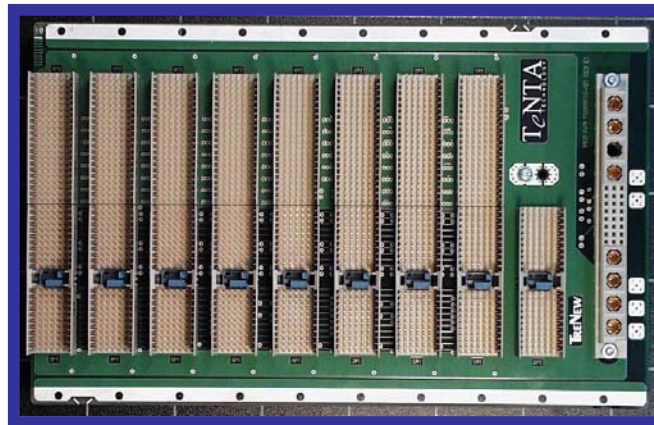




BPLN-0014

**3U CompactPCI
8-slot Backplane**

User Manual



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Document Revisions

Rev	Comment	BY	Date
E1.0	Release	Lior,	02/10/00
E1.1	Review and corrections	Jesus	03/10/00
E2.0	Update document format	TJ	01/14/02

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I. Introduction

This document describes the specifications and functionality of Tenta's 3U CompactPCI Back-plane. The board comprises of 8 slots with two added slots for power supply and a spare slot. The system slot is the right slot. The Back-plane mechanical was designed according to specification PICMG 2.0 R2.1 (June 17th, 1997) , 32 bits bus on P1 and user defined I/O pins on P2 (Long tails and shrouds) .The board as the capability to support Hot Swap as an option (selective assembled connectors).

II. Ordering Information

Part Number	Description
AS00014-01	Backplane, 3U, 8 slot

III. Specifications

A. Physical Specifications

Criteria	Specifications
PCB Dimensions	128.7mm (5.067") Height X 207.28mm (8.160") Depth X 4mm +/- 0.3mm(0.157") Thickness

B. Environmental Specifications

Criteria	Specifications
Operating temperature	-25°C to +85°C
Storage temperature	-40 to +85 °C
Climatic Test Group	IEC 68/1: 25/085/21
Flammability	UL 94 V-0
Vibration Range	
After DIN 41640 part 15	5 grams, 10Hz – 500Hz 50g, 6msec
Shock (10 Pulses x/y/z)	

C. Electrical Specifications

Criteria	Specifications
According to Specification	PICMG 2.0 R2.1
BUS interface	Compact PCI, 32 bit (16 bit data transfer) ck=33MHz
Supply voltage jumper selectable	3.3V/5V
Current Distribution	+5V/GND 12A/Slot +3.3V/GND 14A/Slot
Impedance	65 Ohm +/- 10%
Resistance of Signal Track	< 70m Ohm / slot
Service Life (MTBF, acc MIL HDBK 217F)	700,000 h

D. Power Connectors

Criteria	Specifications
J1 24V input power	+24V / 10A
J3 24V output power (for FAN)	+24V / 5A

IV. Signal Distribution

A. P1 Connectors

P1 connectors routes the cPCI 32 bits bus, all signals are routed according to specification PICMG 2.0 R2.1. P2 connector routes the user defined signals – and can be defined by the user for I/O distribution. The table below describes the occupied pins – all empty pins can be used for I/O distribution **according to specification PICMG 2.0 R2.1 !** (Refer to CompactPCI Short Form Sep 2, 1997 <http://www.picmg.org>)

B. P2 Connectors

The following table shows the P2 Signals for 1P2 – 8P2.

	Z	A	B	C	D	E	F
22	GND						GND
21	GND						GND
20	GND						GND
19	GND						GND
18	GND						GND
17	GND						GND
16	GND						GND
15	GND						GND
14	GND						GND
13	GND						GND
12	GND						GND
11	GND						GND
10	GND						GND
9	GND						GND
8	GND						GND
7	GND						GND
6	GND						GND
5	GND						GND
4	GND						GND
3	GND						GND
2	GND						GND
1	GND	3.3V		3.3V	5V	5V	GND

C. P9 Connector – Power Supply Slot

The following table shows the pinout for P9 – Power Supply Slot. This is an M-Type Connector.

	A	B	C
2	Reserved		
5	Reserved		
8	Reserved		
11	CHASSIS GND		
13	Spare	+3.3VDC	Reserved
14	Reserved	+3.3VDC	Reserved
15	Reserved	+3.3VDC	Reserved
16	Sense 5V COM	+3.3VDC	+3.3VDC
17	Sense +5VDC	+3.3VDC	+3.3VDC
18	+3.3VDC	+3.3VDC	+3.3VDC
19	+12VDC	+12VDC	+12VDC
20	-12VDC	-12VDC	-12VDC
22	+5VDC		
25	5V COM		
28	INPUT +24V		
31	INPUT 24COM		

D. 0P1 Connector – Spare slot

0P1 is a spare slot with connector P1 assembled – Please note that ONLY POWER PINS are connected on this connector and it is not part of the compact PCI bus routing!

The pins are connected according to specification PICMG 2.0 R2.1.

E. Power Connectors:

J1 – 24V INPUT connector AMP 173925-1 :

J1-1 24V_RET

J1-2 24V

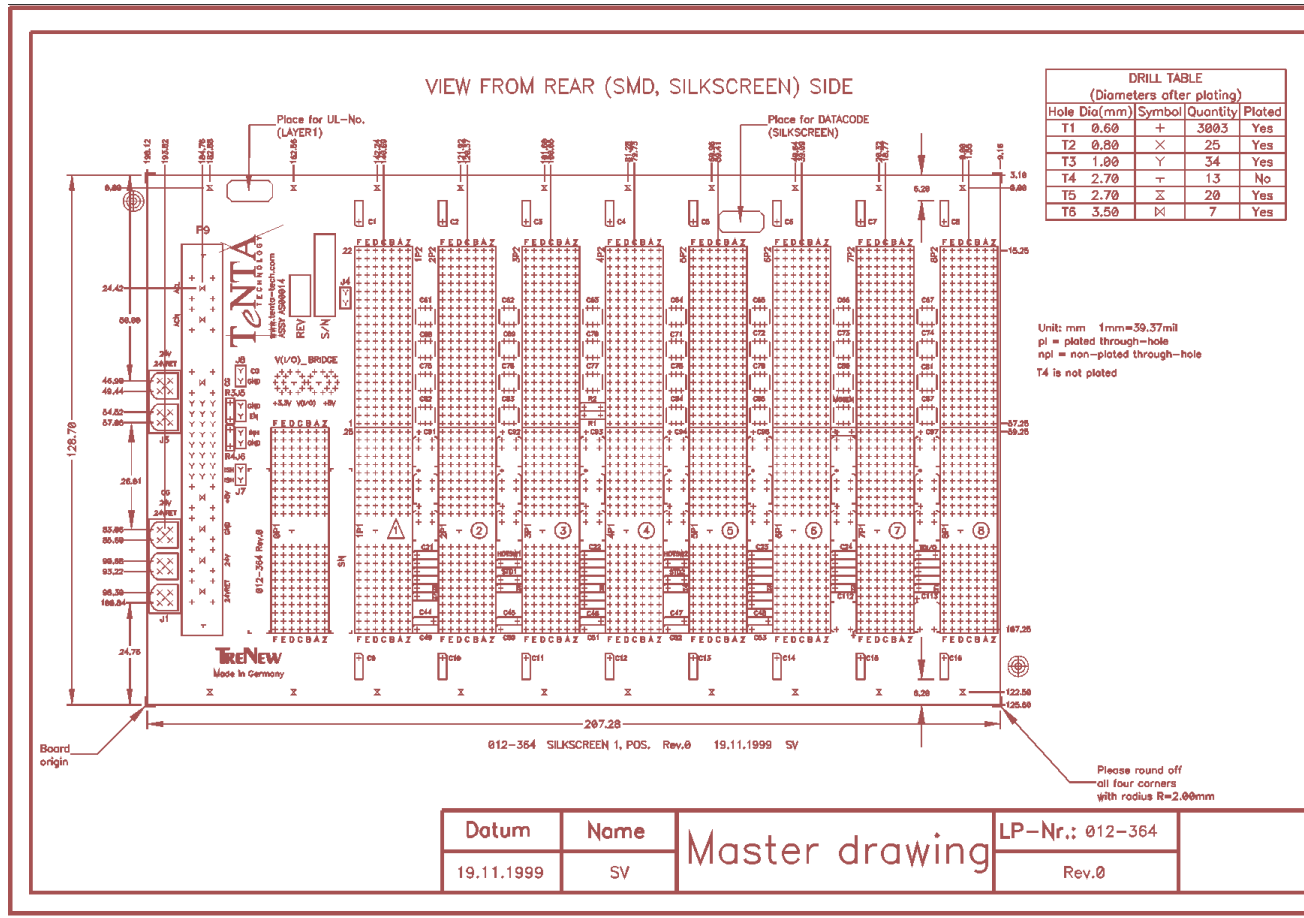
J1-3 CHASSIS GND

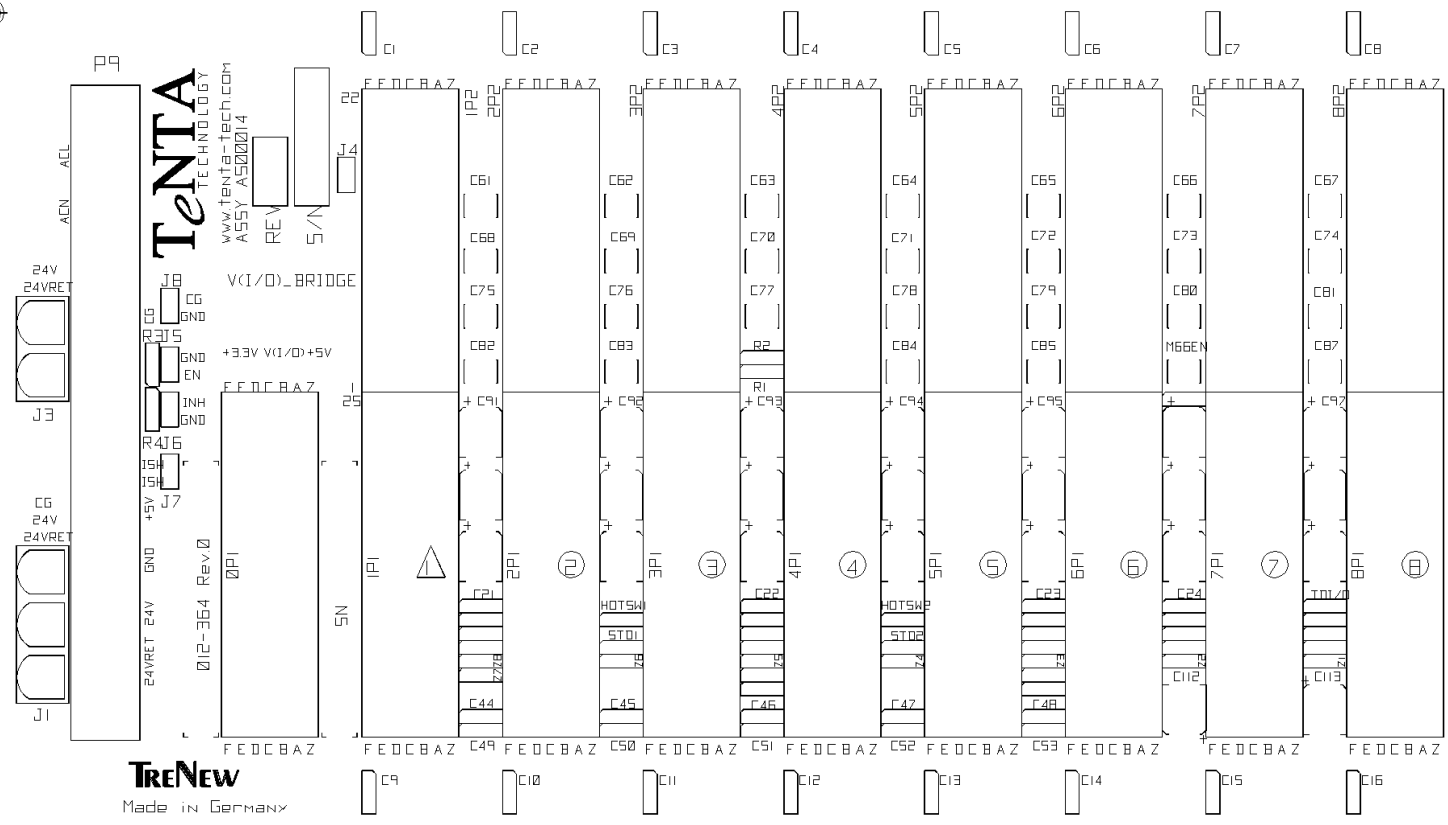
J3 – 24V OUTPUT connector AMP 173924-1 (Used for FAN power) :

J1-1 24V_RET

J1-2 24V

V. Mechanical Drawings:





012-364 SILKSCREEN 1, P88v.0 19.11.1999 5V

VI. Warranty

Tenta Technology warrants the original purchaser for two years from the date of delivery for any defect in the product, material or workmanship. Product should be used in suitable installation environment and for the purposes it was designed, any damages caused by natural disasters such as fire, flood, wind and lightning are not covered. For more information, please contact Tenta Technology customer support (see locations on front page). Tenta Technology hardware and software are not intended for use in any manner when human life or safety is at risk and not for use in life support equipment.