

RTC Real Time Clock

Features

- Build In TCXO : 32.768 kHz
- High accuracy
- Low power consumption
- Fast start up 1ms
- Small size tolerance $\pm 0.05\text{ppb}$
- Power auto switchover

Specifications general

Automotive Applications

MPN	Crystal, Temp. compensation	Port	Accuracy	Power consumption (μA)	Dimension(mm)	Backup power support
INS5A8900	Build-in	I ² C	$\pm 5\text{ ppm@-40}^\circ\text{C} \sim +85^\circ\text{C}$ Ext. $+80^\circ\text{C} \sim +105^\circ\text{C}$	1.5	3.2*2.5*0.9	Yes
INS5A8804	Build-in	I ² C	$\pm 5\text{ ppm@-40}^\circ\text{C} \sim +85^\circ\text{C}$ Ext. $+80^\circ\text{C} \sim +105^\circ\text{C}$	1.5	3.2*2.5*0.9	Yes
INS5A4000	Build-in	SPI	$\pm 5.0\text{ppm@-40}^\circ\text{C} \sim +85^\circ\text{C}$ Ext. $\pm 5.0\text{ppm@+80}^\circ\text{C} \sim +105^\circ\text{C}$ Operable: $+105^\circ\text{C} \sim +125^\circ\text{C}$	0.5	3.2*2.5*0.9	No
INS5A8000	Build-in	I ² C	$\pm 5.0\text{ppm@-40}^\circ\text{C} \sim +85^\circ\text{C}$ Ext. $\pm 5.0\text{ppm@+80}^\circ\text{C} \sim +105^\circ\text{C}$ Operable: $+105^\circ\text{C} \sim +125^\circ\text{C}$	0.5	3.2*2.5*0.9	No

High Accuracy

MPN	Crystal, Temp. compensation	Port	Accuracy	Power consumption (µA)	Dimension(mm)	Backup power support
INS5902A	Build-in	I ² C	±2.0ppm @-40°C ~ +85°C Ext. -50°C ~ +85°C	1.0	3.2*2.5*1.0	Yes
INS5699C	Build-in	I ² C	±3.4ppm @-40°C ~ +85°C	1.0	3.2*2.5*1.0	Yes
INS5699S	Build-in	I ² C	±5.0ppm@-40°C ~ +85°C Ext. ±10ppm @+85°C ~ +105°C	1.0	3.2*2.5*1.0	Yes
INS5T8900	Build-in	I ² C	±3.4ppm@-40°C ~ +85°C Opt±5.0ppm@-40°C ~ +85°C Ext ±10ppm @+85°C ~ +105°C	1.0	3.2*2.5*1.0	Yes
INS5T8025	Build-in	I ² C	±3.4ppm@-40°C ~ +85°C	1.0	SOP14	No

MPN	32K & Temp. compensation	Port	Accuracy	Power consumption(µA)	Dimension(mm)	Backup power support
INS5710C	Build-in 32K and Temp. compensation	I ² C	±20ppm@-20°C ~ +70°C Ext.: -40°C ~ +85°C	1.0	SOP8	No
INS5T8130	Build-in 32K	I ² C	±5ppm(25°C) Temp. -40°C ~ +85°C	0.7	3.2*2.5*0.9	Yes
INS5T8111	Build-in 32K	I ² C	±5ppm(25°C) Temp. -40°C ~ +85°C	0.2	3.2*2.5*0.9	Yes
INS5T4111	Build-in 32K	SPI	±5ppm(25°C) Temp. -40°C ~ +85°C	0.2	3.2*2.5*0.9	Yes

Antishock High Temperature Range

MPN	Crystal, Temp. compensation	Port	Accuracy	Power consumption(μA)	Dimension(mm)	Backup power support
INS5S8563	Built-in silicon oscillator	I ² C	±100ppm@-55°C ~ +125°C	1.0	SOP8 DFN6L(2.0*2.0*0.75mm) FCDFN6(1.2*1.2*0.55mm)	No

Applications

- Communication Security
- Automotive electronics
- Metering
- Healthcare
- Smart Home