



I3C/I2C-Bus, ± 1 °C Accuracy, Digital Temperature Sensor

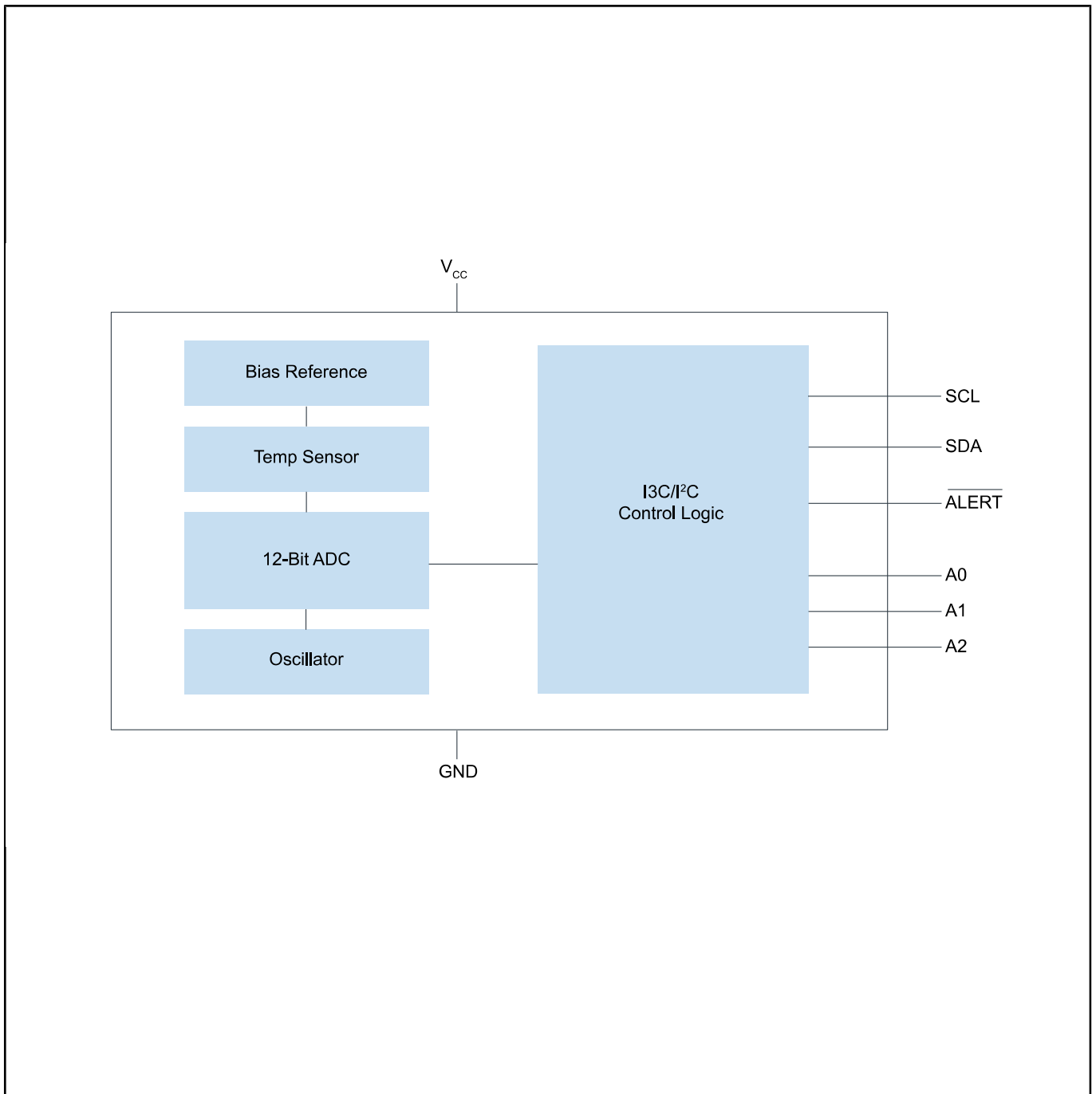
P3T1750DP

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P3T1750DP is a ± 1 °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 over temperature detection. The temperature register always stores a 12 bit two's complement data, giving a temperature resolution of 0.0625 °C.

P3T1750DP can be configured for different operation conditions: continuous 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.

I3C/I2C-Bus, ± 1 °C Accuracy, Digital Temperature Sensor Block Diagram



View additional information for [I3C/I2C-Bus, \$\pm 1\$ °C Accuracy, Digital Temperature Sensor](#).

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