Low-Cost 10Gbps Tunable SFP+

Features
- SFP+ duplex
- λ-tunable range over 35nm in C-band
- λ-locking accuracy within ±25 pm
- 10 Gbps over 40km
- AMCC based on 500kHz pilot tone

Applications
- 10Gbps Ethernet
- 4G/5G LTE fronthaul

Availability
- Engineering samples are available.
- Commercial samples in 2Q 2020

<table>
<thead>
<tr>
<th>Items</th>
<th>Unit</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuning range (C-band)</td>
<td>nm</td>
<td>35</td>
<td></td>
<td>100GHz, 40ch DWDM</td>
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</tr>
<tr>
<td>DWDM channel distance</td>
<td>nm</td>
<td>0.8/0.4</td>
<td></td>
<td>next page for 0.4nm ch. distance</td>
<td></td>
</tr>
<tr>
<td>Data rate</td>
<td>Gbps</td>
<td>1</td>
<td>11</td>
<td></td>
<td>Multi-rate (1Gbps~10Gbps)</td>
</tr>
<tr>
<td>Tx power</td>
<td>dBm</td>
<td>0</td>
<td>5</td>
<td></td>
<td>Power Flatness ≤ 3dB</td>
</tr>
<tr>
<td>Rx sensitivity</td>
<td>dBm</td>
<td></td>
<td>-21</td>
<td></td>
<td>2^{31}-1, BER $10^{-12}$, 20km</td>
</tr>
<tr>
<td>Wavelength accuracy</td>
<td>pm</td>
<td>-25</td>
<td></td>
<td>+25</td>
<td></td>
</tr>
<tr>
<td>SMSR</td>
<td>dB</td>
<td>50</td>
<td></td>
<td></td>
<td>OSA res. 20pm</td>
</tr>
<tr>
<td>Power supply voltage</td>
<td>V</td>
<td>3.2</td>
<td>3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power consumption</td>
<td>W</td>
<td></td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating case temp.</td>
<td>°C</td>
<td>-40</td>
<td>85</td>
<td></td>
<td>Min @ $T_A$, Max @ $T_{case}$</td>
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Low-Cost 25Gbps Tunable DWDM SFP+

Features
• Extended SFP+ duplex
• λ-tunable range over 30nm in O-band
• λ-locking accuracy within ±25 pm (EOL)
• transmission distance of 20 km @ 26 Gbps
• AMCC based on 500kHz pilot tone

Applications
• 25Gbps Ethernet
• 5G LTE fronthaul

Availability
• Engineering samples in 3Q 2020
• Commercial samples in 4Q 2020

Preliminary specifications

<table>
<thead>
<tr>
<th>Items</th>
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<th>Max</th>
<th>Remark</th>
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<tr>
<td>Tuning range (O-band)</td>
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<td>0.8/0.4</td>
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<td>λ center = 1291nm</td>
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<td>DWDM channel distance</td>
<td>nm</td>
<td>0.8/0.4</td>
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<td>Next page for 0.4nm ch. distance</td>
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<tr>
<td>Data rate</td>
<td>Gbps</td>
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<td>Tx power</td>
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<tr>
<td>Rx sensitivity</td>
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<td>Wavelength accuracy</td>
<td>pm</td>
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