AT8402

AdvancedTCA Carrier Board with 4 Mid-size AMC Slots

kontron

Board Rev. 2

QUICK REFERENCE

Document version 1.0

CONNECTORS

J20	ATCA Base & Fabric Interface (Zone 2)
J23	ATCA Base & Fabric Interface (Zone 2)
J30	ATCA RTM Connector (Zone 3)
J31	ATCA RTM Connector (Zone 3)
J32	ATCA RTM Connector (Zone 3)
J34	Serial Port (RJ45)
P10	ATCA Power (Zone 1)
J_B1	AMC B1
J_B2	AMC B2
J_B3	AMC B3
J_B4	AMC B4

JUMPER SETTINGS

(● Default Setting)

○ FWPD - Flash Write Enable	
Write Enable	in
● Write Protect	out

○ IPMC0 - Front Board IPMI Override	
ShMC Bypass	in
● Normal Operation	out

○ IPMC1 - AMC IPMI Override	
ShMC Bypass	in
● Normal Operation	out

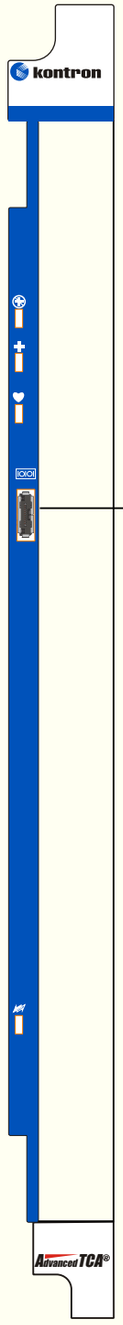
○ IPMC2 - PCIe E-Keying Override	
ShMC Bypass	in
● Normal Operation	out

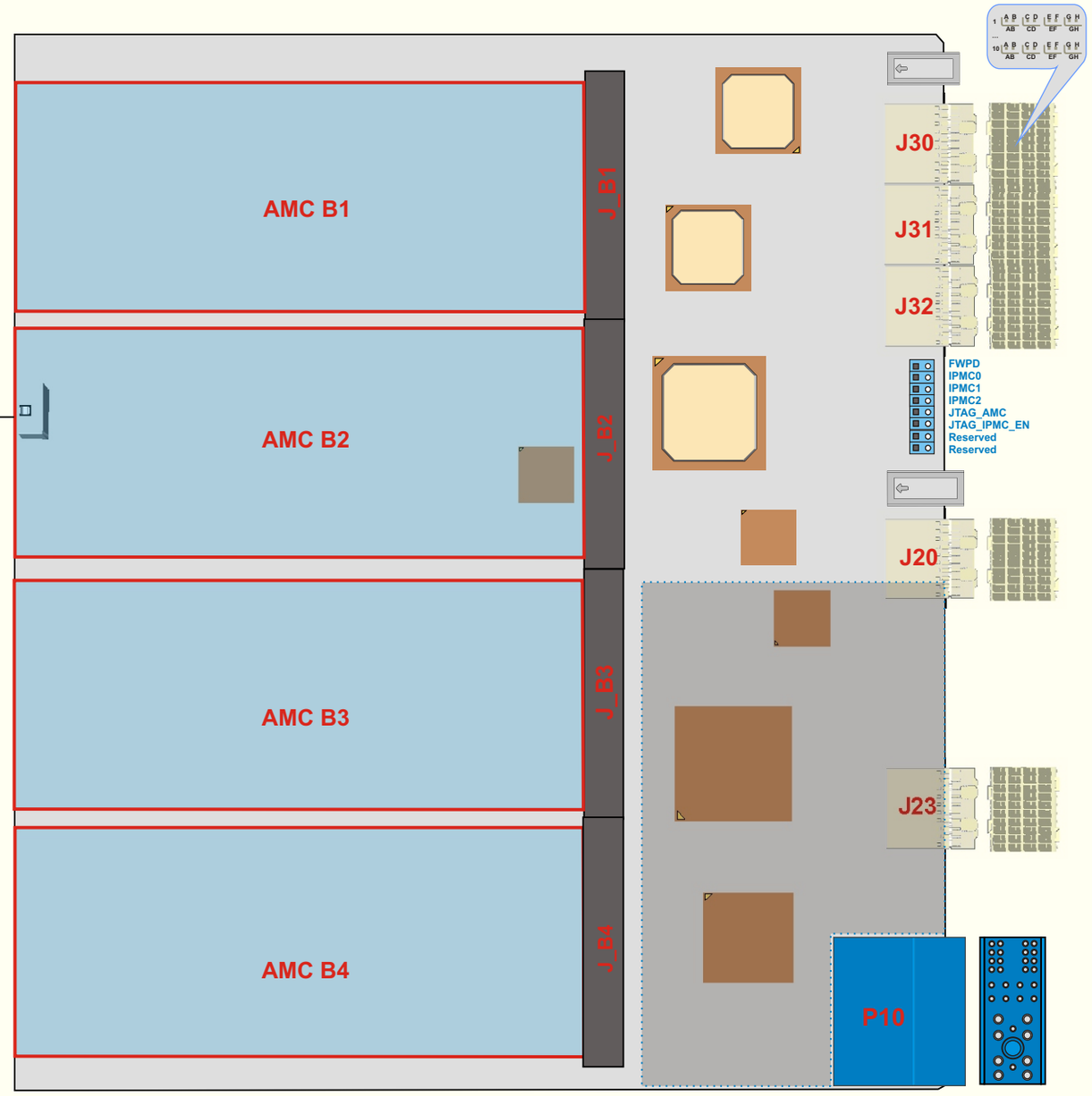
○ JTAG_AMC - AMC JTAG Integration	
Included in JTAG Chain	in
● Excluded from JTAG Chain	out

○ JTAG_IPMC - IPMC JTAG	
Restrict JTAG to IPMC	in
● Normal JTAG Operation	out

Symbols Chart

- Heart Beat
- Healthy
- Out Of Service
- Hot Swap





Connector Pinouts

AT8402

Board Rev. 2

Document version 1.0

J20 - ATCA Base & Fabric Interface (Zone 2)

	ROW A	AB	ROW B	ROW C	CD	ROW D	ROW E	EF	ROW F	ROW G	GH	ROW H
1	CLK1A+	GND	CLK1A-	CLK1B+	GND	CLK1B-	CLK2A+	GND	CLK2A-	CLK2B+	GND	CLK2B-
2	Tx4(UP)+	GND	Tx4(UP)-	Rx4(UP)+	GND	Rx4(UP)-	CLK3A+	GND	CLK3A-	CLK3B+	GND	CLK3B-
3	Tx2(UP)+	GND	Tx2(UP)-	Rx2(UP)+	GND	Rx2(UP)-	Tx3(UP)+	GND	Tx3(UP)-	Rx3(UP)+	GND	Rx3(UP)-
4	Tx0(UP)+	GND	Tx0(UP)-	Rx0(UP)+	GND	Rx0(UP)-	Tx1(UP)+	GND	Tx1(UP)-	Rx1(UP)+	GND	Rx1(UP)-
5	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.
6	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.
7	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.
8	Tx0[14]+	GND	Tx0[14]-	Rx0[14]+	GND	Rx0[14]-	Tx1[14]+	GND	Tx1[14]-	Rx1[14]+	GND	Rx1[14]-
9	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.
10	Tx0[13]+	GND	Tx0[13]-	Rx0[13]+	GND	Rx0[13]-	Tx1[13]+	GND	Tx1[13]-	Rx1[13]+	GND	Rx1[13]-

J23 - ATCA Base & Fabric Interface (Zone 2)

	ROW A	AB	ROW B	ROW C	CD	ROW D	ROW E	EF	ROW F	ROW G	GH	ROW H
1	Tx2[2]+	GND	Tx2[2]-	Rx2[2]+	GND	Rx2[2]-	Tx3[2]+	GND	Tx3[2]-	Rx3[2]+	GND	Rx3[2]-
2	Tx0[2]+	GND	Tx0[2]-	Rx0[2]+	GND	Rx0[2]-	Tx1[2]+	GND	Tx1[2]-	Rx1[2]+	GND	Rx1[2]-
3	Tx2[1]+	GND	Tx2[1]-	Rx2[1]+	GND	Rx2[1]-	Tx3[1]+	GND	Tx3[1]-	Rx3[1]+	GND	Rx3[1]-
4	Tx0[1]+	GND	Tx0[1]-	Rx0[1]+	GND	Rx0[1]-	Tx1[1]+	GND	Tx1[1]-	Rx1[1]+	GND	Rx1[1]-
5	BI_DA1+	GND	BI_DA1-	BI_DB1+	GND	BI_DB1-	BI_DC1+	GND	BI_DC1-	BI_DD1+	GND	BI_DD1-
6	BI_DA2+	GND	BI_DA2-	BI_DB2+	GND	BI_DB2-	BI_DC2+	GND	BI_DC2-	BI_DD2+	GND	BI_DD2-
7	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.
8	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.
9	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C	GND	N.C.
10	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.

GbE Switch Port Assignment

CLI ID	Connection
0/1	RTM GE1
0/2	RTM GE2
0/3	Base Channel 1
0/4	Base Channel 2
0/5	Fabric Channel 2, Port 3
0/6	Fabric Channel 2, Port 2
0/7	Fabric Channel 2, Port 1
0/8	Fabric Channel 2, Port 0
0/9	AMC B4, Channel 0
0/10	AMC B4, Channel 1
0/11	AMC B3, Channel 0
0/12	AMC B3, Channel 1
0/13	AMC B2, Channel 0
0/14	AMC B2, Channel 1
0/15	AMC B1, Channel 0
0/16	AMC B1, Channel 1
0/17	Fabric Channel 1, Port 3
0/18	Fabric Channel 1, Port 2
0/19	Fabric Channel 1, Port 1
0/20	Fabric Channel 1, Port 0
0/21	Fabric Channel 13, Port 1
0/22	Fabric Channel 13, Port 0
0/23	Fabric Channel 14, Port 1
0/24	Fabric Channel 14, Port 0

J30 - ATCA RTM Connector (Zone3)

	ROW A	AB	ROW B	ROW C	CD	ROW D	ROW E	EF	ROW F	ROW G	GH	ROW H
1	N.C.	GND	N.C.	N.C.	GND	N.C.	MNG_LAN_DA-	GND	MNG_LAN_DA+	STOR0_RX-	GND	STOR0_RX+
2	PROD_IO0	GND	PROD_IO1	N.C.	GND	N.C.	MNG_LAN_DB-	GND	MNG_LAN_DB+	STOR0_TX-	GND	STOR0_TX+
3	12V	GND	3V3_SUS	SMB_SCL	GND	SMB_SDA	N.C.	GND	N.C.	STOR1_RX-	GND	STOR1_RX+
4	PROD_IO2	GND	PLD_DOUT	PLD_CLOCK	GND	PLD_DIN	N.C.	GND	N.C.	STOR1_TX-	GND	STOR1_TX+
5	JTAG_TDO	GND	TEST_JIG#	N.C.	GND	PROD_IO3	N.C.	GND	GLAN_AB_CT	STOR2_RX-	GND	STOR2_RX+
6	JTAG_TDI	GND	12V	N.C.	GND	N.C.	MNG_LAN_CT	GND	12V	STOR2_TX-	GND	STOR2_TX+
7	JTAG_TCK	GND	PROD_IO4	N.C.	GND	N.C.	N.C.	GND	N.C.	STOR3_RX-	GND	STOR3_RX+
8	JTAG_TMS	GND	JTAG_TRST#	N.C.	GND	N.C.	N.C.	GND	SMB_ALRT#	STOR3_TX-	GND	STOR3_TX+
9	SP_RI	GND	SP_DTR	SP_CTS	GND	SP_TX#	N.C.	GND	N.C.	N.C.	GND	N.C.
10	SP_RTS	GND	SP_RX#	SP_DSR	GND	SP_DCD	N.C.	GND	N.C.	N.C.	GND	N.C.

J31 - ATCA RTM Connector (Zone3)

	ROW A	AB	ROW B	ROW C	CD	ROW D	ROW E	EF	ROW F	ROW G	GH	ROW H
1	RTM_GE1_DA+	GND	RTM_GE1_DA-	RTM_GE1_DB+	GND	RTM_GE1_DB-	RTM_GE1_DC+	GND	RTM_GE1_DC-	RTM_GE1_DD+	GND	RTM_GE1_DD-
2	RTM_GE2_DA+	GND	RTM_GE2_DA-	RTM_GE2_DB+	GND	RTM_GE2_DB-	RTM_GE2_DC+	GND	RTM_GE2_DC-	RTM_GE2_DD+	GND	RTM_GE2_DD-
3	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.
4	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.	N.C.	GND	N.C.
5	AMC_B1_P12_TX+	GND	AMC_B1_P12_TX-	AMC_B1_P12_RX+	GND	AMC_B1_P12_RX-	AMC_B1_P13_TX+	GND	AMC_B1_P13_TX-	AMC_B1_P13_RX+	GND	AMC_B1_P13_RX-
6	AMC_B1_P14_TX+	GND	AMC_B1_P14_TX-	AMC_B1_P14_RX+	GND	AMC_B1_P14_RX-	AMC_B1_P15_TX+	GND	AMC_B1_P15_TX-	AMC_B1_P15_RX+	GND	AMC_B1_P15_RX-
7	AMC_B1_P17_TX+	GND	AMC_B1_P17_TX-	AMC_B1_P17_RX+	GND	AMC_B1_P17_RX-	AMC_B1_P18_TX+	GND	AMC_B1_P18_TX-	AMC_B1_P18_RX+	GND	AMC_B1_P18_RX-
8	AMC_B1_P19_TX+	GND	AMC_B1_P19_TX-	AMC_B1_P19_RX+	GND	AMC_B1_P19_RX-	AMC_B1_P20_TX+	GND	AMC_B1_P20_TX-	AMC_B1_P20_RX+	GND	AMC_B1_P20_RX-
9	AMC_B2_P17_TX+	GND	AMC_B2_P17_TX-	AMC_B2_P17_RX+	GND	AMC_B2_P17_RX-	AMC_B2_P18_TX+	GND	AMC_B2_P18_TX-	AMC_B2_P18_RX+	GND	AMC_B2_P18_RX-
10	AMC_B2_P19_TX+	GND	AMC_B2_P19_TX-	AMC_B2_P19_RX+	GND	AMC_B2_P19_RX-	AMC_B2_P20_TX+	GND	AMC_B2_P20_TX-	AMC_B2_P20_RX+	GND	AMC_B2_P20_RX-

J32 - ATCA RTM Connector (Zone3)

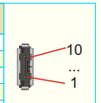
	ROW A	AB	ROW B	ROW C	CD	ROW D	ROW E	EF	ROW F	ROW G	GH	ROW H
1	AMC_B2_P12_TX+	GND	AMC_B2_P12_TX-	AMC_B2_P12_RX+	GND	AMC_B2_P12_RX-	AMC_B2_P13_TX+	GND	AMC_B2_P13_TX-	AMC_B2_P13_RX+	GND	AMC_B2_P13_RX-
2	AMC_B2_P14_TX+	GND	AMC_B2_P14_TX-	AMC_B2_P14_RX+	GND	AMC_B2_P14_RX-	AMC_B2_P15_TX+	GND	AMC_B2_P15_TX-	AMC_B2_P15_RX+	GND	AMC_B2_P15_RX-
3	AMC_B3_P12_TX+	GND	AMC_B3_P12_TX-	AMC_B3_P12_RX+	GND	AMC_B3_P12_RX-	AMC_B3_P13_TX+	GND	AMC_B3_P13_TX-	AMC_B3_P13_RX+	GND	AMC_B3_P13_RX-
4	AMC_B3_P14_TX+	GND	AMC_B3_P14_TX-	AMC_B3_P14_RX+	GND	AMC_B3_P14_RX-	AMC_B3_P15_TX+	GND	AMC_B3_P15_TX-	AMC_B3_P15_RX+	GND	AMC_B3_P15_RX-
5	AMC_B3_P17_TX+	GND	AMC_B3_P17_TX-	AMC_B3_P17_RX+	GND	AMC_B3_P17_RX-	AMC_B3_P18_TX+	GND	AMC_B3_P18_TX-	AMC_B3_P18_RX+	GND	AMC_B3_P18_RX-
6	AMC_B3_P19_TX+	GND	AMC_B3_P19_TX-	AMC_B3_P19_RX+	GND	AMC_B3_P19_RX-	AMC_B3_P20_TX+	GND	AMC_B3_P20_TX-	AMC_B3_P20_RX+	GND	AMC_B3_P20_RX-
7	AMC_B4_P12_TX+	GND	AMC_B4_P12_TX-	AMC_B4_P12_RX+	GND	AMC_B4_P12_RX-	AMC_B4_P13_TX+	GND	AMC_B4_P13_TX-	AMC_B4_P13_RX+	GND	AMC_B4_P13_RX-
8	AMC_B4_P14_TX+	GND	AMC_B4_P14_TX-	AMC_B4_P14_RX+	GND	AMC_B4_P14_RX-	AMC_B4_P15_TX+	GND	AMC_B4_P15_TX-	AMC_B4_P15_RX+	GND	AMC_B4_P15_RX-
9	AMC_B4_P17_TX+	GND	AMC_B4_P17_TX-	AMC_B4_P17_RX+	GND	AMC_B4_P17_RX-	AMC_B4_P18_TX+	GND	AMC_B4_P18_TX-	AMC_B4_P18_RX+	GND	AMC_B4_P18_RX-
10	AMC_B4_P19_TX+	GND	AMC_B4_P19_TX-	AMC_B4_P19_RX+	GND	AMC_B4_P19_RX-	AMC_B4_P20_TX+	GND	AMC_B4_P20_TX-	AMC_B4_P20_RX+	GND	AMC_B4_P20_RX-

PCI Express Switch Port Assignment

Port	Lane	Connection
0	0 to 7	AMC B4, Channel 4 to 11
1	8 to 11	AMC B3, Channel 4 to 7
2	12 to 15	ATCA Update Channel
8	16 to 23	AMC B2, Channel 4 to 11
9	24 to 27	AMC B1, Channel 4 to 7
10	28 to 31	LSI SAS1064E

J34 - Serial Port

1	N.C.	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	N.C.
5	GND	10	N.C.



AMC B1 Channel Assignment

Channel	Region	Connection
0	GbE	GbE Switch 0/15
1	GbE	GbE Switch 0/16
2	SAS/SATA	SAS Expander Port 10
3	SAS/SATA	-* / AMC B3 channel 2**
4	Fabric	PCI Express Switch Port 9, lane 0
5	Fabric	PCI Express Switch Port 9, lane 1
6	Fabric	PCI Express Switch Port 9, lane 2
7	Fabric	PCI Express Switch Port 9, lane 3
8	Fabric	-
9	Fabric	-
10	Fabric	-
11	Fabric	-
12	Extended	RTM, AMC_B1_P12
13	Extended	RTM, AMC_B1_P13
14	Extended	RTM, AMC_B1_P14
15	Extended	RTM, AMC_B1_P15
17	Extended	RTM, AMC_B1_P17
18	Extended	RTM, AMC_B1_P18
19	Extended	RTM, AMC_B1_P19
20	Extended	RTM, AMC_B1_P20
TCLKA	Clock	From Backplane
TCLKB	Clock	To Backplane
TCLKC	Clock	From Backplane
TCLKD	Clock	To Backplane
FCLKA	Clock	PCIe Reference Clock

* Configured for SAS Connect

** Configured for Direct AMC Connect

AMC B2 Channel Assignment

Channel	Region	Connection
0	GbE	GbE Switch 0/13
1	GbE	GbE Switch 0/14
2	SAS/SATA	SAS Expander Port 11
3	SAS/SATA	-* / AMC B4 channel 2**
4	Fabric	PCI Express Switch Port 8, lane 0
5	Fabric	PCI Express Switch Port 8, lane 1
6	Fabric	PCI Express Switch Port 8, lane 2
7	Fabric	PCI Express Switch Port 8, lane 3
8	Fabric	PCI Express Switch Port 8, lane 4
9	Fabric	PCI Express Switch Port 8, lane 5
10	Fabric	PCI Express Switch Port 8, lane 6
11	Fabric	PCI Express Switch Port 8, lane 7
12	Extended	RTM, AMC_B2_P12
13	Extended	RTM, AMC_B2_P13
14	Extended	RTM, AMC_B2_P14
15	Extended	RTM, AMC_B2_P15
17	Extended	RTM, AMC_B2_P17
18	Extended	RTM, AMC_B2_P18
19	Extended	RTM, AMC_B2_P19
20	Extended	RTM, AMC_B2_P20
TCLKA	Clock	From Backplane
TCLKB	Clock	To Backplane
TCLKC	Clock	From Backplane
TCLKD	Clock	To Backplane
FCLKA	Clock	PCIe Reference Clock

* Configured for SAS Connect

** Configured for Direct AMC Connect

AMC B3 Channel Assignment

Channel	Region	Connection
0	GbE	GbE Switch 0/11
1	GbE	GbE Switch 0/12
2	SAS/SATA	SAS Expander Port 0* /AMC B1 ch3**
3	SAS/SATA	-
4	Fabric	PCI Express Switch Port 1, lane 0
5	Fabric	PCI Express Switch Port 1, lane 1
6	Fabric	PCI Express Switch Port 1, lane 2
7	Fabric	PCI Express Switch Port 1, lane 3
8	Fabric	-
9	Fabric	-
10	Fabric	-
11	Fabric	-
12	Extended	RTM, AMC_B3_P12
13	Extended	RTM, AMC_B3_P13
14	Extended	RTM, AMC_B3_P14
15	Extended	RTM, AMC_B3_P15
17	Extended	RTM, AMC_B3_P17
18	Extended	RTM, AMC_B3_P18
19	Extended	RTM, AMC_B3_P19
20	Extended	RTM, AMC_B3_P20
TCLKA	Clock	From backplane
TCLKB	Clock	To backplane
TCLKC	Clock	From Backplane
TCLKD	Clock	To Backplane
FCLKA	Clock	PCIe Reference Clock

* Configured for SAS Connect

** Configured for Direct AMC Connect

AMC B4 Channel Assignment

Channel	Region	Connection
0	GbE	GbE Switch 0/9
1	GbE	GbE Switch 0/10
2	SAS/SATA	SAS Expander Port 1* /AMC B2 ch3**
3	SAS/SATA	-
4	Fabric	PCI Express Switch Port 0, lane 0
5	Fabric	PCI Express Switch Port 0, lane 1
6	Fabric	PCI Express Switch Port 0, lane 2
7	Fabric	PCI Express Switch Port 0, lane 3
8	Fabric	PCI Express Switch Port 0, lane 4
9	Fabric	PCI Express Switch Port 0, lane 5
10	Fabric	PCI Express Switch Port 0, lane 6
11	Fabric	PCI Express Switch Port 0, lane 7
12	Extended	RTM, AMC_B4_P12
13	Extended	RTM, AMC_B4_P13
14	Extended	RTM, AMC_B4_P14
15	Extended	RTM, AMC_B4_P15
17	Extended	RTM, AMC_B4_P17
18	Extended	RTM, AMC_B4_P18
19	Extended	RTM, AMC_B4_P19
20	Extended	RTM, AMC_B4_P20
TCLKA	Clock	From backplane
TCLKB	Clock	To backplane
TCLKC	Clock	From Backplane
TCLKD	Clock	To Backplane
FCLKA	Clock	PCIe Reference Clock

* Configured for SAS Connect

** Configured for Direct AMC Connect

P10 - Power (Zone 1)

1	N.C.	2	N.C.
3	N.C.	4	N.C.
5	HA0	6	HA1
7	HA2	8	HA3
9	HA4	10	HA5
11	HA6	12	HA7/P
13	SCL_A	14	SDA_A
15	SCL_B	16	SDA_B
17	MT1_TIP(N.C.)	18	MT2_TIP(N.C.)
19	RING_A(N.C.)	20	RING_B(N.C.)
21	MT1_RING(N.C.)	22	MT2_RING(N.C.)
23	RRTN_A(N.C.)	24	RRTN_B(N.C.)
25	**SHELF_GND**	26	**LOGIC_GND**
27	ENABLE_B	28	VRTN_A
29	VRTN_B	30	EARLY_A
31	EARLY_B	32	ENABLE_A
33	-48V_A	34	-48V_B

SAS Expander Port Assignment

Channel	Connection
0	AMC B3, Channel 2*
1	AMC B4, Channel 2*
2	SAS Controller Port 0
3	SAS Controller Port 1
4	SAS Controller Port 2
5	SAS Controller Port 3
6	RTM, STOR3
7	RTM, STOR2
8	RTM, STOR1
9	RTM, STOR0
10	AMC B1, Channel 2
11	AMC B2, Channel 2

* Configured for SAS Connect

J_B1, J_B2, J_B3 & J_B4 - AMC B1, AMC B2, AMC B3 & AMC B4

B1	GND	B43	GND	B86	GND	B129	TxD15-
B2	12V	B44	RxD4+	B87	TxD8-	B130	TxD15+
B3	PS1#	B45	RxD4-	B88	TxD8+	B131	GND
B4	MP_3V3	B46	GND	B89	GND	B132	RxD15-
B5	GA0	B47	TxD4+	B90	RxD8-	B133	RxD15+
B6	RSV	B48	TxD4-	B91	RxD8+	B134	GND
B7	GND	B49	GND	B92	GND	B135	TCLKC-
B8	RSV	B50	RxD5+	B93	TxD9-	B136	TCLKC+
B9	12V	B51	RxD5-	B94	TxD9+	B137	GND
B10	GND	B52	GND	B95	GND	B138	TCLKD-
B11	RxD0+	B53	TxD5+	B96	RxD9-	B139	TCLKD+
B12	RxD0-	B54	TxD5-	B97	RxD9+	B140	GND
B13	GND	B55	GND	B98	GND	B141	TxD17-
B14	TxD0+	B56	IPMI_CLK	B99	TxD10-	B142	TxD17+
B15	TxD0-	B57	12V	B100	TxD10+	B143	GND
B16	GND	B58	GND	B101	GND	B144	RxD17-
B17	GA1	B59	RxD6+	B102	RxD10-	B145	RxD17+
B18	12V	B60	RxD6-	B103	RxD10+	B146	GND
B19	GND	B61	GND	B104	GND	B147	TxD18-
B20	RxD1+	B62	TxD6+	B105	TxD11-	B148	TxD18+
B21	RxD1-	B63	TxD6-	B106	TxD11+	B149	GND
B22	GND	B64	GND	B107	GND	B150	RxD18-
B23	TxD1+	B65	RxD7+	B108	RxD11-	B151	RxD18+
B24	TxD1-	B66	RxD7-	B109	RxD11+	B152	GND
B25	GND	B67	GND	B110	GND	B153	TxD19-
B26	GA2	B68	TxD7+	B111	TxD12-	B154	TxD19+
B27	12V	B69	TxD7-	B112	TxD12+	B155	GND
B28	GND	B70	GND	B113	GND	B156	RxD19-
B29	RxD2+	B71	IPMI_DATA	B114	RxD12-	B157	RxD19+
B30	RxD2-	B72	12V	B115	RxD12+	B158	GND
B31	GND	B73	GND	B116	GND	B159	TxD20-
B32	TxD2+	B74	TCLKA+	B117	TxD13-	B160	TxD20+
B33	TxD2-	B75	TCLKA-	B118	TxD13+	B161	GND
B34	GND	B76	GND	B119	GND	B162	RxD20-
B35	RxD3+	B77	TCLKB+	B120	RxD13-	B163	RxD20+
B36	RxD3-	B78	TCLKB-	B121	RxD13+	B164	GND
B37	GND	B79	GND	B122	GND	B165	TCLK
B38	TxD3+	B80	FCLKA+	B123	TxD14-	B166	TMS
B39	TxD3-	B81	FCLKA-	B124	TxD14+	B167	TRST#
B40	GND	B82	GND	B125	GND	B168	TDO
B41	ENABLE#	B83	PS0#(GND)	B126	RxD14-	B169	TDI
B42	12V	B84	12V	B127	RxD14+	B170	GND
		B85	GND	B128	GND		

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The Technical Reference Manual and the Quick Reference can be downloaded from Kontron Web site at: http://www.kontron.com

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