The PI4ULS5V106 supports up to 100MHz up translation and greater than 100MHz down translation at ≤ 30pF cap load and up to 40MHz up/down translation at 50pF cap load which allows the LSF family to support more consumer or telecom interfaces (MDIO or SDIO). It has bi-directional voltage translation without the need for DIR pin which minimizes system effort (for PMBus, I²C, or SMbus).

The PI4ULS5V106 is 5V tolerant on I/O port which makes it compatible with TTL levels in industrial and telecom applications.

Different voltage translation levels can be used on each channel for increased flexibility.

### The Diodes Advantage

- **Supports up to 100MHz**
  - High Performance
- **Allows bi-directional voltage translation between 0.95V~3.3V**
  - Wide Range Voltage Support
- **Low Standby Current**
  - Power Efficiency
- **Low $R_{DS(ON)}$ reduces signal distortion**
  - Higher Quality Signals
- **I/O port tolerant to SV signals allowing TTL signals interface**
  - Flexible Design
- **Package: UQFN3X3-16**
  - Industry-Standard Packages

### Applications

- Mobile phones and other portable devices
- SMBus, PMBus and I²C
- GPIO, MDIO, SDIO, SVID, UART and SPI
**Typical Application Circuit**

![Typical Application Circuit](image)

**Ordering Information**

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<th>Part Numbers</th>
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**Cross Reference**

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<td>NVT2006BS (HVQFN16)</td>
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For more information: [https://www.diodes.com/part/PI4ULS5V106](https://www.diodes.com/part/PI4ULS5V106)