CP6011

6U cPCI® Single Processor
CPCI Pentium-M Dual PMC

Board Rev. 1

kontron ... always a Jump ahead!

QUICK REFERENCE

Document version 1.3

CONNECTORS

J1-J5	CompactPCI	J14	IDE Mezzanine
J6	Post Code	JN1A-JN4A	64-bit PCIX Mezzanine & PIM
J7-J8	Memory SODIMM 1-2	JN1B-JN3B	64-bit PCIX Mezzanine
J9	Ethernet Management	SW1	Reset Button (faceplate)
J10	COM1 (faceplate) (RJ-45)	BT1	Battery
J11	USB (faceplate)	LP1	LEDs
J12	Compact Flash	J16	JTAG
J13	Hot Swap Switch		

JUMPER SETTINGS (● Default Setting)

W1 (1-2), W1 (3-4) PMC A VIO Settings

	W1(1-2)	W1(3-4)
● 3.3V VIO	out	in
5V VIO	in	out

W1 (5-6) User Jumper

Low	in
● High	out

W2(1-2) Console Redirection

Enabled	in
● Disabled	out

W2(3-4) Reserved

●	out

W2 (5-6) Onboard Video

Disabled	in
● Enabled	out

W3 Reserved

●	out

W4, W5 COM2 Terminations

RS-422/485 modes only	W4	W5
With termination	in	in
● Without termination	out	out

W6, W7, W8 Backplane PCI Maximum Speed

	W6	W7	W8
PCI 33MHz	in	in	in
PCI 66MHz	out	in	in
PCIX 66MHz	in	out	in
PCIX 100MHz	out	out	in
● PCIX 133MHz	out	out	out
Bridge Disabled	in	out	out
Brisge Dis. In I/O Slot	in	in	out

W9 Onboard IPMI

Disable	in
● Enable	out

W10 CompactFlash

● Master	in
Slave	out

W11, W12 PMC B VIO Settings

	W11	W12
● 3.3V VIO	in	out
5V VIO	out	in

W13 Clear CMOS

Clear CMOS	in
● Normal	out

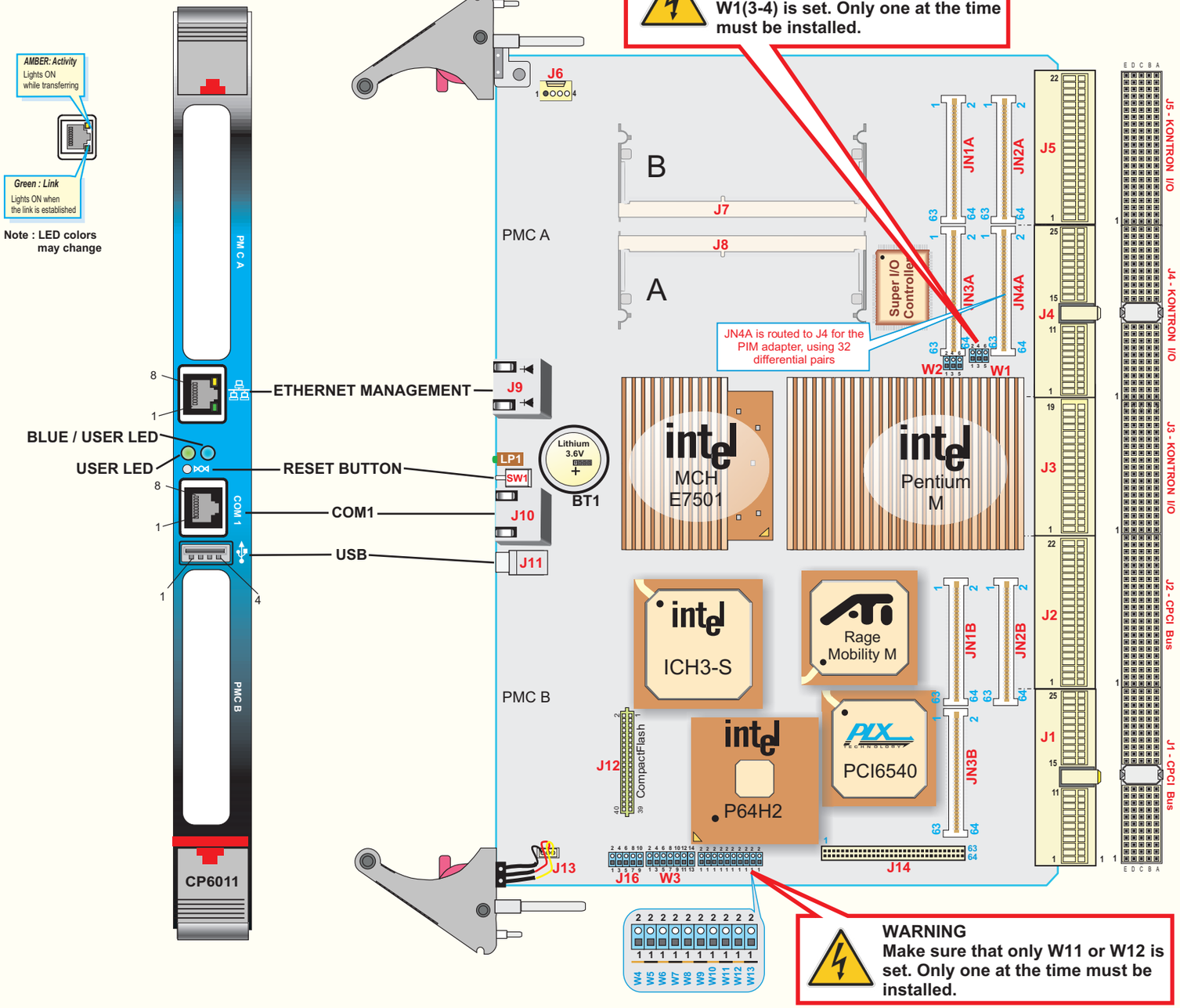
First Level Debugging

Blue LED always ON
1. Remove all peripheral and external connections.
2. Verify if the board is in the correct CPCI slot.
3. Verify PMC VIO jumpers
4. Verify the power supply.

Both red LEDs always ON
1. Check PMC VIO jumpers

Blue LED OFF
1. Check the jumper settings
2. Check the memory
3. Check post code on Blue/User led.

Warning:
Be sure you have the right backplane VIO setting according to the board configuration.



WARNING
Make sure that only W1(1-2) or W1(3-4) is set. Only one at the time must be installed.

WARNING
Make sure that only W11 or W12 is set. Only one at the time must be installed.

Connector Pinouts

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J1 - CompactPCI Bus

	ROW A	ROW B	ROW C	ROW D	ROW E
1	VCCE	-12VE	RSV	+12VE	VCCE
2	RSV	VCCE	RSV	RSV	RSV
3	INTA#	INTB#	INTC#	VCCE	INTD#
4	IPMB_PWR	HEALTHY#	VI/O	INTP	INTS
5	RSV	RSV	RST#	GND	GNT0#
6	REQ0#	PCI_PRESENT#	VCC3E	CLK0	AD31
7	AD30	AD29	AD28	GND	AD27
8	AD26	GND	VI/O	AD25	AD24
9	CBE3#	IDSEL	AD23	GND	AD22
10	AD21	GND	VCC3E	AD20	AD19
11	AD18	AD17	AD16	GND	CBE2#
12 13 14	Key Area				
15	VCC3E	FRAME#	IRDY#	BD_SEL#_	TRDY#
16	DEVSEL#	PCIXCAP	VI/O	STOP#	LOCK#
17	VCC3E	IPMB_SCL	IPMB_SDA	GND	PERR#
18	SERR#	GND	VCC3E	PAR	CBE1#
19	VCC3E	AD15	AD14	GND	AD13
20	AD12	GND	VI/O	AD11	AD10
21	VCC3E	AD9	AD8	M66EN	CBE0#
22	AD7	GND	VCC3E	AD6	AD5
23	VCC3E	AD4	AD3	VCCE	AD2
24	AD1	VCCE	VI/O	AD0	ACK64#
25	VCCE	REQ64#	ENUM#	VCC3E	VCCE

Long Pins Short Pins

J2 - CompactPCI Bus

	ROW A	ROW B	ROW C	ROW D	ROW E
1	CLK1	GND	REQ1#	GNT1#	REQ2#
2	CLK2	CLK3	SYSEN#	GNT2#	REQ3#
3	CLK4	GND	GNT3#	REQ4#	GNT4#
4	VI/O	RSV	CBE7#	GND	CBE6#
5	CBE5#	64_EN#	VI/O	CBE4#	PAR64
6	AD63	AD62	AD61	GND	AD60
7	AD59	GND	VI/O	AD58	AD57
8	AD56	AD55	AD54	GND	AD53
9	AD52	GND	VI/O	AD51	AD50
10	AD49	AD48	AD47	GND	AD46
11	AD45	GND	VI/O	AD44	AD43
12	AD42	AD41	AD40	GND	AD39
13	AD38	GND	VI/O	AD37	AD36
14	AD35	AD34	AD33	GND	AD32
15	RSV	GND	*FAL#	REQ5#	GNT5#
16	RSV	RSV	*DEG#	GND	RSV
17	RSV	GND	PBRST#	REQ6#	GNT6#
18	RSV	RSV	RSV	GND	RSV
19	GND	GND	SMB_SDA	SMB_SCL	SMB_ALERT#
20	CLK5	GND	RSV	GND	RSV
21	CLK6	GND	RSV	RSV	RSV
22	GA4	GA3	GA2	GA1	GA0

*Not Used

J3 - CompactPCI I/O

	ROW A	ROW B	ROW C	ROW D	ROW E
1	COM1:RTS	COM1:RXD	COM1:DSR	COM1:DCD	ID1
2	COM1:RI	COM1:DTR	COM1:CTS	COM1:TXD	MOUSE:CLK
3	COM2:RTS	COM2:RXD	COM2:DSR	COM2:DCD	MOUSE:DATA
4	COM2:RI	COM2:DTR	COM2:CTS	COM2:TXD	KB:DATA
5	VGA:BLUE	VGA:HSYNC	VGA:VSYNC	VGA:SCL	KB:CLK
6	VGA:RED	VGA:GREEN	VGA:SDA	POST:CLK	POST:DATA
7	VCC3	ID2	ID3	ID4	SPEAKER
8	USB0:DATA-	USB0:DATA+	GND	RSV	RSV
9	USB1:DATA-	USB1:DATA+	GND	RSV	RSV
10	USB1:VCC	USB0:VCC	GND	RSV	RSV
11	LAN3:ERX+	LAN3:ERX-	GND	RSV	RSV
12	LAN3:ETX+	LAN3:ETX-	GND	RSV	RSV
13	LAN2:ACT#	LAN1:ACT#	RSV	LAN3:ACT#	RSV
14	LAN2:LINK#	LAN1:LINK#	LAN:CT	LAN3:LINK#	RSV
15	LAN1:DB+	LAN1:DB-	GND	LAN1:DD+	LAN1:DD-
16	LAN1:DA+	LAN1:DA-	GND	LAN1:DC+	LAN1:DC-
17	LAN2:DB+	LAN2:DB-	GND	LAN2:DD+	LAN2:DD-
18	LAN2:DA+	LAN2:DA-	GND	LAN2:DC+	LAN2:DC-
19	VCC	VCC	VCC3	+12V	-12V

J5 - CompactPCI I/O

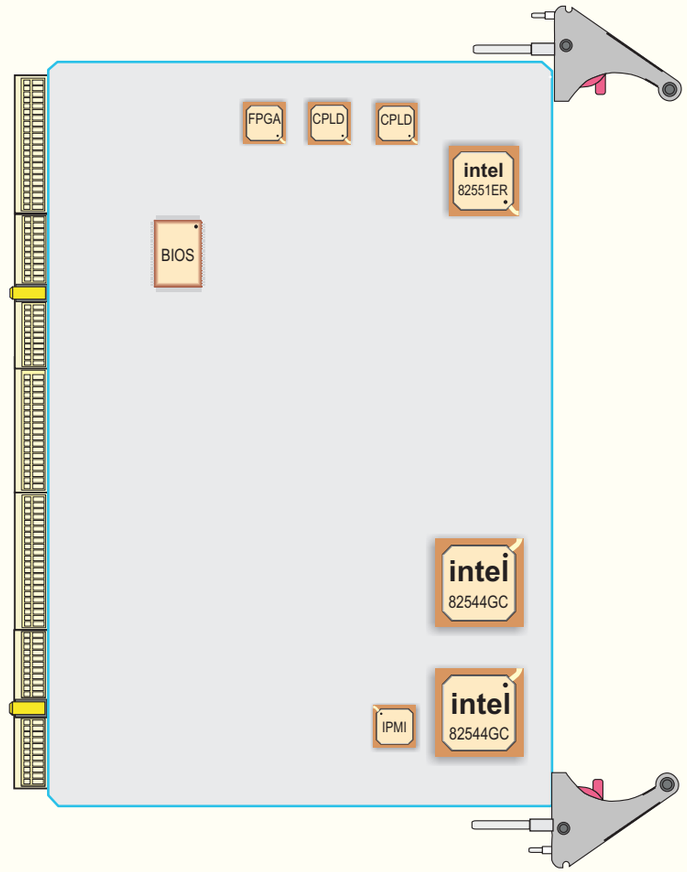
	ROW A	ROW B	ROW C	ROW D	ROW E
1	GND	GND	GND	GND	GND
2	RSV	RSV	GND	RSV	RSV
3	GND	GND	GND	GND	GND
4	RSV	RSV	GND	RSV	RSV
5	GND	GND	GND	GND	GND
6	RSV	RSV	GND	RSV	RSV
7	GND	GND	GND	GND	GND
8	RSV	RSV	GND	RSV	RSV
9	GND	GND	GND	GND	GND
10	FD:MSEN0	FD:MSEN1	GND	RSV	RSV
11	FD: MTR0#	FD: INDEX#	GND	FD: FDEDIN#	FD: DENSEL#
12	FD: DIR#	FD: MTR1#	GND	FD: DSEL0#	FD: DSEL1#
13	FD: TRK0#	FD: WGATE#	GND	FD: WDATA#	FD: STEP#
14	FD: DSKCHG#	FD: HDSEL#	GND	FD: RDATA#	FD: WRPROT#
15	IDE1:D6	IDE1:D8	GND	IDE1:D7	IDE:RESET#
16	IDE1:D4	IDE1:D10	GND	IDE1:D5	IDE1:D9
17	IDE1:D2	IDE1:D12	GND	IDE1:D3	IDE1:D11
18	IDE1:D0	IDE1:D14	GND	IDE1:D1	IDE1:D13
19	IDE1:IOR#	IDE1:IOW#	GND	IDE1:REQ	IDE1:D15
20	RSV	IDE1:IRQ	GND	IDE1:ACK#	IDE1:IORDY
21	IDE1:A2	IDE1:A0	GND	IDE1:A1	IDE1:PDIAG#
22	IDE1:ACT#	IDE1:CS1#	GND	IDE1:CS0#	BATT

JN4A - PIM

1	P1+	2	P2+
3	P1-	4	P2-
5	P3+	6	P4+
7	P3-	8	P4-
9	P5+	10	P6+
11	P5-	12	P6-
13	P7+	14	P8+
15	P7-	16	P8-
17	P9+	18	P10+
19	P9-	20	P10-
21	P11+	22	P12+
23	P11-	24	P12-
25	P13+	26	P14+
27	P13-	28	P14-
29	P15+	30	P16+
31	P15-	32	P16-
33	P17+	34	P18+
35	P17-	36	P18-
37	P19+	38	P20+
39	P19-	40	P20-
41	P21+	42	P22+
43	P21-	44	P22-
45	P23+	46	P24+
47	P23-	48	P24-
49	P25+	50	P26+
51	P25-	52	P26-
53	P27+	54	P28+
55	P27-	56	P28-
57	P29+	58	P30+
59	P29-	60	P30-
61	P31+	62	P32+
63	P31-	64	P32-

J14 - IDE Mezzanine

1	RSV	2	RSV
3	GND	4	RSV
5	RSV	6	GND
7	VCC	8	RSV
9	RSV	10	GND
11	RSV	12	RSV
13	RSV	14	RSV
15	RSV	16	RSV
17	RSV	18	HD_MS#/SLV
19	RSV	20	IDE0_ACT#
21	IDE0_CS#1	22	GND
23	IDE0_DA2	24	IDE0_CS#0
25	GND	26	IDE0_DA0
27	IDE0_DIAG#	28	GND
29	IDE0_DA1	30	P_IDEIRQ
31	GND	32	IDE0_ACK#
33	IDE0_IOCHRDY	34	GND
35	IDE0_IOR#	36	IDE0_IOW#
37	RSV	38	IDE0_REQ
39	IDE0_D0	40	RSV
41	IDE0_D1	42	IDE0_D15
43	RSV	44	IDE0_D14
45	IDE0_D2	46	RSV
47	IDE0_D3	48	IDE0_D13
49	RSV	50	IDE0_D12
51	IDE0_D4	52	RSV
53	IDE0_D5	54	IDE0_D11
55	RSV	56	IDE0_D10
57	IDE0_D6	58	RSV
59	IDE0_D7	60	IDE0_D9
61	RSV	62	IDE0_D8
63	IDE_RESET#	64	RSV



J4 - CompactPCI I/O (PIM / SCSI)

	ROW A	ROW B	ROW C	ROW D	ROW E
1	PIM:61 / D12+	PIM:63 / D12-	GND	PIM:62 / D13+	PIM:64 / D13-
2	PIM:57 / D14+	PIM:59 / D14-	GND	PIM:58 / D15+	PIM:60 / D15-
3	GND	GND	GND	GND	GND
4	PIM:53 / DP1+	PIM:55 / DP1-	GND	PIM:54 / D0+	PIM:56 / D0-
5	PIM:49 / D1+	PIM:51 / D1-	GND	PIM:50 / D2+	PIM:52 / D2-
6	GND	GND	GND	GND	GND
7	PIM:45 / D3+	PIM:47 / D3-	GND	PIM:46 / D4+	PIM:48 / D4-
8	PIM:41 / D5+	PIM:43 / D5-	GND	PIM:42 / D6+	PIM:44 / D6-
9	GND	GND	GND	GND	GND
10	PIM:37 / D7+	PIM:39 / D7-	GND	PIM:38 / DP0+	PIM:40 / DP0-
11	PIM:33 / DIFFSENS	PIM:35 / TERMPW	GND	PIM:34 / TERMPW	PIM:36 / TERMPW
12 13 14	Key Area				
15	PIM:29 / TERMPW	PIM:31 / TERMPW	GND	PIM:30 / TERMPW	PIM:32 / TERMPW
16	PIM:25 / TERMPW	PIM:27 / TERMPW	GND	PIM:26 / ATN+	PIM:28 / ATN-
17	GND	GND	GND	GND	GND
18	PIM:21 / BSY+	PIM:23 / BSY-	GND	PIM:22 / ACK+	PIM:24 / ACK-
19	PIM:17 / RST+	PIM:19 / RST-	GND	PIM:18 / MSG+	PIM:20 / MSG-
20	GND	GND	GND	GND	GND
21	PIM:13 / SEL+	PIM:15 /SEL-	GND	PIM:14 / CD+	PIM:16 / CD-
22	PIM:9 / REQ+	PIM:11 / REQ-	GND	PIM:10 / IO+	PIM:12 / IO-
23	RSV	VCC	GND	RSV	VCC3
24	PIM:5 / D8+	PIM:7 / D8-	GND	PIM:6 / D9+	PIM:8 / D9-
25	PIM:1 / D10+	PIM:3 / D10-	GND	PIM:2 / D11+	PIM:4 / D11-

J12 - COMPACT FLASH (IDE0)

1	D11	2	GND
3	D12	4	D3
5	D13	6	D4
7	D14	8	D5
9	D15	10	D6
11	CS1#	12	D7
13	DMACK#	14	CS0#
15	DMARQ	16	DIOR#
17	PDIAG#	18	DIOW#
19	IRQ14	20	VCC
21	VCC	22	VCC
23	GND	24	GND
25	RESET#	26	GND
27	CSEL	28	A2
29	A1	30	DASP#
31	A0	32	IORDY
33	D0	34	D8
35	D1	36	D9
37	D2	38	D10
39	RSV	40	GND

J9 - Ethernet Management (front)

1	TX+	5	RSV
2	TX-	6	RX-
3	RX+	7	RSV
4	RSV	8	RSV

J10 - Serial 1 - RS-232

1	RTS	5	GND
2	DTR	6	RXD
3	TXD	7	DSR
4	GND	8	CTS

J16 - JTAG Port

1	TDO	2	GND
3	VCC3	4	N.C.
5	N.C.	6	TDI
7	TRST#	8	TCK
9	GND	10	TMS

J11 - USB PORT

1	VCC
2	DATA -
3	DATA+
4	GND

J13 - Hot Swap Switch

1	VCC3E
2	SW_OPEN#
3	SW_CLOSE#

SW1 - RESET Button

1	GND
2	RESET#

J6 - POST CODE

1	VCC3
2	POST:DATA
3	POST:CLOCK
4	GND

: Active low

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

Voltages

VCC = +5V
VCCE = +5V Early
VCC3 = +3.3V
VCC3E =+3.3V Early
+12VE = +12V Early
-12VE = -12V Early

For Technical Support please contact:

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