Plexon MAP Circuit Diagram - prior to April 2003

**Preamp Table**

<table>
<thead>
<tr>
<th>Board</th>
<th>Gain</th>
<th>Low-cut</th>
<th>High-cut</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 sp-r</td>
<td>100</td>
<td>150 Hz-1p</td>
<td>9 KHz-1p</td>
</tr>
<tr>
<td>16 fp</td>
<td>500</td>
<td>3 Hz-1p</td>
<td>90 Hz-1p</td>
</tr>
<tr>
<td>16 wb</td>
<td>500</td>
<td>3 Hz-1p</td>
<td>9 KHz-1p</td>
</tr>
</tbody>
</table>

(All boards are 16-channel in spike (sp), field potential (fp), or wide band (wb) configurations)

**Gain Table**

<table>
<thead>
<tr>
<th>Option</th>
<th>Device #1</th>
<th>Device #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>HST gain</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>PBX gain</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>SIG gain</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

**Digital Input**

1) 14 individual TTL lines
2) 8 individual TTL lines, 8-bit word
3) 15-bit word - 150 µsec resolution

**A/D Converter**

- 40 kHz (25 µsec)
- To DSP board

**DSP board**

- Digital
- To OUT board (analog output)

**Digital Output**

- 8 channels per DSP chip
- Up to 4 DSP chips per DSP board

**Software**

- Control Clients (visualization and analysis)
- Data Clients
  - Sort Client
  - FEC
  - PlexNet
  - PEC
  - GridMon

- Nex

- Run only one copy at a time
- Run multiple copies

**HST**

- G = 1 or 20 (see Gain Table)
- Connected together in headset

**PBX**

- Low-cut (see Preamp Table)
- Cross-point switch (optional with 16 sp-r board) (inside PBX box)
- Ref tied to neg. input on diff op-amp

**SIG**

- G = 1, 10, 20 (see Gain Table)
- Software programmable gain

- A/D Converter 40 kHz (25 µsec)
- To DSP board

**Headset cable**

**Twisted-pair ribbon cable**