

# Technical Data **Schroff**<sup>®</sup>

## Schroff CPCI - Backplanes

part# 23006 – 7nn & 8nn

|   |                 |                   |
|---|-----------------|-------------------|
| <b>Mechanical and Climatic Parameters</b> | <b>Standard</b> | <b>on request</b> |
|---|-----------------|-------------------|

|   |  |                         |
|---|--|-------------------------|
| Operating Temperature   | -40°C - +105°C   | -55°C - +155°C          |
| Storage Temperature   | -55°C - +105°C   | -55°C - +155°C          |
| Humidity<br>conformal coating   | max 95%, not condensing  | on request              |
| Flammability:<br><ul style="list-style-type: none"> <li>• PCB, Connectors</li> <li>• Ceramic caps</li> </ul>  | UL 94 V-0<br>fire-proof  |                         |
| Connectors<br><ul style="list-style-type: none"> <li>• Performance level per IEC 61076-4-101</li> <li>• Mechanical Durability (Mating Cycles)</li> <li>• Total Insertion and Extraction Force (mating)</li> </ul> | IEC 61076-4-101<br>(HardMetric 2mm Grid)<br>level 2<br>> 250 cycles<br>< 0,7 N / Pin | level 1<br>> 500 cycles |
| Vibration<br>acc. DIN 41640 Part 15   | 10Hz – 500Hz<br>5g rms   | 5Hz – 2000Hz<br>20g rms |
| Shock (10 pulses each direction x,y,z)  | 10g, 6ms   |                         |
| Low Pressure / Altitude<br>(max Board voltage per single isolation gap doesn't exceed 12V)  | no restrictions  |                         |
| Construction:   | 10 - Layer Stripline   |                         |
| Dimensions (mm)<br><ul style="list-style-type: none"> <li>• Width (pl. see Dwg.)</li> <li>• Height 3U / 6U</li> <li>• Thickness</li> </ul>  | 20,32mm x # Slots-1mm<br>128,7mm / 262,05 mm<br>3,2 mm +/- 0,2 mm                    |                         |

### Electrical Parameters:

|   |                    |                             |
|---|--------------------|-----------------------------|
| Specifications  | PICMG 2.0 R3.0     | CPCI Core Specification     |
|   | PICMG 2.1          | CPCI Hot Swap Specification |
|   | PICMG 2.6          | Bridging Specification      |
|   | PICMG 2.9          | System Management Bus Spec. |
|   | PICMG 2.10         | Keying Specification        |
| Service Life: MTBF,<br>acc. to MIL HDBK 217F,<br>cond.: 25°C, ground, benign<br>6U 8-Slot | more than 600.000h |                             |
| Characteristic Impedance<br>PCI traces  | 65 Ω ± 10 %        |                             |
| Ohmic Resistance of Signal Tracks<br>PCI traces   | < 95mΩ/Slot        |                             |
| Hot Swap  | supported          |                             |

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### Electrical Parameters (II):

|  |   |
|--|---|
| Termination (only 8 Slot Backplanes)   | Schottky diodes (on request), pluggable termination board   |
| Power input  | <ul style="list-style-type: none"> <li>• Power bugs for wiring or</li> <li>• special Adapter Board to use an ATX cable; this board can act as a power distribution star point within the Systems</li> </ul>   |
| max. Current carrying Capacity <ul style="list-style-type: none"> <li>• 5V/GND</li> <li>• 3,3V/GND</li> </ul>  | 8 A per Slot<br>10 A per Slot   |
| max. Voltage Drop between any two points on the backplane on +5V or +3,3V  | < 40mV  |
| VI/O <ul style="list-style-type: none"> <li>• bridging (default)</li> <li>• on request</li> </ul>  | +5V (default), blue key; 3,3V optional (yellow key) <ul style="list-style-type: none"> <li>• field changeable, using M4 screws and a bus bar</li> <li>• fixed during bp assy by using a Power Bug cable using Faston crimp contacts</li> </ul>                        |
| Clock frequency  | 33 MHz<br>66 MHz up to 5 Slots;<br>on higher Slot number M66EN can be enabled for test purposes (cut a copper link on rear)   |
| PCI Bus Width  | 32bit; 64bit, check part#   |
| Data Transfer Rate (peak) <ul style="list-style-type: none"> <li>• 33 MHz</li> <li>• 66 MHz</li> </ul>   | 132 Mbyte/s (32 bit) / 264 Mbyte/s (64 bit)<br>264 Mbyte/s (32 bit) / 528 Mbyte/s (64 bit)  |
| Bridging of Backplanes<br>clock frequency:<br>primary / secondary <ul style="list-style-type: none"> <li>• 33 MHz / 33MHz</li> <li>• 66 MHz / 33MHz</li> <li>• 66 MHz / 66MHz</li> </ul> | backplane of slot numbers equal or higher than 4 up to 7 Slots can be bridged<br>primary / secondary <ul style="list-style-type: none"> <li>• any slot number as primary and secondary b/p</li> <li>• 4 Slots / any Slot number</li> <li>• 4 Slot / 4 Slot</li> </ul> |
|  |   |