GND
A36	PE_SLOT_RX_DN6	B36	PE_SLOT_TX_C_DN6
A37	PE_SLOT_RX_DP6	B37	PE_SLOT_TX_C_DP6
A38	GND	B38	GND
A39	PE_SLOT_RX_DN7	B39	PE_SLOT_TX_C_DN7
A40	PE_SLOT_RX_DP7	B40	PE_SLOT_TX_C_DP7
A41	GND	B41	GND
A42	NO USE	B42	NO USE
A43	GND	B43	GND
A44	PE_SLOT_RX_DN8	B44	PE_SLOT_TX_C_DN8
A45	PE_SLOT_RX_DP8	B45	PE_SLOT_TX_C_DP8
A46	GND	B46	GND
A47	PE_SLOT_RX_DN9	B47	PE_SLOT_TX_C_DN9
A48	PE_SLOT_RX_DP9	B48	PE_SLOT_TX_C_DP9
A49	GND	B49	GND
A50	PE_SLOT_RX_DN10	B50	PE_SLOT_TX_C_DN10
A51	PE_SLOT_RX_DP10	B51	PE_SLOT_TX_C_DP10
A52	GND	B52	GND
A53	PE_SLOT_RX_DN11	B53	PE_SLOT_TX_C_DN11
A54	PE_SLOT_RX_DP11	B54	PE_SLOT_TX_C_DP11
A55	GND	B55	GND
A56	PE_SLOT_RX_DN12	B56	PE_SLOT_TX_C_DN12
A57	PE_SLOT_RX_DP12	B57	PE_SLOT_TX_C_DP12
A58	GND	B58	GND
A59	PE_SLOT_RX_DN13	B59	PE_SLOT_TX_C_DN13
A60	PE_SLOT_RX_DP13	B60	PE_SLOT_TX_C_DP13
A61	GND	B61	GND
A62	PE_SLOT_RX_DN14	B62	PE_SLOT_TX_C_DN14
A63	PE_SLOT_RX_DP14	B63	PE_SLOT_TX_C_DP14
A64	GND	B64	GND
A65	PE_SLOT_RX_DN15	B65	PE_SLOT_TX_C_DN15
A66	PE_SLOT_RX_DP15	B66	PE_SLOT_TX_C_DP15
A67	GND	B67	GND
A68	NC	B68	NC
A69	NC	B69	NC
A70	NO USE	B70	NO USE