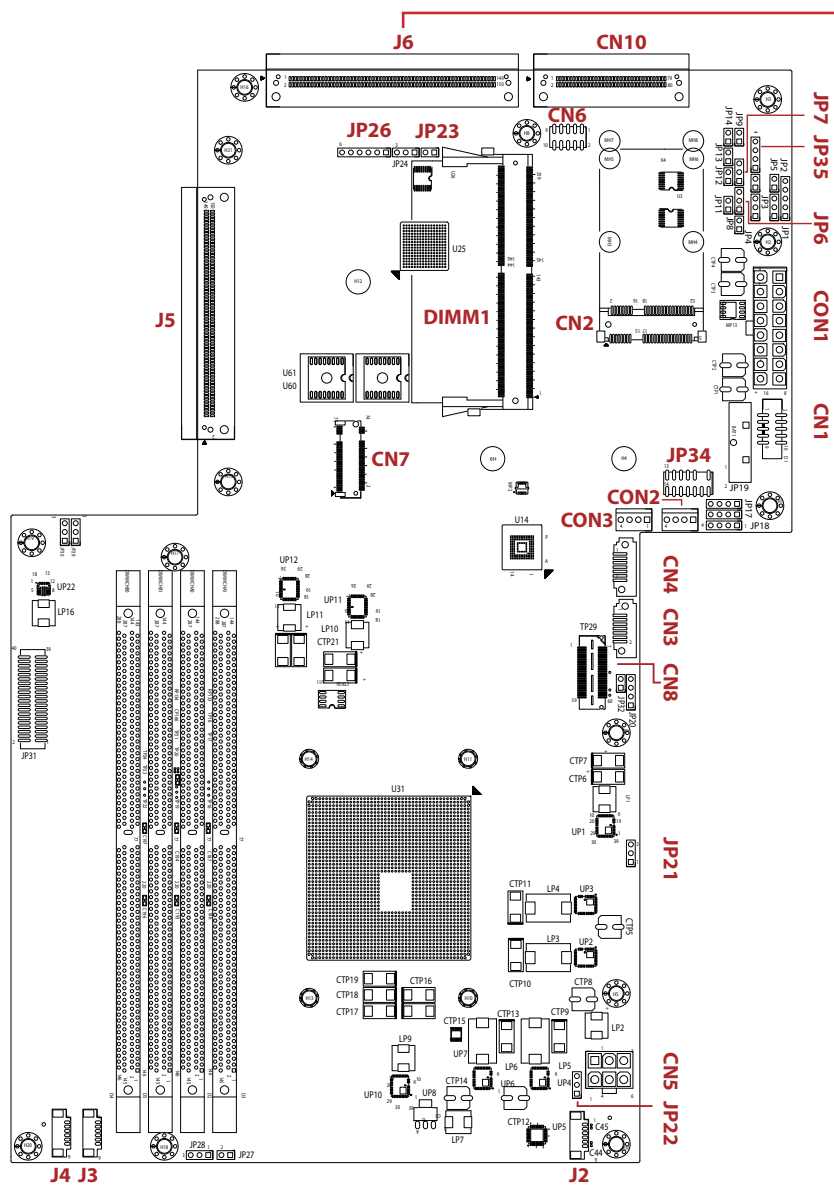
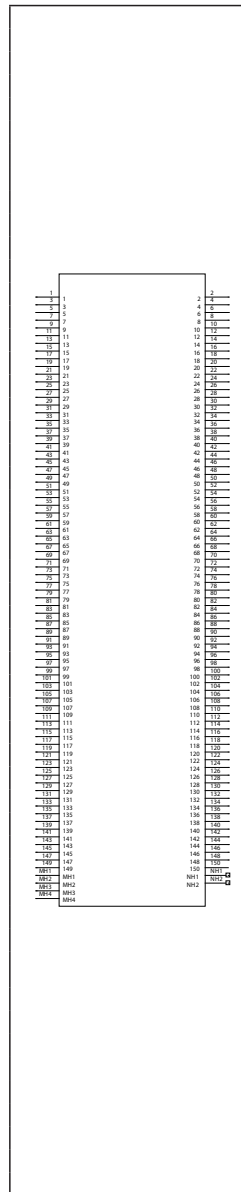


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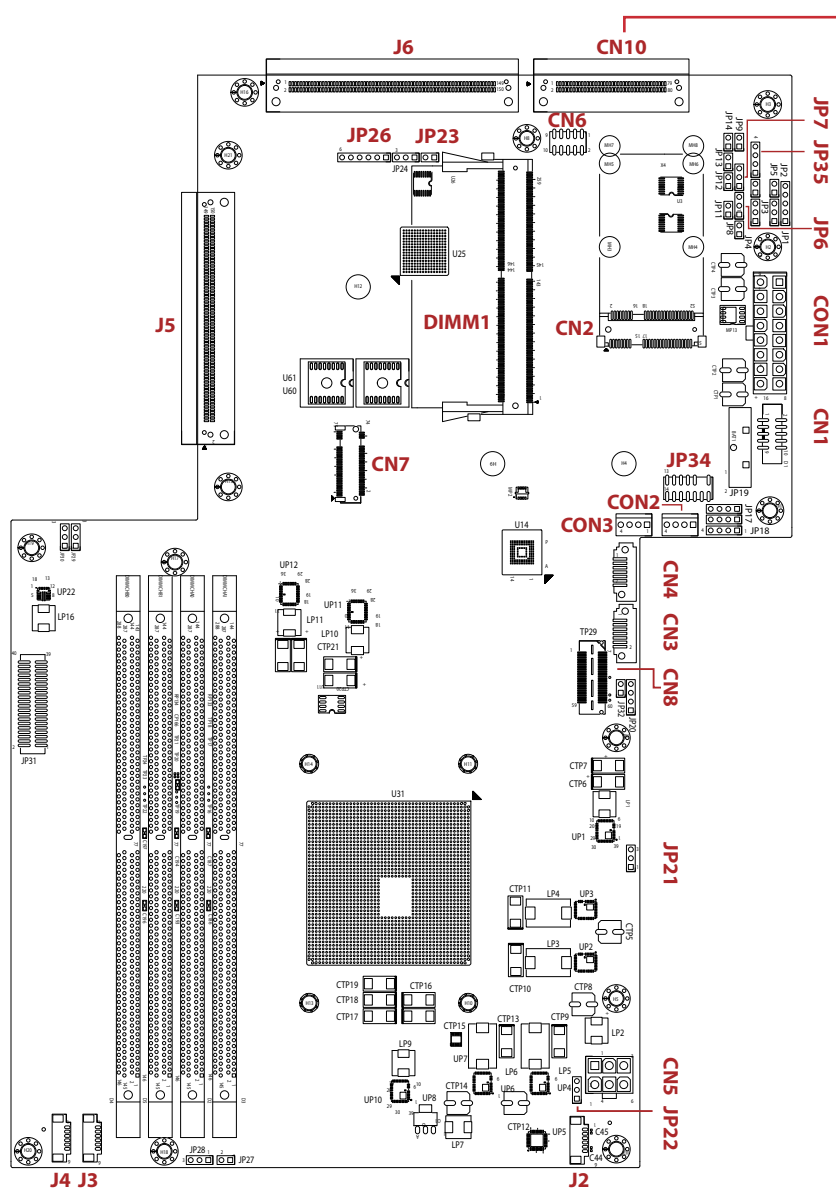


J6 : High Speed

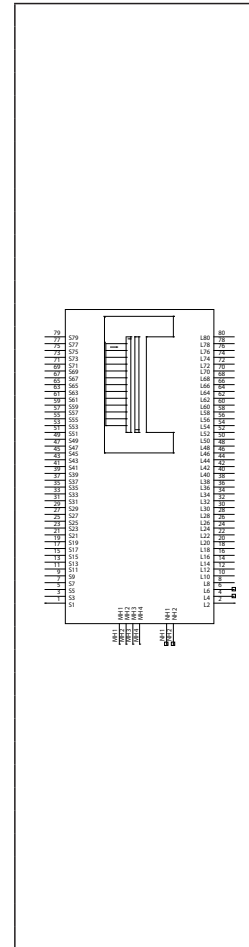


Pin	Description	Pin	Description	Pin	Description
1	GND	51	CR0_TX_DP2	101	SMB_GBE0_I2C_DATA_R
2	GND	52	3258_L0_RX_P_C	102	5G_LTE_RX_DN0_C
3	P12V2	53	CR0_TX_DN2	103	GND
4	P3V3_S	54	3258_L0_RX_N_C	104	GND
5	P12V2	55	GND	105	SMB_GBE1_I2C_CLK_R
6	P3V3_S	56	GND	106	5G_LTE_RX_DP1
7	GND	57	CR0_TX_DP3	107	SMB_GBE1_I2C_DATA_R
8	GND	58	3258_L1_RX_P_C	108	5G_LTE_RX_DN1
9	P12V2	59	CR0_TX_DN3	109	GND
10	P12V_AUX	60	3258_L1_RX_N_C	110	GND
11	P12V2	61	GND	111	SMB_GBE2_I2C_CLK_R
12	P12V_AUX	62	GND	112	5G_LTE_RX_DP2
13	GND	63	3258_L0_TX_P	113	SMB_GBE2_I2C_DATA_R
14	GND	64	3258_L2_RX_P_C	114	5G_LTE_RX_DN2
15	SMB_HOST_CLK	65	3258_L0_TX_N	115	GND
16	USB_0_OC#	66	3258_L2_RX_N_C	116	GND
17	SMB_HOST_DATA	67	GND	117	SMB_GBE3_I2C_CLK_R
18	CLK_32K_SUSCLK_SOC	68	GND	118	USB3_RX_P1_C
19	GND	69	3258_L1_TX_P	119	SMB_GBE3_I2C_DATA_R
20	GND	70	3258_L3_RX_P_C	120	USB3_RX_N1_C
21	SW_INIT_DONE	71	3258_L1_TX_N	121	GND
22	SW_UART_RXD	72	3258_L3_RX_N_C	122	GND
23	TEMP_INT_N	73	GND	123	SMB_CPLD_I2C_CLK_R
24	SW_UART_TXD	74	GND	124	PEX_SW_RX_P
25	GND	75	3258_L2_TX_P	125	SMB_CPLD_I2C_DATA_R
26	GND	76	5G_LTE_TX_DP0_C	126	PEX_SW_RX_N
27	3258_MR_N	77	3258_L2_TX_N	127	GND
28	PMD_L0_RX_P	78	5G_LTE_TX_DN0_C	128	GND
29	RESETN1	79	GND	129	RST_GBE_GPIO6_RST_0_N_R
30	PMD_L0_RX_N	80	GND	130	PEX_SW_TX_P_C
31	GND	81	3258_L3_TX_P	131	FM_GBE_GPIO7_INT_0_N_R
32	GND	82	5G_LTE_TX_DP1_C	132	PEX_SW_TX_N_C
33	SYSRST_OUT_N	83	3258_L3_TX_N	133	GND
34	PMD_L1_RX_P	84	5G_LTE_TX_DN1_C	134	GND
35	RST_M_RESET_N	85	GND	135	FM_GBE_GPIO4_INT_1_N_R
36	PMD_L1_RX_N	86	GND	136	SMB_ETH_MNG_I2C_CLK_R
37	GND	87	CLK_OUT_DP6	137	PD_GBE_GPIO5_R
38	GND	88	5G_LTE_TX_DP2_C	138	SMB_ETH_MNG_I2C_DATA_R
39	CR0_TX_DP0	89	CLK_OUT_DN6	139	GND
40	PMD_L2_RX_P	90	5G_LTE_TX_DN2_C	140	GND
41	CR0_TX_DN0	91	GND	141	FM_GBE_GPIO2_PRSN2_3_N_R
42	PMD_L2_RX_N	92	GND	142	RST_SW_LTB_RSTBTN_N
43	GND	93	CLK_OUT_DP7	143	RST_GBE_GPIO3_RST_1_N_R
44	GND	94	USB3_TX_P1_C	144	FM_SW_LTB_PWRBTN_N
45	CR0_TX_DP1	95	CLK_OUT_DN7	145	GND
46	PMD_L3_RX_P	96	USB3_TX_N1_C	146	GND
47	CR0_TX_DN1	97	GND	147	RST_GBE_GPIO0_RST_3_N_R
48	PMD_L3_RX_N	98	GND	148	CLK_100M_SW_DP
49	GND	99	SMB_GBE0_I2C_CLK_R	149	FM_GBE_GPIO1_INT_3_N_R
50	GND	100	5G_LTE_RX_DP0_C	150	CLK_100M_SW_DN

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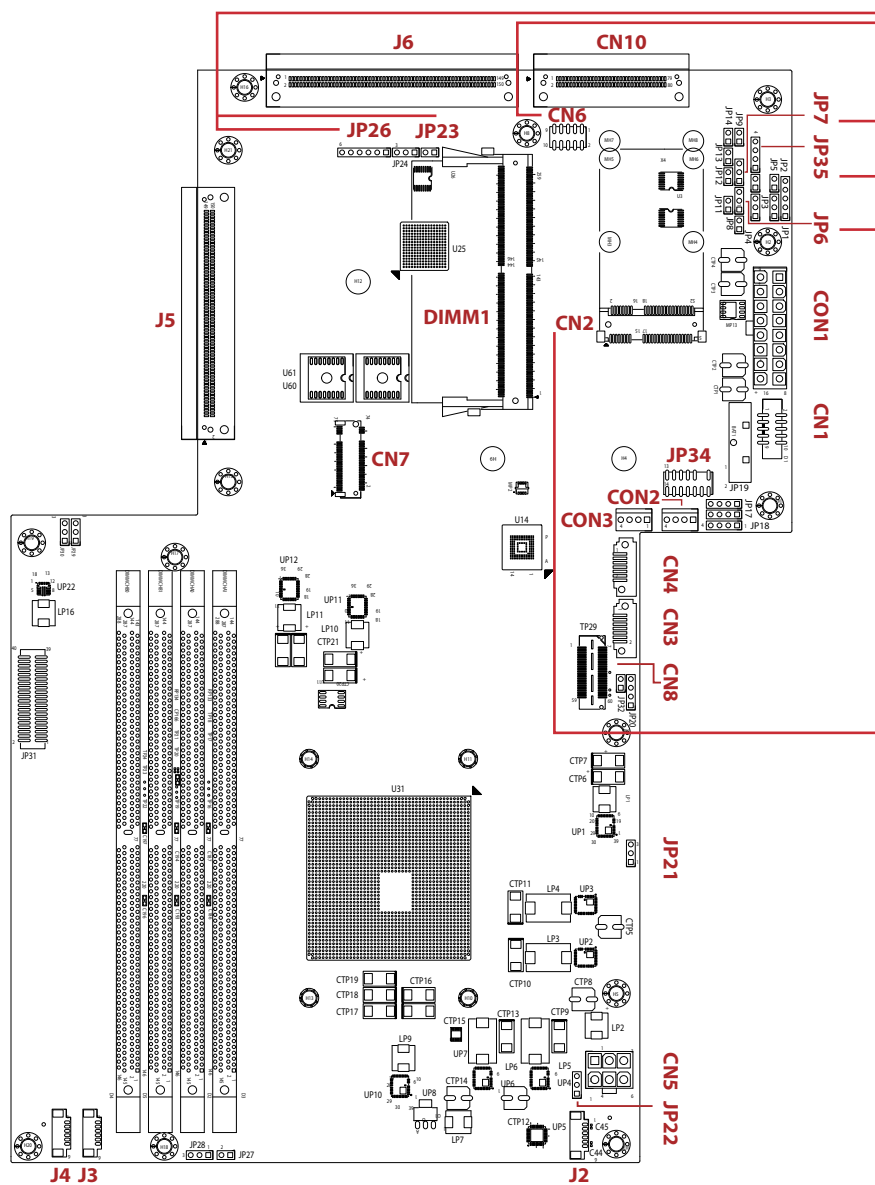
CN10 : Low speed



Pin	Description	Pin	Description
1	BMC_CPLD_RI_N	41	SMB_ME_SMT1_CLK
2	FM_SOC_CPLD_SLP_S3_N	42	GND
3	BMC_CPLD_RXD	43	SMB_ME_SMT1_DATA
4	N.C.	44	CLK_100M_NIC0_DN
5	BMC_CPLD_DSR_N	45	LED_GBE0_LED2_R
6	N.C.	46	CLK_100M_NIC0_DP
7	BMC_CPLD_CTS_N	47	LED_GBE1_LED0_R
8	IRQ_5GM2_WAKE_N	48	GND
9	BMC_CPLD_DCD_N	49	LED_GBE1_LED1_R
10	POWER_OK_EN	50	P1E_NIC0_RX_DN
11	BMC_CPLD_DTR_N	51	LED_GBE1_LED2_R
12	GND	52	P1E_NIC0_RX_DP
13	BMC_CPLD_TXD	53	LED_GBE2_LED0_R
14	USB2_P0_DN	54	GND
15	BMC_CPLD_RTS_N	55	LED_GBE2_LED1_R
16	USB2_P0_DP	56	P1E_NIC0_TX_C_DN
17	PU_NIC0_NCSI_RXD_1	57	LED_GBE2_LED2_R
18	GND	58	P1E_NIC0_TX_C_DP
19	PD_NIC0_NCSI_CRS_DV	59	LED_GBE3_LED0_R
20	USB2_P1_DN	60	GND
21	NCSI_CLK_I210	61	LED_GBE3_LED1_R
22	USB2_P1_DP	62	GND
23	PU_NIC0_NCSI_RXD_0	63	LED_GBE3_LED2_R
24	GND	64	P3V3_AUX
25	PU_NIC0_NCSI_TXD_0	65	POE_LED
26	USB3_RX_N0_C	66	P3V3_AUX
27	PU_NIC0_NCSI_TXD_1	67	WIFI_LED
28	USB3_RX_P0_C	68	GND
29	PD_NIC0_NCSI_TX_EN	69	HDD_CPLD_LED
30	GND	70	P3V3_S
31	FM_NIC0_DISABLE_N	71	POWER_LED
32	USB3_TX_N0_C	72	P3V3_S
33	IRQ_NIC0_WAKE_N	73	GND
34	USB3_TX_P0_C	74	GND
35	RST_CPLD_NIC_RESET_N	75	P12V2
36	GND	76	P3V3_S
37	SMB_ME_SMT1_ALRT_N	77	P12V2
38	LED_GBE0_LED0_R	78	P3V3_S
39	GND	79	GND
40	LED_GBE0_LED1_R	80	GND



# FTA 1170 Quick Reference Guide



**JP26: CPLD JTAG Header (for online)**

Pin	Description
1	P3V3_AUX
2	GND
3	JTAG_PLD_TCK
4	JTAG_PLD_TDO
5	JTAG_PLD_TDI
6	JTAG_PLD_TMS

**JP23: CPLD Firmware Update by Diamond Programmer**

Pin	Description
1	JTAG_SEL
2	GND

**CN6: CPLD GPIO (4 GPI ; 4 GPO) Header**

Pin	Description	Pin	Description
1	P3V3_AUX	2	GND
3	CPLD_GPIN1	4	CPLD_GPOUT1
5	CPLD_GPIN2	6	CPLD_GPOUT2
7	CPLD_GPIN3	8	CPLD_GPOUT3
9	CPLD_GPIN4	10	CPLD_GPOUT4

**JP6, JP7: SYS RTC/CMOS Header**

Pin	Description
1	N.C.
2	RST_SOC_RTEST_N (JP6)
2	RST_SRTCST_N (JP7)
3	GND

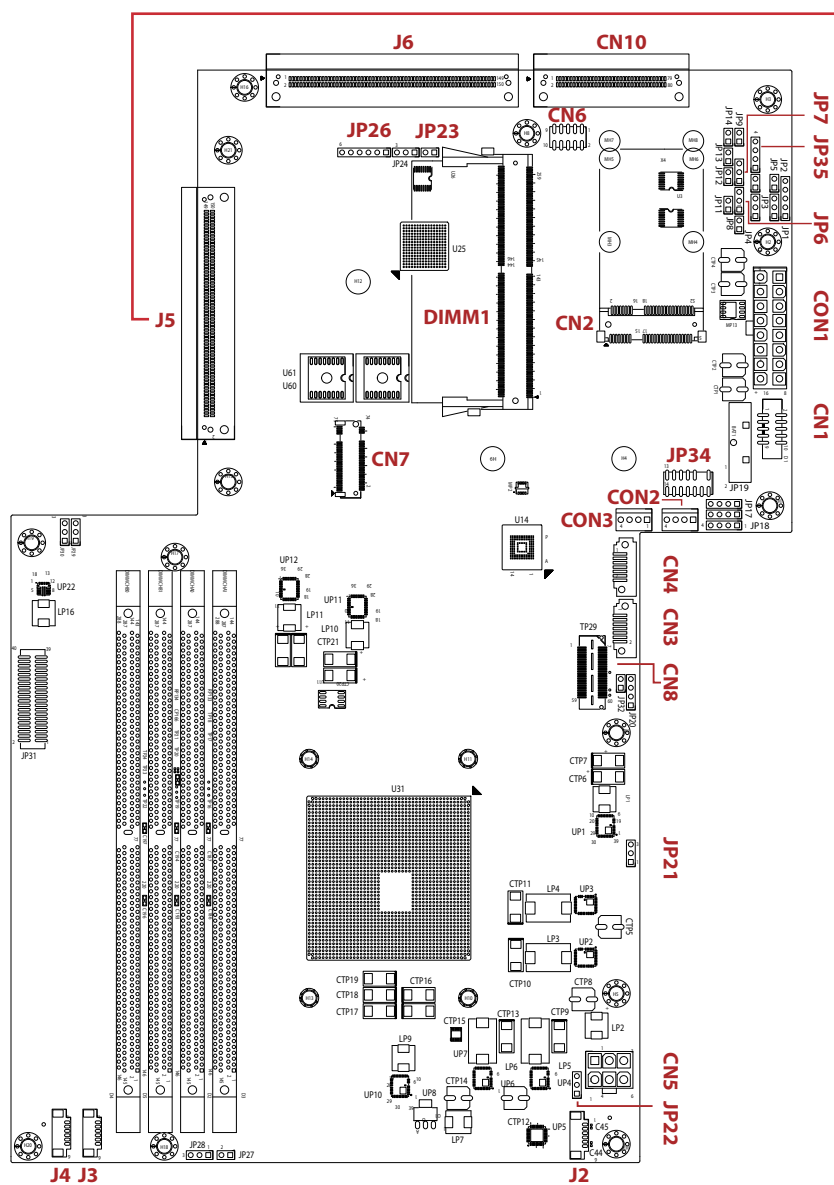
**JP35: BMC Debug Console Header**

Pin	Description
1	P3V3_AUX
2	BMC_CPLD_DEBUG_RXD
3	BMC_CPLD_DEBUG_TXD
4	GND

**CN2: Mini PCIe Slot**

Pin	Description	Pin	Description	Pin	Description
1	MPCIE_WAKE# (N.C.)	37	GND	22	MPCIE_RST
3	MINI_COEX1	39	P3V3	24	P3V3
5	MINI_COEX2	41	P3V3	26	GND
7	WIFI_CLKREQ#	43	GND	28	P1V5
9	GND	45	N.C.	30	MINI_PCIE_CLK
11	CLK_M2_WIFI2_N	47	N.C.	32	MINI_PCIE_DAT
13	CLK_M2_WIFI2_P	49	N.C.	34	GND
15	GND	51	N.C.	36	USB2_P2_DN
17	N.C.	2	P3V3	38	USB2_P2_DP
19	N.C.	4	GND	40	GND
21	GND	6	P1V5	42	WIFI_LED_WWAN#
23	WIFI_RXN_1	8	N.C.	44	WIFI_LED_WLAN#
25	WIFI_RXP_1	10	N.C.	46	WIFI_LED_WPAN#
27	GND	12	N.C.	48	P1V5
29	GND	14	N.C.	50	GND
31	WIFI_TXN_1_C	16	N.C.	52	P3V3
33	WIFI_TXP_1_C	18	GND		
35	GND	20	MPCIE_DIS#		

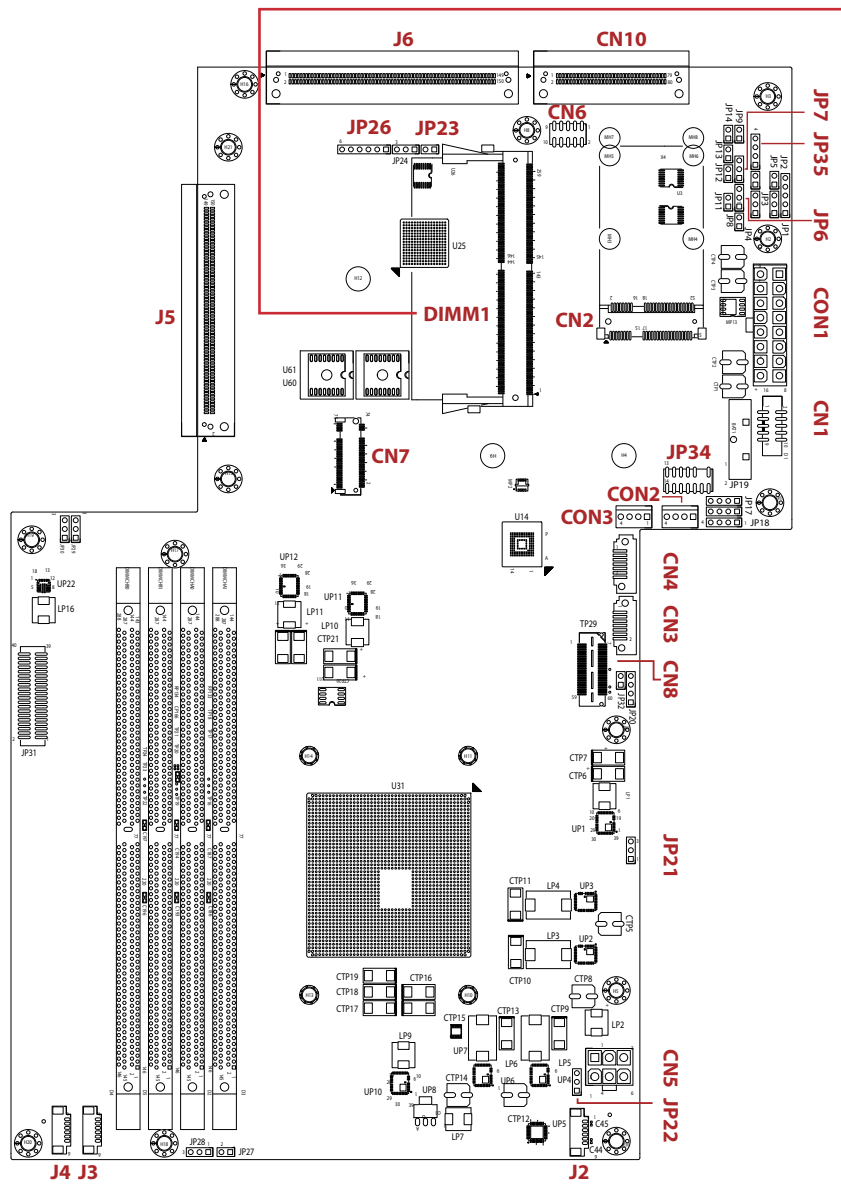
# FTA 1170 Quick Reference Guide



J5: PCIe Gen3 x16 Riser Card Board to Board Connector (from CPU)

Pin	Description	Pin	Description	Pin	Description
1	GND	51	PE_SOC_RX_DP7	101	PE_SOC_RX_DN15
2	GND	52	PE_SOC_TX_C_DP7	102	PE_SOC_TX_C_DN15
3	IRQ_PCIE_WAKE_N	53	PE_SOC_RX_DN7	103	GND
4	SMB_PCIE_S1_CLK_R	54	PE_SOC_TX_C_DN7	104	GND
5	PCIE_SLOT_RST_N	55	GND	105	CLK_PCIE_SLOT_P
6	SMB_PCIE_S1_DATA_R	56	GND	106	DISCONN_A0_EN
7	GND	57	PE_SOC_RX_DP8	107	CLK_PCIE_SLOT_N
8	GND	58	PE_SOC_TX_C_DP8	108	DISCONN_A1_EN
9	PE_SOC_RX_DP0	59	PE_SOC_RX_DN8	109	GND
10	PE_SOC_TX_C_DN0	60	PE_SOC_TX_C_DN8	110	GND
11	PE_SOC_RX_DN0	61	GND	111	DISCONN_A2_EN
12	PE_SOC_TX_C_DP0	62	GND	112	P3V3_S
13	GND	63	PE_SOC_RX_DP9	113	DISCONN_A3_EN
14	GND	64	PE_SOC_TX_C_DP9	114	P3V3_S
15	PE_SOC_RX_DP1	65	PE_SOC_RX_DN9	115	GND
16	PE_SOC_TX_C_DN1	66	PE_SOC_TX_C_DN9	116	GND
17	PE_SOC_RX_DN1	67	GND	117	BYPASS_SLOT_EN
18	PE_SOC_TX_C_DP1	68	GND	118	P3V3_S
19	GND	69	PE_SOC_RX_DP10	119	BYPASS_SLOT_A
20	GND	70	PE_SOC_TX_C_DP10	120	P3V3_S
21	PE_SOC_RX_DP2	71	PE_SOC_RX_DN10	121	GND
22	PE_SOC_TX_C_DN2	72	PE_SOC_TX_C_DN10	122	GND
23	PE_SOC_RX_DN2	73	GND	123	BYPASS_SLOT_B
24	PE_SOC_TX_C_DP2	74	GND	124	P3V3_AUX
25	GND	75	PE_SOC_RX_DP11	125	BYPASS_SLOT_C
26	GND	76	PE_SOC_TX_C_DP11	126	P3V3_AUX
27	PE_SOC_RX_DP3	77	PE_SOC_RX_DN11	127	GND
28	PE_SOC_TX_C_DN3	78	PE_SOC_TX_C_DN11	128	GND
29	PE_SOC_RX_DN3	79	GND	129	BYPASS_SLOT_D
30	PE_SOC_TX_C_DP3	80	GND	130	P12V_S2
31	GND	81	PE_SOC_RX_DP12	131	N.C.
32	GND	82	PE_SOC_TX_C_DP12	132	P12V_S2
33	PE_SOC_RX_DP4	83	PE_SOC_RX_DN12	133	N.C.
34	PE_SOC_TX_C_DN4	84	PE_SOC_TX_C_DN12	134	GND
35	PE_SOC_RX_DN4	85	GND	135	N.C.
36	PE_SOC_TX_C_DP4	86	GND	136	P12V_S2
37	GND	87	PE_SOC_RX_DP13	137	N.C.
38	GND	88	PE_SOC_TX_C_DP13	138	P12V_S2
39	PE_SOC_RX_DP5	89	PE_SOC_RX_DN13	139	N.C.
40	PE_SOC_TX_C_DP5	90	PE_SOC_TX_C_DN13	140	GND
41	PE_SOC_RX_DN5	91	GND	141	N.C.
42	PE_SOC_TX_C_DN5	92	GND	142	P12V_S2
43	GND	93	PE_SOC_RX_DP14	143	N.C.
44	GND	94	PE_SOC_TX_C_DP14	144	P12V_S2
45	PE_SOC_RX_DP6	95	PE_SOC_RX_DN14	145	N.C.
46	PE_SOC_TX_C_DP6	96	PE_SOC_TX_C_DN14	146	GND
47	PE_SOC_RX_DN6	97	GND	147	N.C.
48	PE_SOC_TX_C_DN6	98	GND	148	N.C.
49	GND	99	PE_SOC_RX_DP15	149	N.C.
50	GND	100	PE_SOC_TX_C_DP15	150	N.C.

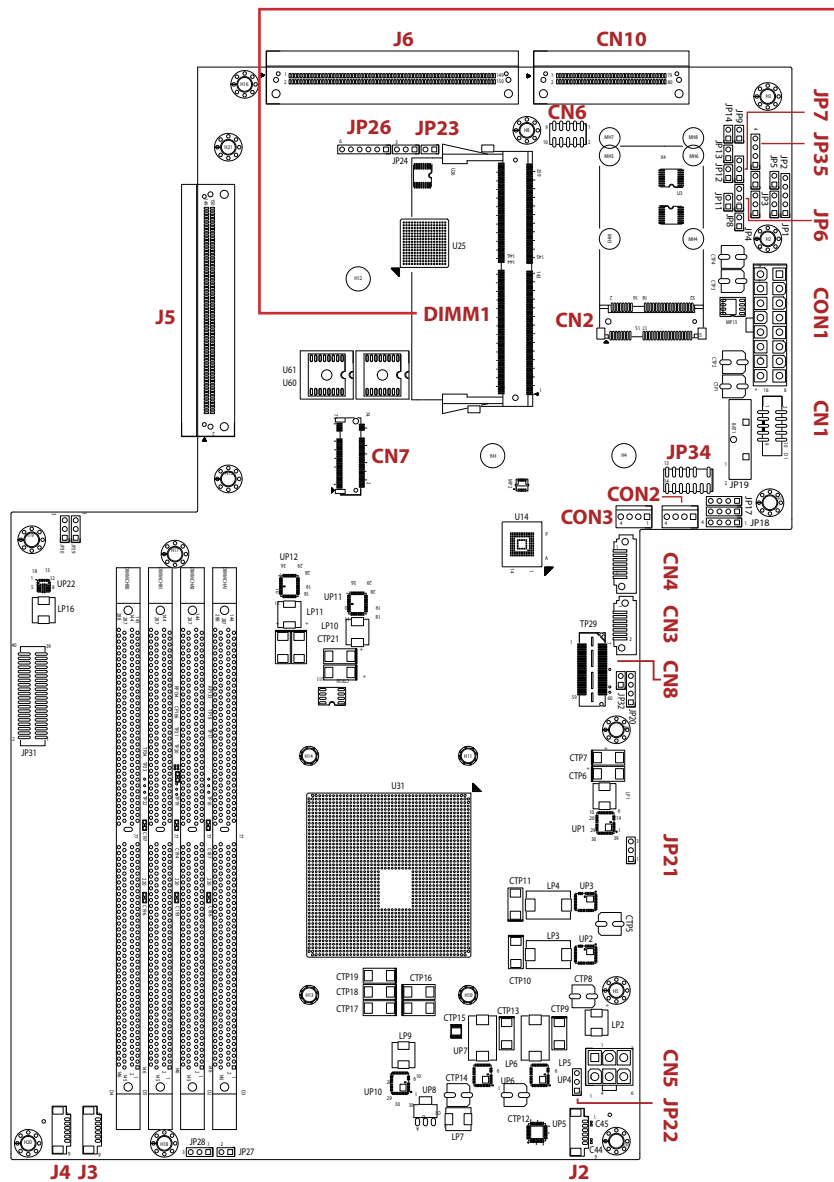
# FTA 1170 Quick Reference Guide



**DIMM1: Run BMC SO-DIMM (Socket)**

Pin	Description	Pin	Description	Pin	Description
1	RSVD for P12V_AUX	51	GND	101	N.C.
2	N.C.	52	GND	102	TACH12_GPIO68
3	P3V3_AUX	53	BMC_SENSOR_SCL	103	N.C.
4	P3V3_AUX	54	I2C6SCL_GPIO28	104	TACH13_GPIO70
5	P3V3_AUX	55	BMC_SENSOR_SDA	105	IRQ_SMB_PWR_ALERT_N
6	P3V3_AUX	56	I2C6SDA_GPIO30	106	TACH14_GPIO72
7	P3V3_AUX	57	GND	107	GPIO73
8	GND	58	GND	108	N.C.
9	GND	59	N.C.	109	N.C.
10	N.C.	60	I2C5SCL_GPIO32	110	GND
11	GND	61	N.C.	111	P1V05_A
12	N.C.	62	I2C5SDA_GPIO34	112	PECI
13	GPIO0_SGPMLO	63	N.C.	113	N.C.
14	N.C.	64	GND	114	GND
15	GPIO1_SGPMI	65	N.C.	115	N.C.
16	N.C.	66	GPIO36	116	N.C.
17	GPIO3_SGPMO	67	FWSPIMISO_IO1	117	N.C.
18	N.C.	68	GPIO37	118	N.C.
19	GPIO5_SGPMCK	69	N.C.	119	N.C.
20	N.C.	70	GPIO38	120	N.C.
21	CONSOLE_RX	71	N.C.	121	PW_OK_A_CAB
22	N.C.	72	N.C.	122	N.C.
23	CONSOLE_TX	73	N.C.	123	I2C2SCL_GPIO85
24	GND	74	N.C.	124	N.C.
25	N.C.	75	N.C.	125	I2C2SDA_GPIO87
26	PWM0_GPIO10	76	N.C.	126	GND
27	PWM2_GPIO9	77	N.C.	127	GND
28	PWM1_GPIO12	78	TACH0_GPIO44	128	I2C1SCL_GPIO88
29	N.C.	79	N.C.	129	N.C.
30	N.C.	80	TACH1_GPIO46	130	I2C1SDA_GPIO90
31	PWM6_GPIO13	81	N.C.	131	N.C.
32	PWM5_GPIO16	82	TACH2_GPIO48	132	GND
33	RNBMC_PRSENT#_R	83	WDRST2_GPIO49	133	GND
34	N.C.	84	N.C.	134	I2C4SCL_GPIO92
35	N.C.	85	N.C.	135	N.C.
36	PW_OK_B_CAB	86	N.C.	136	I2C4SDA_GPIO94
37	N.C.	87	EXTRST#	137	N.C.
38	GPIO20	88	N.C.	138	N.C.
39	GND	89	GPIO55	139	GND
40	GPIO21	90	TACH6_GPIO56	140	N.C.
41	N.C.	91	N.C.	141	I2C12SCL_GPIO98
42	N.C.	92	TACH7_GPIO58	142	PERSTN
43	N.C.	93	N.C.	143	I2C12SDA_GPIO99
44	N.C.	94	N.C.	144	N.C.
45	GND	95	A_VBAT_DETECT	145	GND
46	GPIO25	96	TACH9_GPIO62	146	N.C.
47	I2C8SCL_GPIO26	97	N.C.	147	PERXN
48	N.C.	98	TACH10_GPIO64	148	GPIO102_UART4RX
49	I2C8SDA_GPIO27	99	N.C.	149	PERXP
50	I2C13SDA	100	TACH11_GPIO66	150	GPIO103_UART4TX

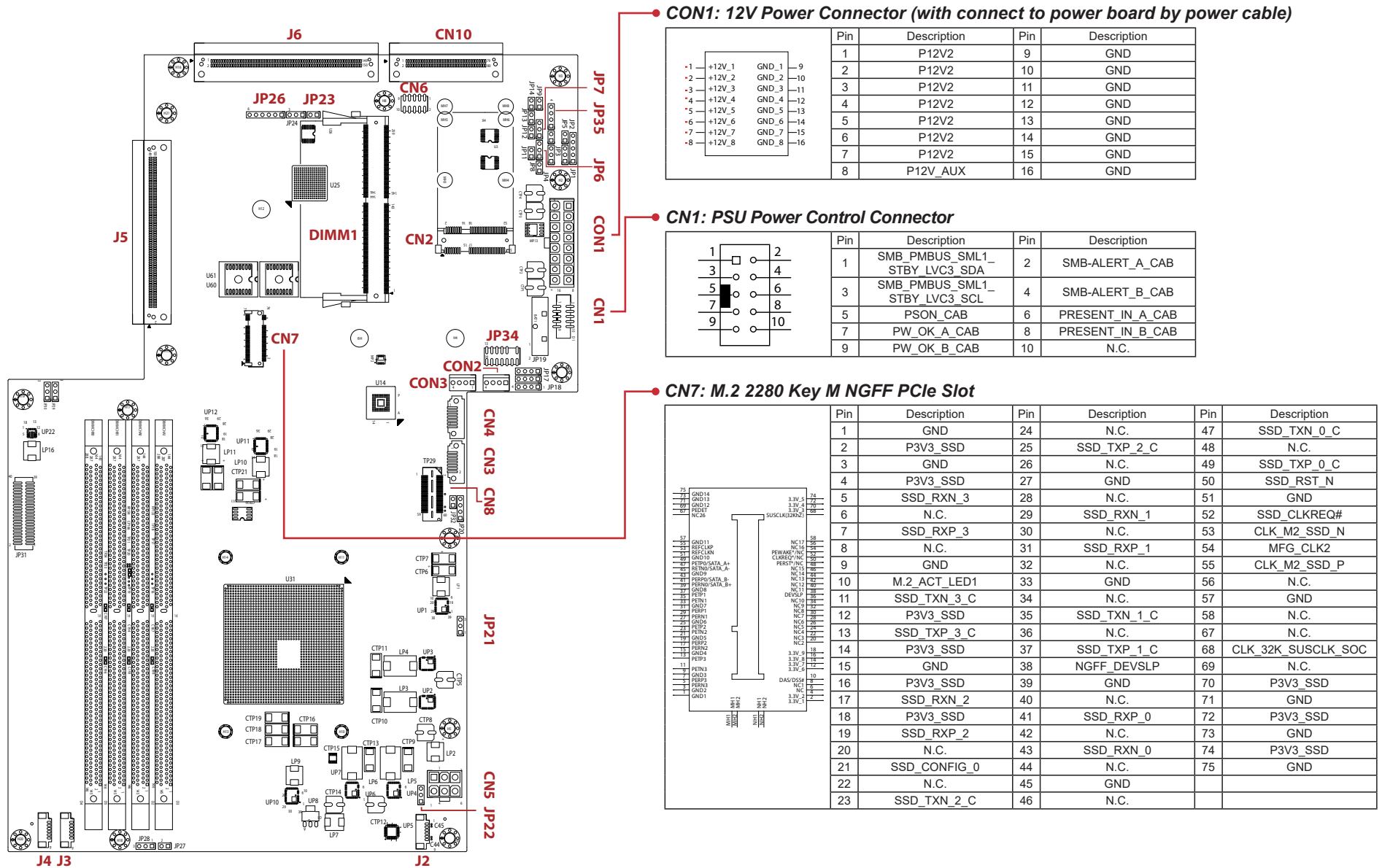
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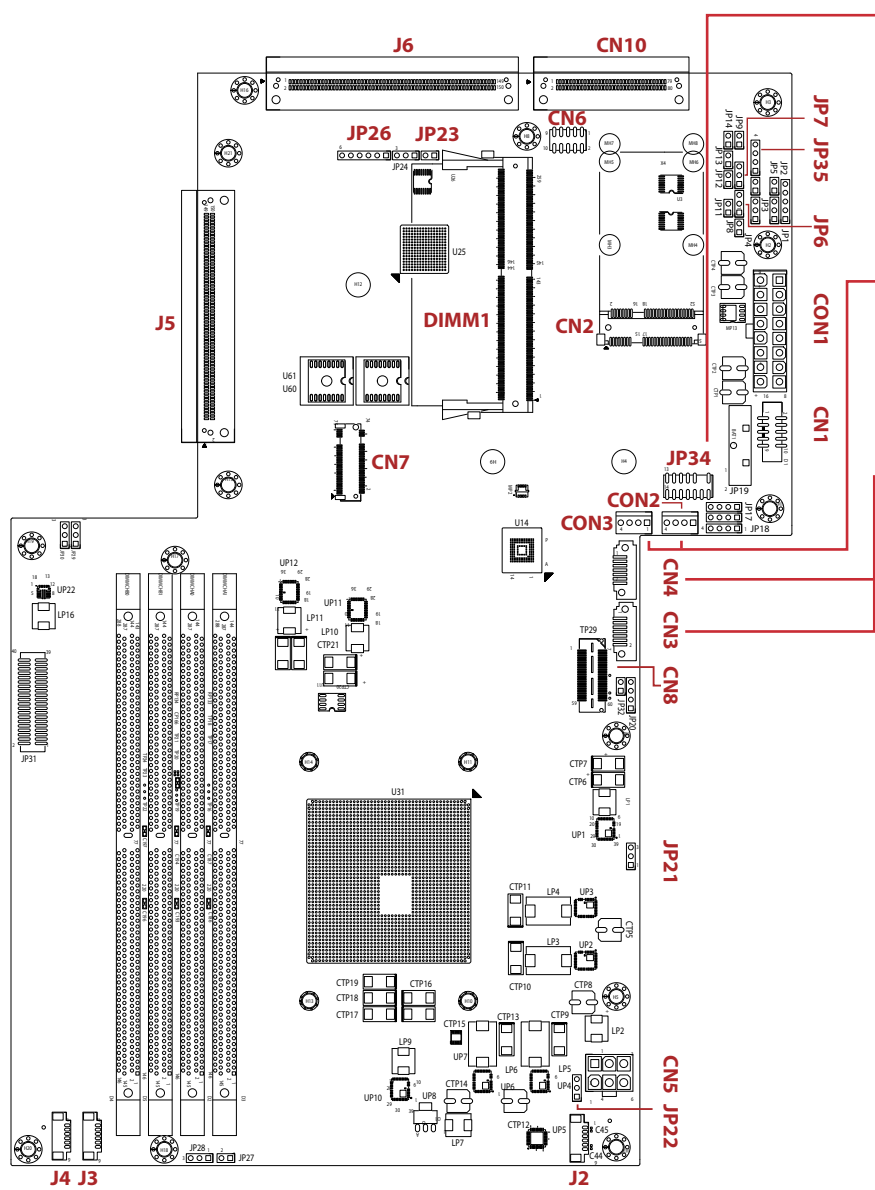
**DIMM1: Run BMC SO-DIMM (Connector)**

Pin	Description	Pin	Description	Pin	Description
151	GND	201	I2C11SDA_GPIO118	251	GND
152	P3V3_AUX	202	SPI_SSB_IBMC_DI	252	PVNN_PCH_ADC8
153	PCIE_RX_BMC_DN	203	GND	253	BMC_RESET#
154	N.C.	204	N.C.	254	P1V2_VDDQ_ADC9
155	PCIE_RX_BMC_DP	205	I2C3SCL_GPIO119	255	P3V_RTC_ADC13
156	N.C.	206	N.C.	256	P5V_ADC10
157	GND	207	I2C3SDA_GPIO121	257	P1V05_NAC_ADC11
158	N.C.	208	SPI_IBMC_SSB_CLK	258	P1V8_A_ADC12
159	PEREFCLKN	209	N.C.	259	N.C.
160	N.C.	210	SPI1CS1#_GPIO124	260	N.C.
161	PEREFCLKP	211	N.C.		
162	N.C.	212	GND		
163	GND	213	N.C.		
164	JTAG1TDO	214	N.C.		
165	LPCRST#_ESPIRST#	215	GND		
166	JTAG1TDI	216	RMIICRSVD		
167	ESPI_IO3_LPC_AD1	217	USB2_P3_DN		
168	N.C.	218	N.C.		
169	ESPI_IO3_LPC_AD0	219	USB2_P3_DP		
170	JTAG1TCK	220	NIC0_NCSI_CLK_IN_R		
171	LPCIRQ#_ESPIALERT#	221	GND		
172	JTAG1TMS	222	GND		
173	H_LPC_FRAME_N	223	N.C.		
174	P1V2V_ADC0	224	RMIITXEN		
175	ESPI_IO3_LPC_AD3	225	N.C.		
176	P3V3_AUX_ADC1	226	GND		
177	ESPI_IO3_LPC_AD2	227	GND		
178	P5V_AUX_ADC2	228	RMIIRXD0		
179	LPCCLK_ESPICLK	229	N.C.		
180	P3V3_SOC_ADC3	230	RMIIRXD1		
181	BMC_RSVD1	231	N.C.		
182	P3V3_ADC4	232	GND		
183	BMC_RSVD2	233	GND		
184	P1V05_A_ADC5	234	PU_NICO_NCSI_TXD_0		
185	GND	235	N.C.		
186	PVCCIN_ADC6	236	PU_NICO_NCSI_TXD_1		
187	I2C10SCL_GPIO110	237	N.C.		
188	PVNN_NAC_ADC7	238	GND		
189	N.C.	239	GND		
190	SYSCS#_GPIO112	240	N.C.		
191	GND	241	N.C.		
192	SPI_PCH_IBMC_DI	242	N.C.		
193	N.C.	243	N.C.		
194	SPI_PCH_IBMC_DO	244	N.C.		
195	N.C.	245	GND		
196	SPI_PCH_IBMC_CLK	246	N.C.		
197	GND	247	N.C.		
198	SPI1CS0#_GPIO116	248	N.C.		
199	I2C11SCL_GPIO117	249	N.C.		
200	SPI_IBMC_SSB_DO	250	N.C.		

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**JP34: LPC TPM Module Header**

	Pin	Description	Pin	Description
1	1	GND	2	CLK_LPC_TPM
3	3	防呆孔	4	H_LPC_FRAME_N
5	5	ESPI_IO3_LPC_AD2	6	RST_TPM_N
7	7	ESPI_IO3_LPC_AD1	8	ESPI_IO3_LPC_AD3
9	9	GND	10	ESPI_IO3_LPC_AD0
11	11	INT_SERIRQ	12	P3V3_SOC
13	13	GND	14	GND

**CON3, CON2: SATA Power Connector**

	Pin	Description
1	1	P12V_S2
2	2	GND
3	3	GND
4	4	P5V_S

**CN3: SATA Connector**

	Pin	Description
1	1	GND
2	2	SATA1_TX_DP_C
3	3	SATA1_TX_DN_C
4	4	GND
5	5	SATA1_RX_DN_C
6	6	SATA1_RX_DP_C
7	7	GND

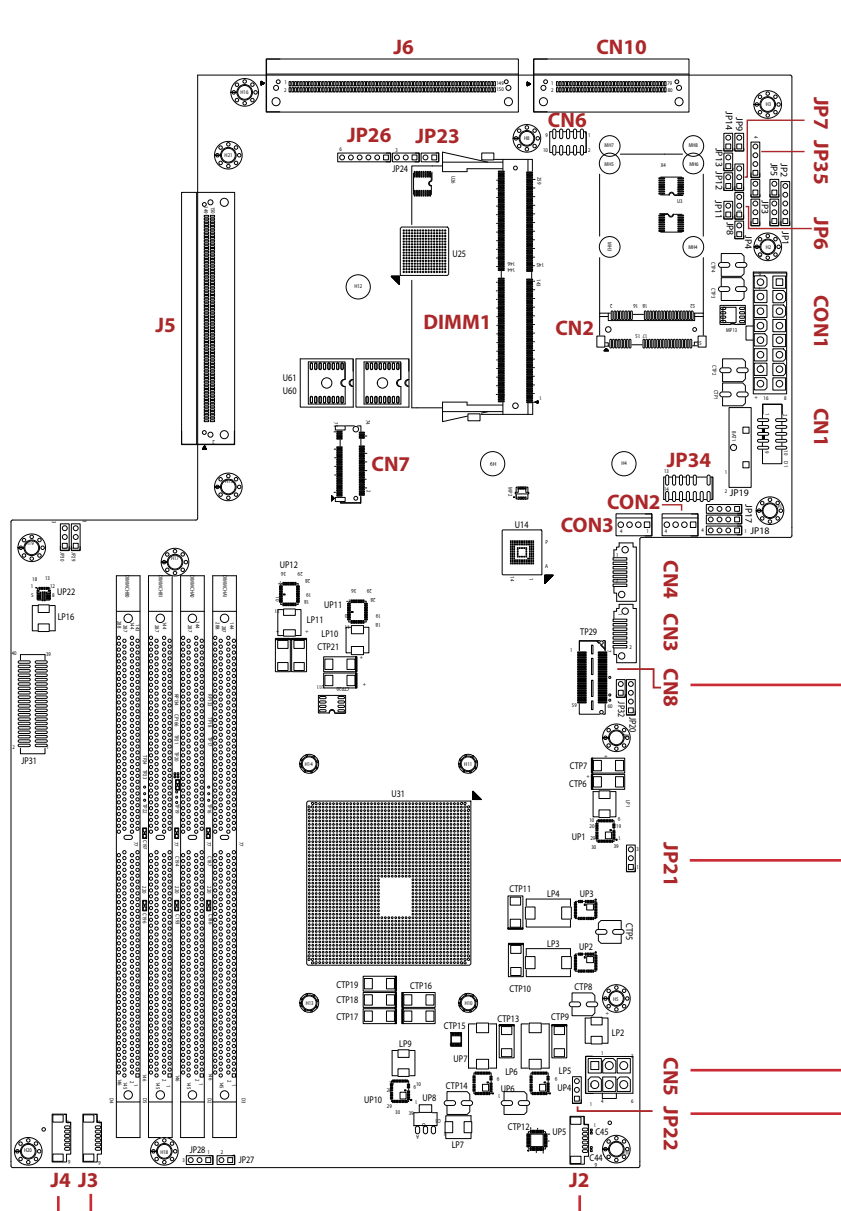
**CN4: SATA Connector**

	Pin	Description
1	1	GND
2	2	SATA0_TX_DP_C
3	3	SATA0_TX_DN_C
4	4	GND
5	5	SATA0_RX_DN_C
6	6	SATA0_RX_DP_C
7	7	GND





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**CN8: Intel XDP Connector for Debug**

Pin	Description	Pin	Description	Pin	Description
1	P1V05_A	41	TRC_PT1_DATA_R11	22	N.C.
3	JTAG_CPU_TCK	43	TRC_PT1_DATA_R12	24	N.C.
5	JTAG_SOC_TDI	45	TRC_PT1_DATA_R13	26	N.C.
7	RST_LTB_PLTRST_R_N	47	TRC_PT1_DATA_R14	28	N.C.
9	JTAG_SOC_TRST_N	49	TRC_PT1_DATA_R15	30	N.C.
11	DBP_LTB_SOC_PRDY_N	51	JTAG_PCH_TCK	32	N.C.
13	TRC_DFX_CLK0_R	53	DBP_LTB_MBP1_R_N(N.C.)	34	TP_LTB_PIN34
15	DBP_LTB_PCH_DEBUG_CONSENT_R_N	55	DBP_LTB_MBP0_R_N(N.C.)	36	FM_BOOT_HALT_TIMESYNC2_R
17	FM_LTB_CPU_DEBUG_EN_N	57	GND	38	DBP_LTB_SOC_FBRK_N
19	TRC_PT1_DATA_R0	59	TRC_DFX_CLK1_R	40	FM_LTB_PWRBTN_R_N
21	TRC_PT1_DATA_R1	2	JTAG_SOC_TMS	42	RST_CPLD_LTB_RSMRST_R_N
23	TRC_PT1_DATA_R2	4	JTAG_SOC_TDO	44	CLK_100M_MIPI60_DN_R
25	TRC_PT1_DATA_R3	6	RST_LTB_RSTBTN_R_N	46	CLK_100M_MIPI60_DP_R
27	TRC_PT1_DATA_R4	8	PD_JTAG_LTB_TRST	48	SMB_SMT0_LTB_CLK
29	TRC_PT1_DATA_R5	10	DBP_DBG_LTB_SOC_PREQ_N	50	SMB_SMT0_LTB_DATA
31	TRC_PT1_DATA_R6	12	P1V05_A	52	PU_P52_3V3
33	TRC_PT1_DATA_R7	14	GND	54	TP_J5K1_54
35	TRC_PT1_DATA_R8	16	GND	56	TP_J5K1_56
37	TRC_PT1_DATA_R9	18	N.C.	58	GND
39	TRC_PT1_DATA_R10	20	N.C.	60	PD_LTB_P60

**CN5: Main power 12V connector**

Pin	Description
1	P12V1
2	P12V1
3	P12V1
4	GND
5	GND
6	GND

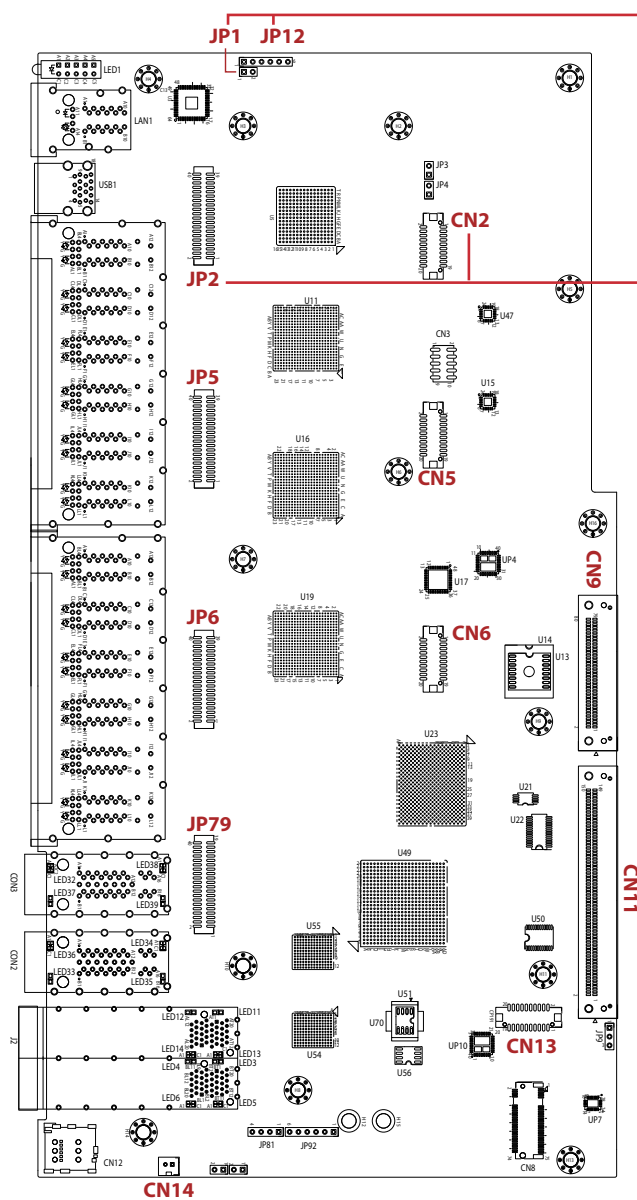
**JP21, JP22 : Core Power PWM SMBus Header (for VCCIN, PVNN\_PCH PM ic fw update by tool)**

Pin	Description
1	PVCCIN_SCL
2	PVCCIN_SDA
3	GND

**J2, J3, J4: FAN Wafer Connector**

Pin	Description
1	GND
2	P12V_S1
3	SYS_FAN1_TACH_R
4	SYS_FAN1_PWM_R
5	GND
6	P12V_S1

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**JP1 : Power Button Header**

	Pin	Description
1	1	PWRBTN#_C
2	2	GND

**JP12 : I/O Board CPLD JTAG Header**

	Pin	Description
1	1	P3V3_AUX
2	2	GND
3	3	JTAG_CPLD_TCK
4	4	JTAG_CPLD_TDO
5	5	JTAG_CPLD_TDI
6	6	JTAG_CPLD_TMS

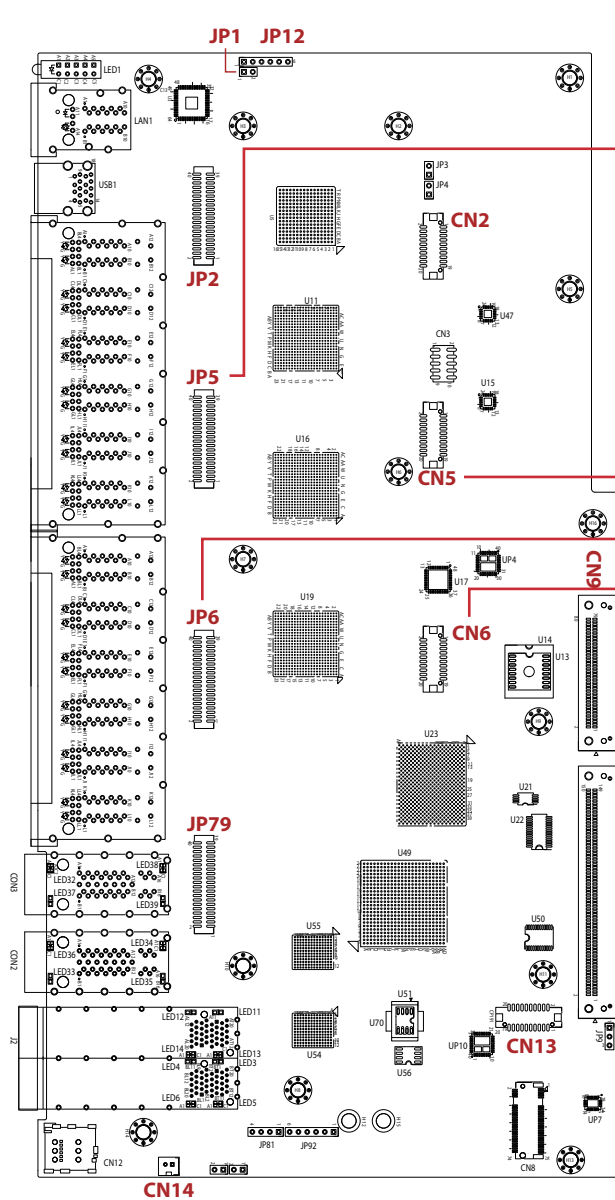
**JP2: PoE Box Header**

	Pin	Signal	Pin	Signal
1	N.C.	21	GND	
2	VPORT_NEG_OUT4	22	V_52V_OUT	
3	N.C.	23	POE1_DETECT	
4	N.C.	24	V_52V_OUT	
5	N.C.	25	GND	
6	VPORT_NEG_OUT3	26	V_52V_OUT	
7	N.C.	27	DRG_SPI_MISO	
8	N.C.	28	VPORT_NEG_OUT8	
9	N.C.	29	GND	
10	VPORT_NEG_OUT2	30	N.C.	
11	N.C.	31	DRG_SPI_MOSI	
12	N.C.	32	VPORT_NEG_OUT7	
13	P12V	33	GND	
14	VPORT_NEG_OUT1	34	N.C.	
15	GND	35	DRG_SPI_SCK	
16	V_52V_OUT	36	VPORT_NEG_OUT6	
17	P3V3	37	GND	
18	V_52V_OUT	38	N.C.	
19	P3V3	39	DRG_SPI_CS	
20	V_52V_OUT	40	VPORT_NEG_OUT5	

**CN2: PoE Box Header**

	Pin	Signal
1	N.C.	
2	N.C.	
3	N.C.	
4	N.C.	
5	N.C.	
6	N.C.	
7	N.C.	
8	N.C.	
9	V_3P3V_POE_MOD2	
10	V_3P3V_POE_MOD2	
11	POE2_ADDR0	
12	N.C.	
13	POE2_ADDR1	
14	N.C.	
15	POE2_ADDR2	
16	N.C.	
17	N.C.	
18	N.C.	
19	GND_POE2	
20	N.C.	

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**JP5: Box Header location**

	Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
	1	N.C.	11	N.C.	21	GND	31	DRG_SPI_MOSI
	2	VPORT_NEG_OUT12	12	N.C.	22	V_52V_OUT	32	VPORT_NEG_OUT15
	3	N.C.	13	P12V	23	POE2_DETECT	33	GND
	4	N.C.	14	VPORT_NEG_OUT9	24	V_52V_OUT	34	N.C.
	5	N.C.	15	GND	25	GND	35	DRG_SPI_SCK
	6	VPORT_NEG_OUT11	16	V_52V_OUT	26	V_52V_OUT	36	VPORT_NEG_OUT14
	7	N.C.	17	P3V3	27	DRG_SPI_MISO	37	GND
	8	N.C.	18	V_52V_OUT	28	VPORT_NEG_OUT16	38	N.C.
	9	N.C.	19	P3V3	29	GND	39	DRG_SPI_CS
	10	VPORT_NEG_OUT10	20	V_52V_OUT	30	N.C.	40	VPORT_NEG_OUT13

**CN5: PoE2 Box Header**

	Pin	Description	Pin	Description
	1	N.C.	11	POE3_ADDR0
	2	N.C.	12	N.C.
	3	N.C.	13	POE3_ADDR1
	4	N.C.	14	N.C.
	5	N.C.	15	POE3_ADDR2
	6	N.C.	16	N.C.
	7	N.C.	17	N.C.
	8	N.C.	18	N.C.
	9	V_3P3V_POE_MOD3	19	GND_POE3
	10	V_3P3V_POE_MOD3	20	N.C.

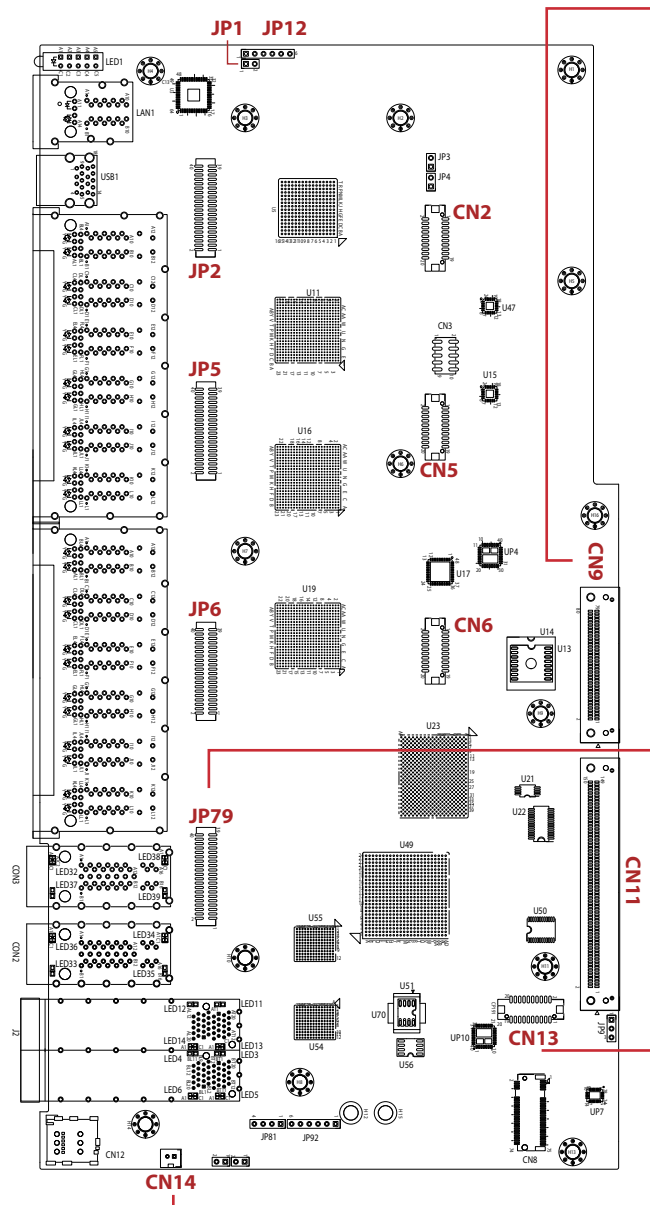
**JP6: Box Header location**

	Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
	1	N.C.	11	N.C.	21	GND	31	DRG_SPI_MOSI
	2	VPORT_NEG_OUT20	12	N.C.	22	V_52V_OUT	32	VPORT_NEG_OUT23
	3	N.C.	13	P12V	23	POE3_DETECT	33	GND
	4	N.C.	14	VPORT_NEG_OUT17	24	V_52V_OUT	34	N.C.
	5	N.C.	15	GND	25	GND	35	DRG_SPI_SCK
	6	VPORT_NEG_OUT19	16	V_52V_OUT	26	V_52V_OUT	36	VPORT_NEG_OUT22
	7	N.C.	17	P3V3	27	DRG_SPI_MISO	37	GND
	8	N.C.	18	V_52V_OUT	28	VPORT_NEG_OUT24	38	N.C.
	9	N.C.	19	P3V3	29	GND	39	DRG_SPI_CS
	10	VPORT_NEG_OUT18	20	V_52V_OUT	30	N.C.	40	VPORT_NEG_OUT21

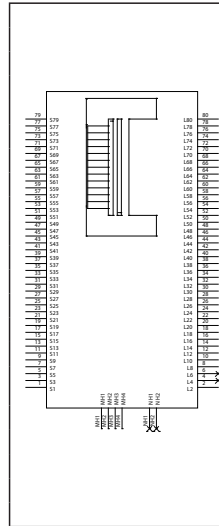
**CN6: CPLD GPIO**

	Pin	Description	Pin	Description
	1	N.C.	11	POE1_ADDR0
	2	N.C.	12	N.C.
	3	N.C.	13	POE1_ADDR1
	4	N.C.	14	N.C.
	5	N.C.	15	POE1_ADDR2
	6	N.C.	16	N.C.
	7	N.C.	17	N.C.
	8	N.C.	18	N.C.
	9	V_3P3V_POE_MOD1	19	GND_POE1
	10	V_3P3V_POE_MOD1	20	N.C.

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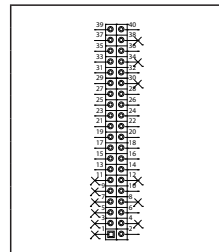


**CN9 : Board to Board**



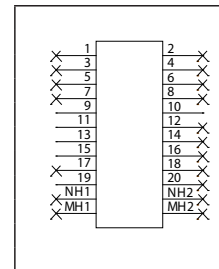
Pin	Description	Pin	Description	Pin	Description	Pin	Description
1	BMC_CPLD_RI_N	21	NIC0_NCSI_CLK_IN_R	41	SMB_NIC0_CLK	61	LED_GBE3_LED1
2	FM_SOC_CPLD_SLP_S3_N	22	USB2_P1_DP	42	GND	62	GND
3	BMC_CPLD_RXD	23	PU_NIC0_NCSI_RXD_0	43	SMB_NIC0_DAT	63	LED_GBE3_LED2
4	N.C.	24	GND	44	CLK_100M_NIC0_DN_R	64	P3V3_AUX
5	BMC_CPLD_DSR_N	25	PU_NIC0_NCSI_TXD_0	45	LED_GBE0_LED2	65	POE_LED
6	N.C.	26	USB3_RX_N0	46	CLK_100M_NIC0_DP_R	66	P3V3_AUX
7	BMC_CPLD_CTS_N	27	PU_NIC0_NCSI_TXD_1	47	LED_GBE1_LED0	67	WIFI_LED
8	IRQ_5GM2_WAKE_N	28	USB3_RX_P0	48	GND	68	GND
9	BMC_CPLD_DCD_N	29	PD_NIC0_NCSI_TX_EN	49	LED_GBE1_LED1	69	HDD_CPLD_LED
10	MB_ATX_PWROK	30	GND	50	P1E_NIC0_RX_DN	70	P3V3_MB
11	BMC_CPLD_DTR_N	31	FM_NIC0_DISABLE_N	51	LED_GBE1_LED2	71	POWER_LED
12	GND	32	USB3_TX_N0	52	P1E_NIC0_RX_DP	72	P3V3_MB
13	BMC_CPLD_TXD	33	IRQ_NIC0_WAKE	53	LED_GBE2_LED0	73	GND
14	USB2_P0_DN	34	USB3_TX_P0	54	GND	74	GND
15	BMC_CPLD_RTS_N	35	RST_CPLD_NIC1_RESET_N_R	55	LED_GBE2_LED1	75	P12V
16	USB2_P0_DP	36	GND	56	P1E_NIC0_TX_C_DN	76	P3V3_MB
17	PU_NIC0_NCSI_RXD_1	37	SMB_NIC0_ALERT_N	57	LED_GBE2_LED2	77	P12V
18	GND	38	LED_GBE0_LED0	58	P1E_NIC0_TX_C_DP	78	P3V3_MB
19	PD_NIC0_NCSI_CRS_DV	39	GND	59	LED_GBE3_LED0	79	GND
20	USB2_P1_DN	40	LED_GBE0_LED1	60	GND	80	GND

**JP79: Box Header Location**



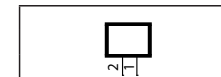
Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	N.C.	11	N.C.	21	GND	31	DRG_SPI_MOSI
2	VPORT_NEG_10G_OUT4	12	N.C.	22	V_52V_OUT	32	VPORT_NEG_10G_OUT7
3	N.C.	13	P12V	23	POE4_DETECT	33	GND
4	N.C.	14	VPORT_NEG_10G_OUT1	24	V_52V_OUT	34	N.C.
5	N.C.	15	GND	25	GND	35	DRG_SPI_SCK
6	VPORT_NEG_10G_OUT3	16	V_52V_OUT	26	V_52V_OUT	36	VPORT_NEG_10G_OUT6
7	N.C.	17	P3V3	27	DRG_SPI_MISO	37	GND
8	N.C.	18	V_52V_OUT	28	VPORT_NEG_10G_OUT8	38	N.C.
9	N.C.	19	P3V3	29	GND	39	DRG_SPI_CS
10	VPORT_NEG_10G_OUT2	20	V_52V_OUT	30	N.C.	40	VPORT_NEG_10G_OUT5

**CN13 : PoE Power Connector**



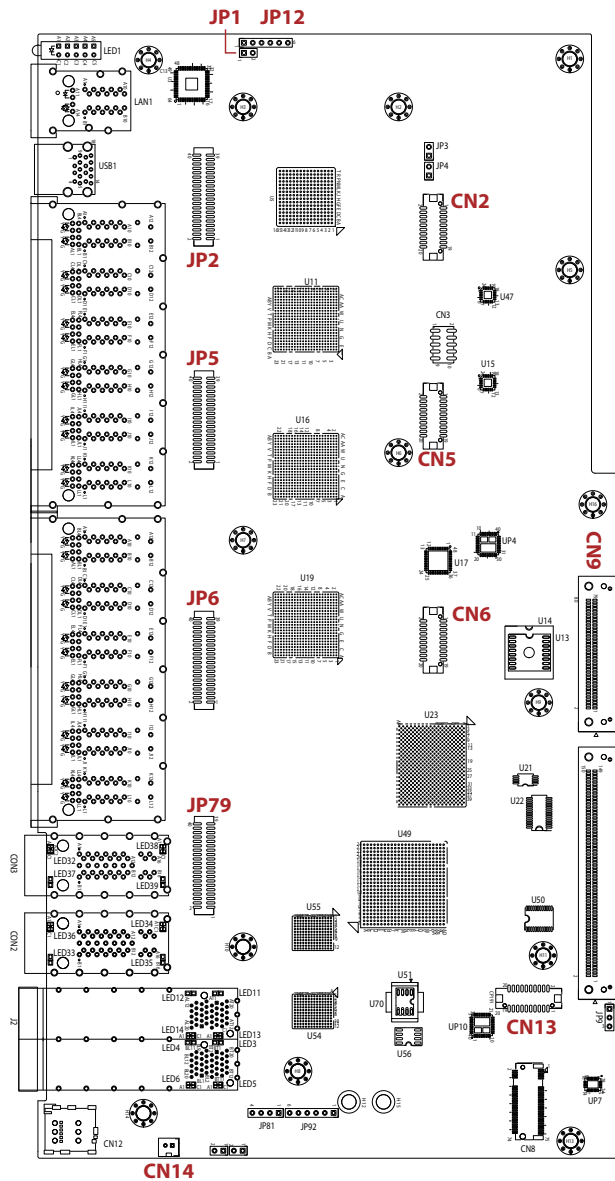
Pin	Description	Pin	Description
1	N.C.	11	POE4_ADDR0
2	N.C.	12	N.C.
3	N.C.	13	POE4_ADDR1
4	N.C.	14	N.C.
5	N.C.	15	POE4_ADDR2
6	N.C.	16	N.C.
7	N.C.	17	N.C.
8	N.C.	18	N.C.
9	V_3P3V_POE_MOD4	19	GND_POE4
10	V_3P3V_POE_MOD4	20	N.C.

**CN14 : RESETBTN Connector**



Pin	Description
1	FP_RST_BTN_N_R
2	GND

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CN11 : Board to Board

Pin	Description	Pin	Description	Pin	Description	Pin	Description
1	GND	39	PMD_L0_TX_P	77	88X3310P_L0_TX_N	114	5G_LTE_RX_DN2
2	GND	40	PMD_L2_RX_P	78	N.C.	115	GND
3	P12V	41	PMD_L0_TX_N	79	GND	116	GND
4	P3V3_MB	42	PMD_L2_RX_N	80	GND	117	TP_SMB_GBE3_I2C_CLK
5	P12V	43	GND	81	88X3310P_L1_TX_P	118	USB3_RX_P1
6	P3V3_MB	44	GND	82	5G_LTE_TX_DP1	119	TP_SMB_GBE3_I2C_DATA
7	GND	45	PMD_L1_TX_P	83	88X3310P_L1_TX_N	120	USB3_RX_N1
8	GND	46	PMD_L3_RX_P			121	GND
9	P12V	47	PMD_L1_TX_N	84	5G_LTE_TX_DN1	122	GND
10	P12V_AUX	48	PMD_L3_RX_N	85	GND	123	SMB_CPLD_I2C_CLK_R
11	P12V	49	GND	89	CLK_OUT_DN6	124	PEX_SW_RX_P_C
12	P12V_AUX	50	GND	86	GND	125	SMB_CPLD_I2C_DATA_R
13	GND	51	PMD_L2_TX_P	87	CLK_OUT_DP6	126	PEX_SW_RX_N_C
14	GND	52	3258_L0_RX_P	88	5G_LTE_TX_DP2	127	GND
15	SMB_HOST_CLK	53	PMD_L2_TX_N	90	5G_LTE_TX_DN2	128	GND
16	USB_0_OC#	54	3258_L0_RX_N	91	GND	129	RST_GBE_GPIO6_RST_0_N_R
17	SMB_HOST_DATA	55	GND	92	GND	130	PEX_SW_TX_P
18	CLK_32K_SUSCLK_SOC	56	GND	93	CLK_OUT_DP7	131	FM_GBE_GPIO7_INT_0_N_R
19	GND	57	PMD_L3_TX_P	94	USB3_TX_P1	132	PEX_SW_TX_N
20	GND	58	3258_L1_RX_P	95	CLK_OUT_DN7	133	GND
21	SW_INIT_DONE_R	59	PMD_L3_TX_N	96	USB3_TX_N1	134	GND
22	SW_UART_RXD	60	3258_L1_RX_N	97	GND	135	FM_GBE_GPIO4_INT_1_N_R
23	TEMP_INT_N_R	61	GND	98	GND	136	X557_MDC_SCL
24	SW_UART_TXD	62	GND	99	SMB_GBE0_I2C_CLK	137	PD_GBE_GPIO5_R
25	GND	63	3258_L0_TX_P	100	N.C.	138	X557_MDIO_SDA
26	GND	64	88X3310P_L0_RX_P	101	SMB_GBE0_I2C_DATA	139	GND
27	3258_MR_N	65	3258_L0_TX_N	102	N.C.	140	GND
28	PMD_L0_RX_P	66	88X3310P_L0_RX_N	103	GND	141	FM_GBE_GPIO2_PRSN2_3_N_R
29	RESETN1_R	67	GND	104	GND	142	RST_SW_LTB_RSTBTN_N
30	PMD_L0_RX_N	68	GND	105	TP_SMB_GBE1_I2C_CLK	143	RST_GBE_GPIO3_RST_1_N_R
31	GND	69	3258_L1_TX_P	106	5G_LTE_RX_DP1	144	FM_SW_LTB_PWRBTN_N
32	GND	70	88X3310P_L1_RX_P	107	TP_SMB_GBE1_I2C_DATA	145	GND
33	SYSRST_OUT_N_R	71	3258_L1_TX_N	108	5G_LTE_RX_DN1	146	GND
34	PMD_L1_RX_P	72	88X3310P_L1_RX_N	109	GND	147	RST_GBE_GPIO0_RST_3_N_R
35	RST_M_RESET_N_R	73	GND	110	GND	148	CLK_100M_SW_DP_R
36	PMD_L1_RX_N	74	GND	111	TP_SMB_GBE2_I2C_CLK	149	FM_GBE_GPIO1_INT_3_N_R
37	GND	75	88X3310P_L0_TX_P	112	5G_LTE_RX_DP2	150	CLK_100M_SW_DN_R
38	GND	76	N.C.	113	TP_SMB_GBE2_I2C_DATA		