I3C/I²C-Bus ±0.5 °C Accurate Digital Temperature Sensor

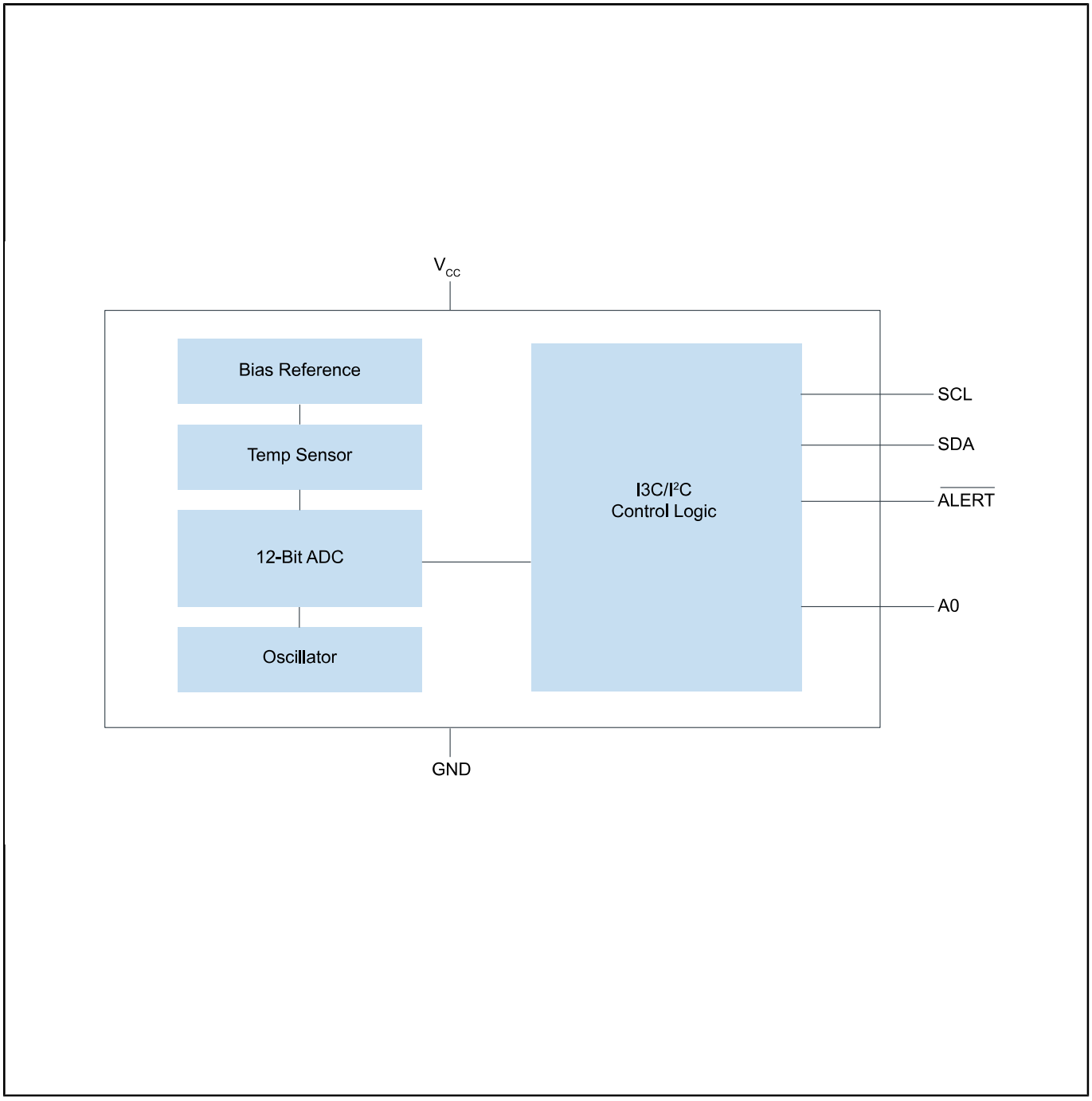
P3T1085UK

Last Updated: May 30, 2024

P3T1085UK is a ±0.5°C accurate temperature-to-digital converter with a -40 °C to +125 °C range. It uses an on-chip band gap temperature sensor and A-to-D conversion technique with overtemperature detection. The temperature register always stores a 12-bit complement data, giving a temperature resolution of 0.0625 °C.

P3T1085UK can be configured for different operation conditions: continued conversion, one-shot mode or shutdown mode. The device supports 2-wire serial I3C (up to 12.5 MHz) and I²C (up to 3.4 MHz) as communication interface. In I²C, the device supports up to four target addresses and an alert function. In I3C, the devices supports in-band interrupt (IBI), where the same bus is used to report the alert interrupts.

P3T1085UK Block Diagram Block Diagram



View additional information for I3C/I²C-Bus ±0.5 °C Accurate Digital Temperature Sensor.

Note: The information on this document is subject to change without notice.

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