



## 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

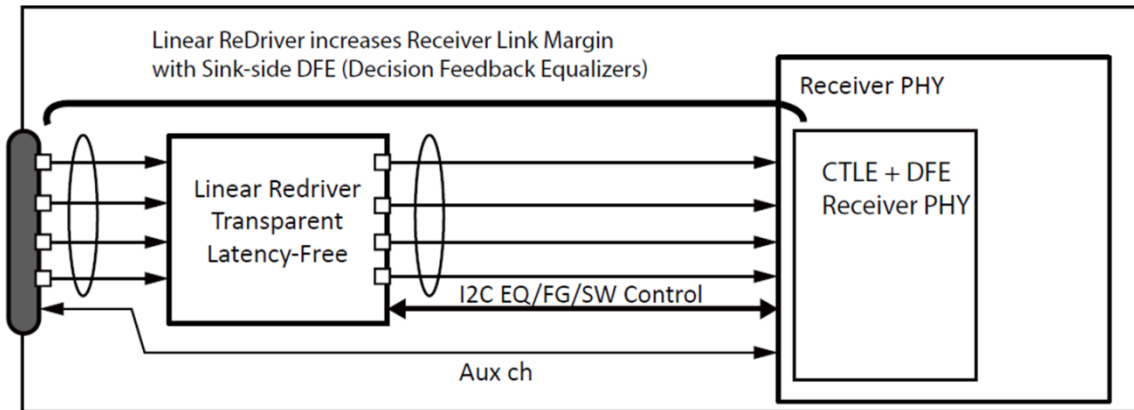
- **Support all the VESA DisplayPort transmission modes**  
RBR (1.62Gbps), HBR (2.7Gbps), HBR2 (5.4Gbps) and HBR3 (8.1Gbps)
- **High speed signal integrity settings**  
Supports receiver side CLTE and output side Flat Gain and Swing settings
- **Programmable and flexible controls**  
I2C or Pin-strapping 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



### Typical Application Circuit



### Product Portfolio

Part No	Operation Voltage	Channels	Data Rate (Gbps)	Lanes/Ports	Output Swing Max(mV)	Programming Interface(s)	Operation Temperature	Packages
PI3DPX1203BZLE	3.3V	4	8.1	4	1370	I2C and Pin-Strapping	0 ~ +70°C	32-pin TQFN
PI3DPX1203BZHHE	3.3V	4	8.1	4	1370	I2C and Pin-Strapping	0 ~ +70°C	42-pin TQFN
PI3DPX1203BZHIE	3.3V	4	8.1	4	1370	I2C and Pin-Strapping	-40 ~ +85°C	42-pin TQFN

### Ordering Information

Ordering Number	Package Code	Package Description
PI3DPX1203BZLEX	ZL	32-pin, Very Thin Quad Flat No-Lead (TQFN) (3x6x0.8mm)
PI3DPX1203BZHHEX	ZH	42-pin, Very Thin Quad Flat No-Lead (TQFN) (3.5x9.0x0.84mm)
PI3DPX1203BZHIEEX	ZH	42-pin, Very Thin Quad Flat No-Lead (TQFN) (3.5x9.0x0.84mm)

### Further Information

<https://www.diodes.com/part/PI3DPX1203B>