

Analog IP

Temperature Sensor

Overview

The Renesas Temperature Sensor IP including ADC outputs a digital code which corresponds to the detected temperature of LSI.

Key Features

- Temperature range : -40 to 125 °C
- Relative accuracy : +/-3 °C (with 2 points calibration)
- Resolution : 12bit

Technology

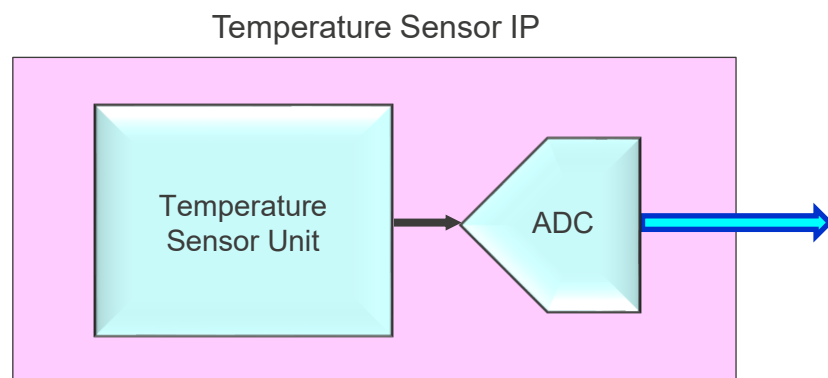
Process : T28HPCplus

Electrical characteristic

Parameter	Min	Typ	Max	Unit
Analog Voltage	1.62		1.98	V
Digital Voltage	0.9		1.08	V
Temperature Range	-40		125	°C
Relative Accuracy (*Note)	-3		+3	°C
Resolution		12		bit
Sampling Time			1	ms

*Note: 2 points calibration is needed every IP.

Block Diagram



*This IP is contract design IP. Please contact for detail.

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