



Part Number: ISP1105BSTM

General Description:

The ISP1105 Universal Serial Bus (USB) transceiver is compliant with *Universal Serial Bus Specification Rev. 2.0*. It can transmit and receive serial data at both full-speed (12 Mbit/s) and low-speed (1.5 Mbit/s) data rates. The ISP1105 can be used as a USB device transceiver or a USB host transceiver.

It allows USB application-specific ICs (ASICs) and programmable logic devices (PLDs) with power supply voltages from 1.65 V to 3.6 V to interface with the physical layer of the Universal Serial Bus. It has an integrated 5 V-to-3.3 V voltage regulator for direct powering via the USB supply V_{BUS} .

ISP1105 allows single-ended and differential input modes selectable by a MODE input and it is available in HVQFN16 and HBCC16 packages.

ISP1105 is ideal for portable electronics devices such as mobile phones, digital still cameras, personal digital assistants (PDA) and information appliances (IA).

Key Features:

- Complies with *Universal Serial Bus Specification Rev. 2.0*
- Can transmit and receive serial data at both full-speed (12 Mbit/s) and low-speed (1.5 Mbit/s) data rates
- Integrated bypassable 5 V-to-3.3 V voltage regulator for powering via USB V_{BUS}
- V_{BUS} disconnection indication through VP and VM
- Used as a USB device transceiver or a USB host transceiver
- Stable RCV output during SE0 condition
- Two single-ended receivers with hysteresis
- Low-power operation
- Supports an I/O voltage range from 1.65 V to 3.6 V
- ± 12 kV ESD protection at the D+, D-, $V_{CC(5.0)}$ and GND pins
- Full industrial operating temperature range from -40 °C to $+85$ °C
- Available in small HBCC16 and HVQFN16 lead-free and halogen-free packages.