



New Product Announcement

PI2MEQX2505

1.8V, 2.5Gbps, Four Data Lane, MIPI D-PHY ReDriver Featuring Low-Power Operation for Mobile and IoT Applications

The DIODES™ PI2MEQX2505 is a 1.8V low-power, 2.5Gbps MIPI ReDriver™ that supports MIPI D-PHY 1.2 specification.

The device has four differential channels providing programmable receiver equalization, output swing, and pre-emphasis. The equalization is controlled by either I2C or pin strap control and optimizes performance over a variety of physical media by reducing inter-symbol interference.

The PI2MEQX2505 is used to extend PCB trace lengths while minimizing power consumption with minimal latency.

To support Ultra-Low Power (ULPS), LP, and Sub-mW shutdown states the PI2MEQX2505 has four power-modes of operation.

Operating from a supply voltage of 1.8V, the device operates over the industrial temperature range of -40°C to +85°C.

The PI2MEQX2505 is available in the tiny TQFN-28L (ZH) package occupying only 3.5mm x 5.5mm of board space.

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The DIODES™ Advantage

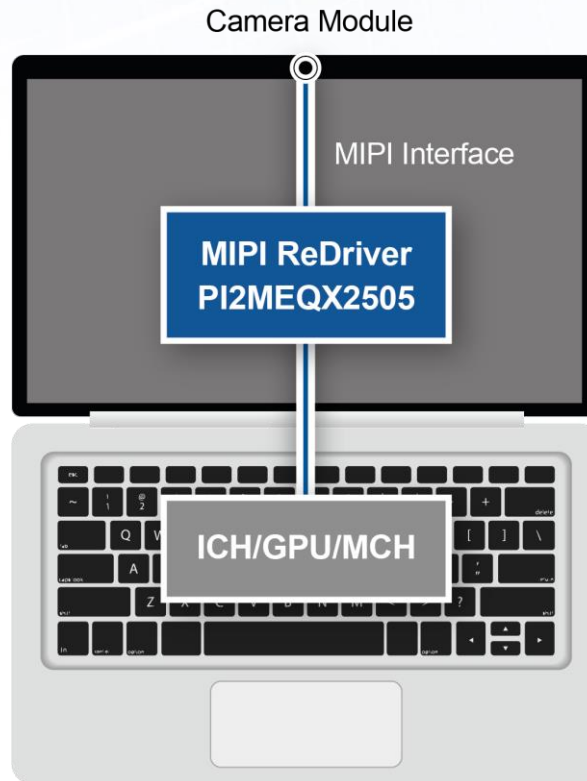
Low-power MIPI ReDriver improves signal integrity of high-speed (up to 2.5Gbps) D-PHY data paths.

- **Up to 2.5Gbps, Four Data Lanes Equalizer + One Clock Lane**
Supports MIPI D-PHY 1.2 specification
- **Low-system power consumption 4-modes of operation (Active: 135mW; Low Power: 5mW; Ultra-Low Power: 2mW, Standby: 0.2mW)**
Supports ULPS, LP, and sub-mW shutdown states
- **Programmable Receiver Equalization, Output Swing, and Pre-Emphasis**
Extends PCB trace lengths while reducing signal latency and minimizing cost and power
- **Tiny TQFN-28L (ZH) Package (3.5mm x 5.5mm)**
Supports high density channel routing

Applications

- Laptop PCs
- All-In-One PCs
- Desktop PCs
- IoT
- Industrial PCs
- Embedded systems

Typical Application



MIPI ReDriver Portfolio

Part Number	Description	Package
PI2MEQX2505	MIPI D-PHY ReDriver, Up to 2.5Gbps data rate, 1.8V, I2C/Pin strap, four data lanes + one clock lane	TQFN-28L (ZH)

Ordering Information

Orderable Part Number	Compliance (Only Automotive Supports PPAP)	Package Code	Package	Moisture Sensitivity	Packing	
					Quantity	Carrier
PI2MEQX2505ZHEX	Standard	ZH	TQFN-28L (3.5 mm x 5.5 mm)	MSL-1	3,500	13" Tape & Reel