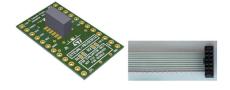




# ISM6HG256X evaluation kit, based on an intelligent IMU with simultaneous low-g and high-g acceleration detection





Product summary		
ISM6HG256X evaluation kit, based on an intelligent IMU with simultaneous low-g and high-g acceleration detection	STEVAL-MKI248KA	
Generic DIL24 adapter board	STEVAL-MKIGIBV5	
Intelligent high-g, low-g accelerometer and IMU sensor	ISM6HG256X	
Professional MEMS tool: evaluation board for all ST MEMS sensors	STEVAL-MKI109D	
Motion MEMS and environmental sensor expansion board for STM32 Nucleo	X-NUCLEO- IKS02A1	
SensorTile Wireless Industrial Node Development Kit	STEVAL-STWINBX1	
Application	Asset tracking	

#### **Features**

- User-friendly ISM6HG256X board
- Complete ISM6HG256X pinout for a standard DIL 24 socket
- Fully compatible with the STEVAL-MKI109D evaluation platform
- RoHS compliant

### **Description**

STEVAL-MKI248KA is an adapter kit designed to facilitate the evaluation of the ISM6HG256X 6-axis inertial measurement unit (IMU).

The kit is composed by a generic DIL24 adapter board (STEVAL-MKIGIBV5), a flat cable, and a square PCB mounting the ISM6HG256X 6-axis IMU. This square PCB ensures that the sensor board put on the system is measured.

The sensor is soldered precisely in the center of the square PCB to conveniently mount the board on the equipment, which is used for the analysis through double-sided adhesives. Alternatively, you can mount the board using the holes located in each corner of the PCB.

STEVAL-MKIGIBV5 can be plugged into a standard DIL-24 socket. The kit provides the complete ISM6HG256X pinout, and it comes ready-to-use with the required decoupling capacitors on the VDD power supply line.

The kit is supported by the STEVAL-MKI109D evaluation platform, which includes a high-performance 32-bit microcontroller. It functions as a bridge between the sensor and a PC, on which it is possible to use the downloadable MEMS Studio graphical user interface, or dedicated software routines for customized applications.

It is also possible to plug the kit on X-NUCLEO-IKS02A1 or STEVAL-STWINBX1 using an ad hoc connector mounted on the STEVAL-MKI248KA board.



## Schematic diagrams

Figure 1. STEVAL-MKIGIBV5 circuit schematic

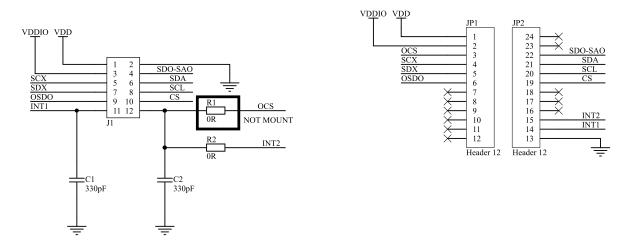
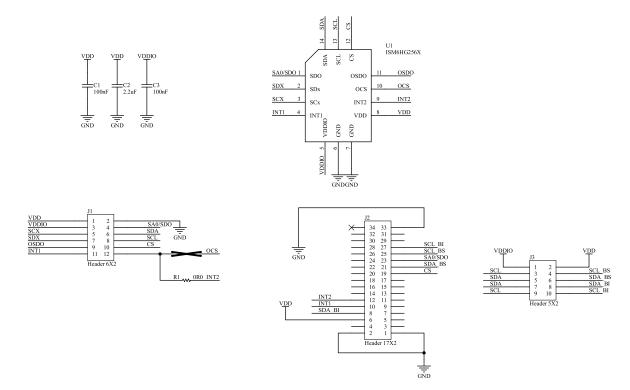


Figure 2. STEVAL-MKI248AA circuit schematic



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### **Revision history**

Table 1. Document revision history

Date	Revision	Changes
24-Jul-2025	1	Initial release.

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