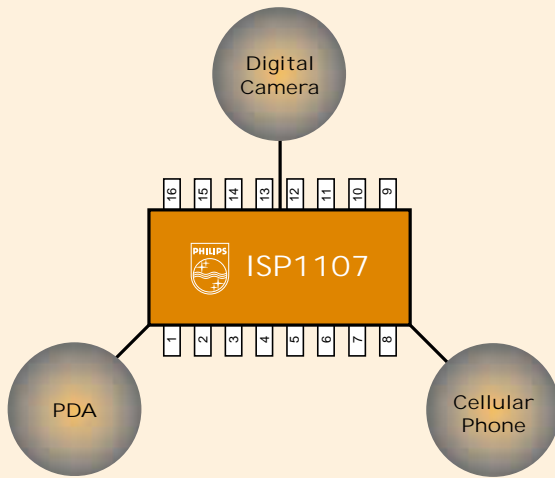


ISP1105/6/7

USB Physical Layer Transceiver for System-on-Chip Applications



ISP1107 is a physical layer Universal Serial Bus (USB) transceiver solution ideal for system-on-chip (SOC) applications. Its ability to do a voltage down to 1.65V and its small chip-scale package (CSP) makes ISP1107 particularly suitable for low-power portable electronics/communications devices. ISP110x has an integrated 5V-to-3.3V voltage regulator.

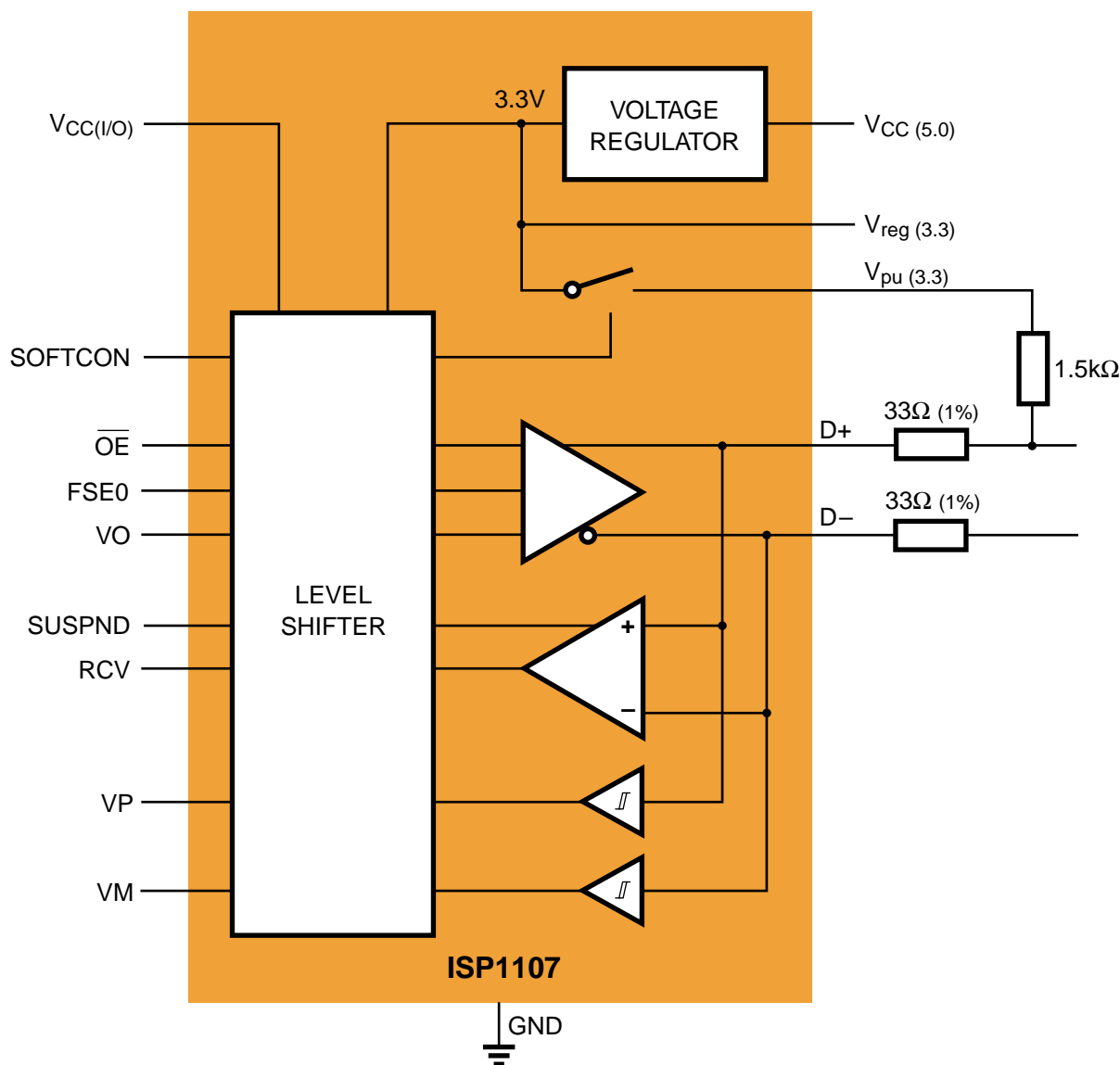
Features

- USB Specification Rev. 2.0 (full-speed) compliant
- Variable I/O voltage levels: 1.65 to 3.6V
- Available in TSSOP16 and HBCC16 packages
- ISP1105---single-ended or differential (selectable)
ISP1106---differential
- ISP1107---single-ended
- Low-power operation
- Software-controlled USB connection (SOFTCONNECT™)
- Slew-rate-controlled differential data driver
- Integrated 5V-to-3.3V voltage regulator
- Two single-ended receivers with hysteresis
- Compatible with Serial Interface Engine Specification from USB Implementers' Forum
- Supports full-speed (12 Mbit/s) and low-speed (1.5 Mbit/s) serial data rate
- Full industrial operating temperature range: -40°C to 85°C

ISP1105/6/7 is Philips Semiconductors' low-risk generic Universal Serial Bus (USB) analog transceiver solution ideal for system-on-chip portable electronics/communications devices such as mobile phones, personal digital assistants, and digital cameras.

ISP1107 allows USB application-specific ICs (ASICs) and programmable logic devices (PLDs) to interface with the physical layer of the USB. It can operate at I/O levels as low as 1.65V, and up to 3.6V. Their availability in two packages TSSOP16 and HBCC16, greatly reduces the amount of space needed, make ISP1105/6/7 perfect for small form-factor systems with low operating voltages and low power, such as portable electronics/communications devices.

The integrated 5V-to-3.3V voltage regulator lowers system costs by eliminating the need for an external regulator. It supports transmitting and receiving serial data at both full speed (12 Mbit/s) and low speed (1.5 Mbit/s) data rates. ISP1105/6/7 variously supports low-power single-ended or differential input receiver interface in 'suspend' mode operation. The pin configuration conforms to the Serial Interface Engine Specification from the USB Implementers' Forum, allowing the designer to make USB-compatible devices with off-the-shelf logic and to easily modify and update applications.



For more information, contact your Philips Semiconductors distributor or www.semiconductors.philips.com/usb

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