



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

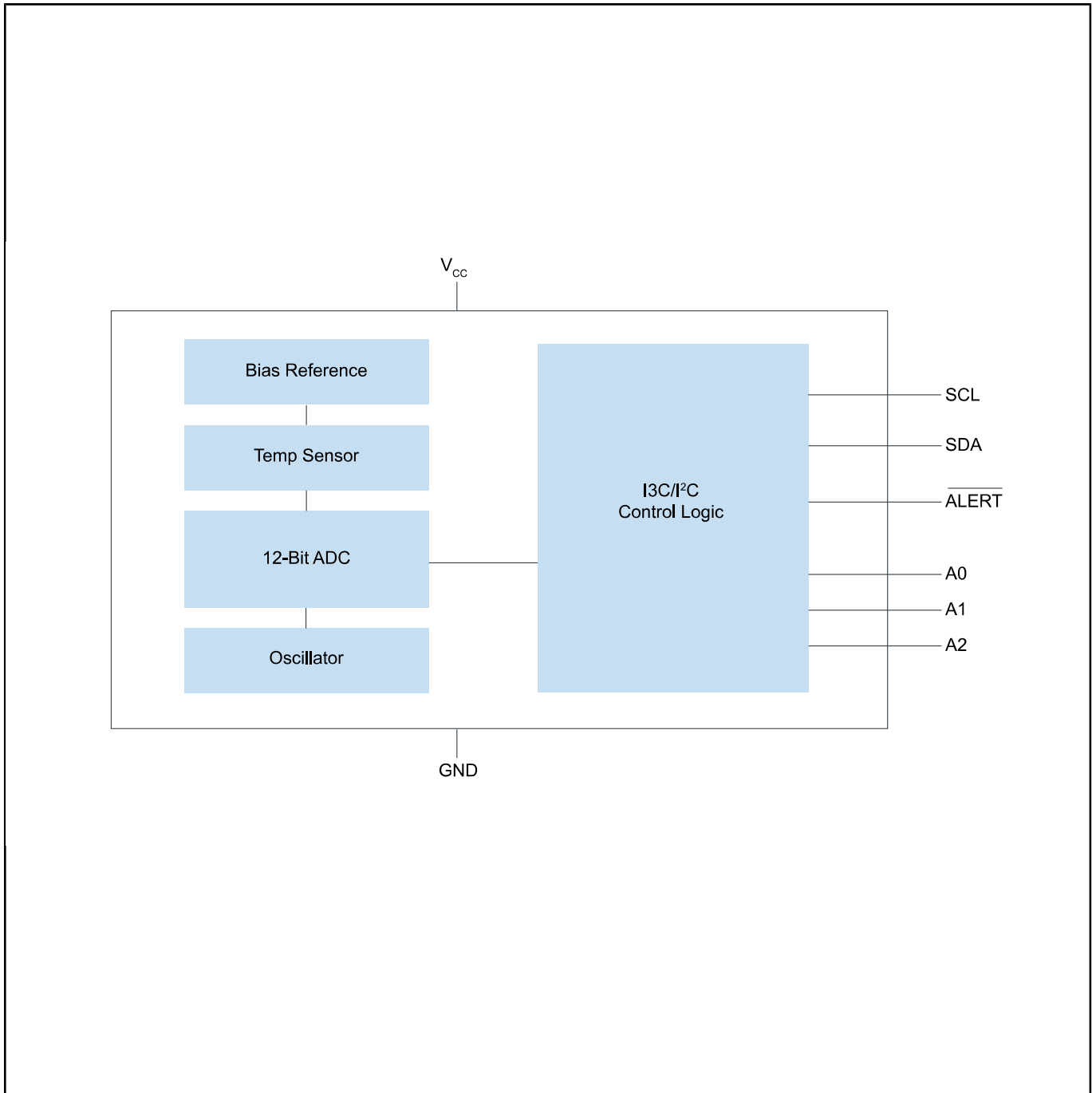
P3T1755DP

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P3T1755DP is a $\pm 0.5^{\circ}\text{C}$ accurate temperature-to-digital converter with a -40°C to $+125^{\circ}\text{C}$ 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 two's complement data, giving a temperature resolution of 0.0625°C P3T1755DP which can be configured for different operation conditions: continues 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 support in-band interrupt (IBI), where the same bus is used to report the alert interrupts.

P3T1755DP Block Diagram Block Diagram



View additional information for [I3C/I2C-Bus \$\pm 0.5\$ °C Accurate Digital Temperature Sensor](#).

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