

## Analog IP

# Temperature Sensor

### Overview

The Renesas Temperature Sensor IP including Analog Buffer outputs an analog voltage which corresponds to the detected temperature of LSI.

### Key Features

- Temperature range : -40 to 125 °C
- Relative accuracy : +/-0.5 °C @ -40 to 105 °C, +/-1 °C @ 105 to 125 °C  
(with 2 points calibration)

### Technology

Process : T40LP

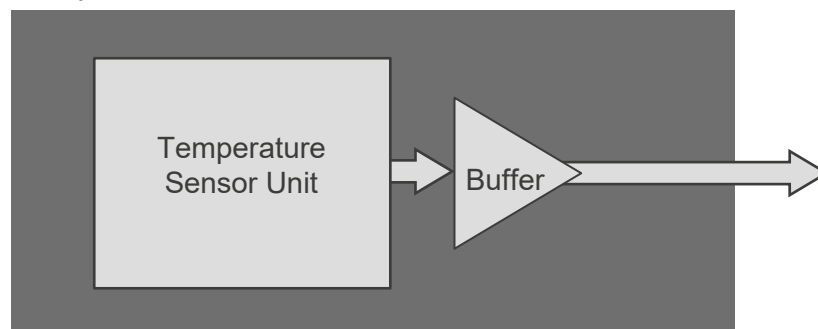
### Electrical characteristic

Parameter		Min	Typ	Max	Unit
Analog Voltage		2.7		3.6	V
Digital Voltage		1.04		1.26	V
Temperature Range		-40		125	°C
Relative Accuracy (*Note)	-40 to 105 °C	-0.5		+0.5	°C
	105 to 125 °C	-1.0		+1.0	°C

\*Note: 2 points calibration is needed every IP.

### Block Diagram

Temperature Sensor IP



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

R06PF0116EJ0101