New Product Announcement
PI3DPX1203B

8.1 Gbps DisplayPort 1.4 HBR3 Linear ReDriver

PI3DPX1203B is a four channel DisplayPort linear ReDriver with maximum data rate up to 8.1Gbps to support various DisplayPort transmission modes including RBR, HBR, HBR2 and HBR3.

The linear ReDriver design provides programmable CLTE equalization, Flat Gain and Swing controls for channel loss compensation to remove ISI jitter and extend channel reach.

The chip is transparent to channel link training and performs ultra-low signal latency to achieve good signal integrity performance and system compatibility.

Users can select I2C or Pin-Strapping for chip control and setting due to different system design preference.

The Diodes Advantage

- **Support all the VESA DisplayPort transmission modes**
  RBR (1.62Gbps), HBR (2.7Gbps), HBR2 (5.4Gbps) and HBR3 (8.1Gbps)
- **High speed signal integrity settings**
  Supports receiver side CLTE and output side Flat Gain and Swing settings
- **Programmable and flexible controls**
  I2C or Pin-strapping control
- **Present detection pin input**
  Power down mode support with connector detection pin input
- **Transparent and ultra low latency Linear ReDriver channels**
  Performs good signal integrity and compatibility for system design

Applications

- Laptop, Desktop and AIO PCs
- Display monitors and TVs
- Virtual Reality devices
- Docking stations
- PC peripherals
- Active cables

www.diodes.com
Typical Application Circuit

Product Portfolio

<table>
<thead>
<tr>
<th>Part No</th>
<th>Operation Voltage</th>
<th>Channels</th>
<th>Data Rate (Gbps)</th>
<th>Lanes/Ports</th>
<th>Output Swing Max(mV)</th>
<th>Programming Interface(s)</th>
<th>Operation Temperature</th>
<th>Packages</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI3DPX1203BZLE</td>
<td>3.3V</td>
<td>4</td>
<td>8.1</td>
<td>4</td>
<td>1370</td>
<td>I2C and Pin-Strapping</td>
<td>0 ~ +70°C</td>
<td>32-pin TQFN</td>
</tr>
<tr>
<td>PI3DPX1203BZHE</td>
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<td>8.1</td>
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<td>1370</td>
<td>I2C and Pin-Strapping</td>
<td>0 ~ +70°C</td>
<td>42-pin TQFN</td>
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<tr>
<td>PI3DPX1203BZHIE</td>
<td>3.3V</td>
<td>4</td>
<td>8.1</td>
<td>4</td>
<td>1370</td>
<td>I2C and Pin-Strapping</td>
<td>-40 ~ +85°C</td>
<td>42-pin TQFN</td>
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</table>

Ordering Information

<table>
<thead>
<tr>
<th>Ordering Number</th>
<th>Package Code</th>
<th>Package Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI3DPX1203BZLEX</td>
<td>ZL</td>
<td>32-pin, Very Thin Quad Flat No-Lead (TQFN) (3x6x0.8mm)</td>
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<tr>
<td>PI3DPX1203BZHEX</td>
<td>ZH</td>
<td>42-pin, Very Thin Quad Flat No-Lead (TQFN) (3.5x9.0x0.84mm)</td>
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<tr>
<td>PI3DPX1203BZHIE</td>
<td>ZH</td>
<td>42-pin, Very Thin Quad Flat No-Lead (TQFN) (3.5x9.0x0.84mm)</td>
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Further Information
https://www.diodes.com/part/PI3DPX1203B