

IXP3114/IXP3104

I3C Basic 1:4 GPIO Expander

Description

The IXP3114/3104 is an I3C Basic 1:4 General I/O Expander with integrated Temperature Sensor used for various motherboard applications. The IXP3114/3104 has four configurable I/O pins that can be configured as either input only, output only or input/output on a local interface. The GPIO pin is a CMOS push-pull buffer or open-drain with a configurable pull-up resistor. The voltage levels for either open drain or push pull are independently configurable.

The IXP family I/O expander is typically used when there is a need for additional GPIO input and output in an application.

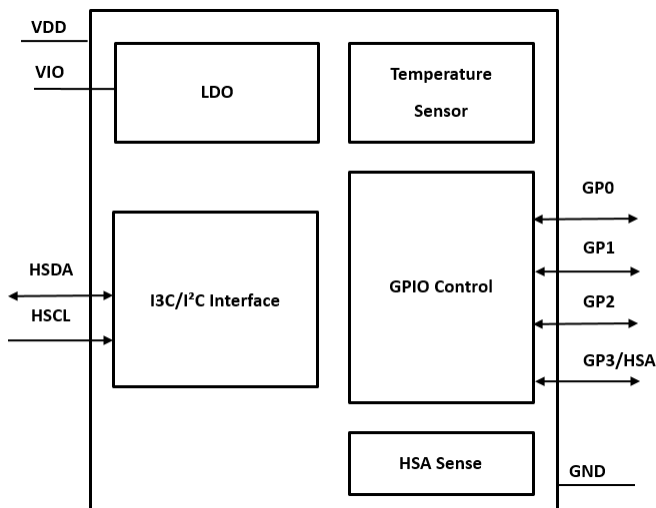


Figure 1. Block Diagram

Features

- 1:4 General Purpose Input/Output Expander (GPIO)
- Two-wire programmable I²C or I3C bus serial interface
- Single device load on the Host bus
- Up to 12.5MHz transfer rate
- Single 1.8V power supply input
- 1.0V VLDO output at VIO pin
- Supports 1.0V, 1.1V, and 1.2V push-pull IO levels
- Supports 1.0V, 1.1V, 1.2V, 1.8V, 2.5V, and 3.3V open-drain I/O levels
- Integrated Temperature Sensor; 0.5°C accuracy with 0.25°C resolution
- Bus reset function
- Packet Error Check (PEC) function
- Parity Error Check function
- Up to 8 unique addressing
- Programmable I²C, I3C bus addressing scheme
- In-Band Interrupt (IBI)
- 9-pin thermally enhanced DFN package
- Temperature: Industrial range of -40°C to 125°C

Applications

- Mobile devices
- Embedded computing
- PCs/notebooks
- Servers

Ordering Information

Orderable Part Number	Internal Thermal Sensor	GPIO Pins
IXP3114	Yes	4
IXP3104	No	4

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