



Innovative Magnetic Sensing Solutions

Compact. Precise. Versatile.

Magnetometers (eCompass)

Advanced magnetic field measurement solutions for Navigation

PN	Application	Vcc (V)	Out. Type	Sens. Range (mT)	Power Cons. @ 50Hz	Temp. Range (°C)	Package
IST8306	Smartphones, wearables, AR/VR	1.65 – 1.96	I ² C	3	1200 µA	-20 – 85 °C	4-WLCSP
IST8308	Drone, parking, industrials	2.4 – 3.6	I ² C	0.5	520 µA	-40 – 125°C	16-LGA
IST8310	Drone, IoT, industrials	1.72 – 3.6	I ² C	1.6 (XY), 2.5 (Z)	320 µA	-40 – 85°C	16-LGA
IST8315L	Drone, AR/VR, robotics	2.4 – 3.6	I ² C	1	400 µA	-40 – 85°C	12-LGA
IST8320	Smartphones, wearables, IoT	1.7 – 3.4	I ² C, I ³ C	7	500 µA	-40 – 85°C	4-WLCSP
IST8321	Smartphones, gaming, IoT	1.7 – 3.4	I ² C, I ³ C	5	500 µA	-40 – 85°C	4-WLCSP

Position Sensors

Precision Sensing for Position and Orientation Detection

PN	Description	Vcc (V)	Out. Type	Sens. Range (mT)	Power Cons.	Temp. Range (°C)	Package
IST8309	3D Hall magnetic sensor	1.7 – 3.6	I ² C	30 – 200	50 µA @ 10 Hz	-40 – 85 °C	5-WLCSP
IST8216	3D Hall angle sensor	1.7 – 3.6	I ² C, PWM, SPI, ABZ	200	3 mA @ 1000 Hz	-40 – 85 °C	9-WLCSP
IST8210	2D angle sensor	5	I ² C	32	–	-40 – 150°C	8-DFN, 8-SO
IST8210S	2D angle sensor	2.4 – 3.6	I ² C	32	13 mA @ 1000 Hz	-40 – 85°C	12-BGA
IST8801	Linear Hall sensor	1.8 – 3.6	I ² C	40.96	180 µA @ 50 Hz	-40 – 85°C	9-WLCSP
IST8803	Linear Hall sensor	1.7 – 3.6	I ² C	40 – 160	100 µA @ 50 Hz	-30 – 85°C	6-WLCSP

Switches

Efficient on/off detection with minimal power draw

PN	Description	Vcc (V)	Out. Type	Bop – Brp (mT)	Power Cons.	Temp. Range (°C)	Package
IST8505	TMR switch	1 – 3.6	Push-pull	±0.7 – ±0.3	20 nA @ 1 Hz	-40 – 85 °C	4-LGA
IST8503	TMR switch	2.4 – 5.5	Open-drain	±1.4 – ±1.0	1.5 µA @ 1000 Hz	-40 – 125 °C	SOT-23
IST8508	3D/1D AMR switch	2.5 – 5.5	Push-pull, open-drain	Adjustable	3 mA @ 24 KHz	-40 – 85 °C	SOT-23, 4-LGA
IST8506	3D Hall switch	1.7 – 3.6	Push-pull, open-drain	Programmable	20 µA @ 50 Hz	-40 – 85 °C	9-WLCSP

Current Sensors

Advanced current sensing for EV safety and energy systems

PN	Description	Vcc (V)	Out. Type	Compliance	Temp. Range (°C)	Package
IST8101	Fluxgate leakage current sensor	4.75 – 5.25	I ² C, Analog	IEC 62752, UL2231, AECQ-100	-40 – 125 °C	32-QFN