Prototype backplane assembly:

The space between two thin vetronite plates of the backplane wall are filled with foam (top or bottom view w.r.t. the cooling box backplane). In this example, we only used 2 wire-wrap connectors (one of which is buried in the foam), which makes a wall of 20mm. In the cooling box, we will use an additional buried connector, resulting in a wall thickness of 35mm.
Connectors needed (for VUTRI card):

Open (2 wire-wrap socket version). For the cooling box assembly, an additional wire-wrap socket (RS 186-7416) will be added in the center.

Mated

Finally, two wire-wrap sockets will be built into the foamed backplane wall.
30pin header connectors (for auxiliary):
### Technical data (for VUTRI card connector, 96 pins):

<table>
<thead>
<tr>
<th></th>
<th>1 x Header C96-M-abc</th>
<th>2 x Socket (wall 20mm) or 3 x Socket (wall 35mm) C96-F-abc-13mm</th>
<th>1 x Frame</th>
<th>1 x Socket R96-F-abc</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS part # (ERNI)</td>
<td>186-7400</td>
<td>186-7416</td>
<td></td>
<td>186-9440</td>
</tr>
<tr>
<td>ERNI part #</td>
<td>533402</td>
<td>543402</td>
<td></td>
<td>004516</td>
</tr>
<tr>
<td>HARTING part # (class 2)</td>
<td>090319666951</td>
<td>09032966821 or 09032966878 (gold plated)</td>
<td>09030009912 (for 1.6mm Vetronite)</td>
<td>09732966801</td>
</tr>
<tr>
<td>Pins</td>
<td>90° solder</td>
<td>wire-wrap</td>
<td></td>
<td>90° solder</td>
</tr>
<tr>
<td>Pin length</td>
<td>3mm</td>
<td>13mm</td>
<td></td>
<td>3mm</td>
</tr>
<tr>
<td>Pin diameter</td>
<td>0.6mm</td>
<td>0.6mm</td>
<td></td>
<td>0.28 x 0.7mm</td>
</tr>
</tbody>
</table>

#### Picture

- ![Connector Diagram](https://via.placeholder.com/150)
- ![Connector Diagram](https://via.placeholder.com/150)

### Technical data (for auxiliary connector, 30 pins):

<table>
<thead>
<tr>
<th></th>
<th>1 x Header C/3-30-M-abc</th>
<th>2 x Socket or 3 x Socket C/3-30-F abc-13mm</th>
<th>1 x Frame</th>
<th>1 x Socket R/3-30-F-abc</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS part #</td>
<td>186-9282</td>
<td>186-9298</td>
<td>none found, could cut 96 pin type</td>
<td>(discont’d)</td>
</tr>
<tr>
<td>ERNI part #</td>
<td>424189</td>
<td>424186</td>
<td></td>
<td>424192</td>
</tr>
<tr>
<td>Pins</td>
<td>90° solder</td>
<td>wire-wrap</td>
<td></td>
<td>90° solder</td>
</tr>
<tr>
<td>Pin length</td>
<td>3mm</td>
<td>13mm</td>
<td></td>
<td>3mm</td>
</tr>
<tr>
<td>Pin diameter</td>
<td>0.6mm</td>
<td>0.6mm</td>
<td></td>
<td>0.28 x 0.7mm</td>
</tr>
</tbody>
</table>
### Technical data (for VUTRI card connector, 64 pins):

<table>
<thead>
<tr>
<th>1 x Header C64-M-ac</th>
<th>2 x Socket (wall 20mm) or 3 x Socket (wall 35mm) C64-F-ac-13mm</th>
<th>1 x Frame</th>
<th>1 x Socket R64-F-ac</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS part # (ERNI)</td>
<td>186-7359</td>
<td>186-7438</td>
<td>186-9434</td>
</tr>
<tr>
<td>ERNI part #</td>
<td>533401</td>
<td>013962</td>
<td>004519</td>
</tr>
<tr>
<td>HARTING part #</td>
<td>09031646921 or 09032646821 or 09032646878 (gold plated)</td>
<td>09030009912 (for 1.6mm Vetronite)</td>
<td>09732646801</td>
</tr>
<tr>
<td>Pins</td>
<td>90° solder</td>
<td>wire-wrap</td>
<td>90° solder</td>
</tr>
<tr>
<td>Pin length</td>
<td>3mm</td>
<td>13mm</td>
<td>3mm</td>
</tr>
<tr>
<td>Pin diameter</td>
<td>0.6mm</td>
<td>0.6mm</td>
<td>0.28 x 0.7mm</td>
</tr>
</tbody>
</table>

**Picture**

![Connector Diagram](image)