

## **EATCA-LB1, ATCA load blade**

### **General Description:**

The ATCA load blade is the best way to test and simulate thermal floating and hot spots in an ATCA system according to power consumption of each board. The board is loadable over frontpanel interface up to 600 watt. It is divided in four power segments with full software controlled load power. With a rich set of sensors and indications the load blade could be controlled over remote via IP and or serial communication.

### **Picture**



### **Key Features:**

- ATCA-compliant load blade
- Up to 600W front blade load
- IP and Serial communication for controlling application
- Rich set of sensors and indications
- Full software control over the load power consumption for each of the four power segments

Description		
<b>Architecture</b>		
Physical	Dimensions	280 x 322 mm (ATCA compliant)
Standard	ATCA 3.0 Specification	
<b>Configuration</b>		
Supply voltage	Input voltage	48/60V nominal Input voltage; 40V to 72V voltage range
EMC control	Input filter & surge protection to meet EMC regulations	
Surge control	Inrush current control to prevents high current surges during hot insertion and input voltage abrupt changes	
Power circuits	Load	Up to 600W per front blade Load power accuracy: better than 2%
	Structure	Four load sectors; each sector is individually controlled by software; heatsink and over temperature sensor per segment
<b>Software</b>		
Communication	Serial and IP via Ethernet and USB by front panel connectors	
Input parameter	Input voltage A & B Input current per power segment Air temperature per power sector Power sector temperature Status LED	
Control parameter	Dissipated power per segment; 10W resolution Power source A and B CPU reset Temperature upper thresholds	
<b>Interfaces</b>		
RS 232	Serial Interface	
100/1000 Base T	External Management	
USB	Management	
Voltage testing point	-48 V measurement	
Voltage outlet	External load	
IPMB	ATCA IPMB Access through Shelf Manager (to be implemented)	
<b>Sensors and Indications</b>		
LCD Panel	All parameters are displayed on a front-panel LCD	
Temperature	Four power sector temperature sensors	
Status LED	Blade Status LED: green / red – OK / faulty	
On/off switch	Switch to turn on and off the load	
<b>Hardware protection</b>		
Over current	Input over current threshold	
Voltage lockout	Input Over voltage and under voltage thresholds	
Inrush current	Inrush current suppression	
Over temperature	Over temperature protection; Trip temperature: +85°C	
<b>Others</b>		
Environmental	Temperature Range	Operation: -5°C +55°C Storage: -40°C +70°C
	Humidity	5% to 95%, non-condensing
	Wight:	3,1 kg
<b>Ordering Information</b>	<b>EATCA-LB1</b>	

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Supported by: eicSys Hamburg

Specification is subject to change without further notice

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