SIVI-T4016

Toshiba 40nm LP (1P4M)

MAIN FEATURES

- Designed on Toshiba 40nm-LP
- On Chip Accurate Temperature Sensor
- One Point Calibration Mode
- Capable of Monitoring Eight Analog Voltages
- 0 to 3.0V Dynamic Input Voltage Range
- Accuracy without Calibration (±4 C°) in the range from -10 to 50 C°
- Accuracy with Calibration (±1 C°) in the range from -10 to 50 C°
- Accuracy with Calibration (±2 C°) in the range from -40 to 125 C°
- 16bit monitoring ADC with 8MHz sampling clock frequency
- Total IP Area is 52600µm2
- Operational temperature range from -40°C to 125°C

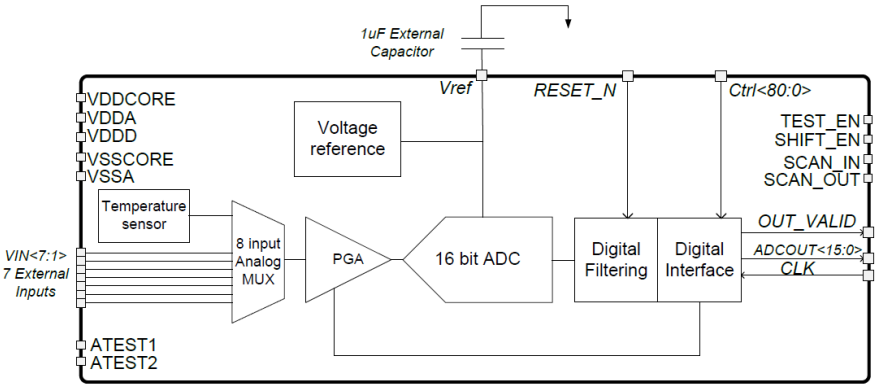
IP DESCRIPTION

Silicon Vision SiVi-T4016 offers a high performance and cost-effective solution for a temperature sensor with a monitoring ADC. The ADC output can be either a representation of the IC junction temperature or a digital code corresponding to one of the seven other analog inputs.

The IP was implemented on Toshiba 40nm LP CMOS with a supply voltage is 3.0V to 3.6V for the analog portion of the circuit and also uses 1.1V core voltage.

APPLICATIONS

- Accurate Temperature Sensing
- Monitoring Analogue Voltages or Currents from External Sensing Devices



Block Diagram for SiVi-T4016

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