40GE 10km SMF PMD
Gen1 Serial Cost Analysis

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### Gen1 40GE-Serial cost analysis

2008 OC-768 VSR 40G Serial 300-pin

<table>
<thead>
<tr>
<th>Component</th>
<th>2008 OC-768 VSR</th>
<th>Projected Cost Reduction</th>
<th>2010 Gen1 40GE-LR</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA Driver</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EML TOSA</td>
<td>20</td>
<td>mori_01_0809, p.10: 75%</td>
<td>10</td>
</tr>
<tr>
<td>PIN ROSA</td>
<td>20</td>
<td>0%</td>
<td>20</td>
</tr>
<tr>
<td>Ser Des ICs</td>
<td>30</td>
<td>mori_01_0809, p.10: 85%</td>
<td>5</td>
</tr>
<tr>
<td>All other</td>
<td>10</td>
<td>50%</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
<td><strong>60%</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

Assume additional typical 1.4x cost drop for other effects.
Discussion

- Gen1 40GE-Serial 2010 cost (per previous page using individual component cost drops in mori_01_0908, p.10, and other effects)
  \[= \frac{2008 \text{ OC-768 VSR cost}}{(2.5x \times 1.4x)}\]
  \[= \frac{40 \times 10GE \text{ LR XFP 2008 cost}}{(2.5x \times 1.4x)}\]
  \[= 11.5x \times 10GE \text{ LR XFP 2008 cost}\]

- Gen1 40GE-Serial 2010 cost (per total cost in mori_01_0908, p.9)
  \[= 5.9x \times 10GE \text{ LR XFP 2010 cost}\]
  \[= 4.2x \times 10GE \text{ LR XFP 2008 cost}\]

- The total cost projections for Gen1 40GE-Serial in mori_01_0908, p.9 are a factor of \(~3x\) greater than supported by individual component cost drops in mori_01_0908, p.10, and from technical standpoint in mori_01_0908, p.13.
Appendix 1: 40GE 10km SMF PMD Alternatives Cost

All costs relative to 2008 10GE LR XFP cost (LC = Lightcounting)