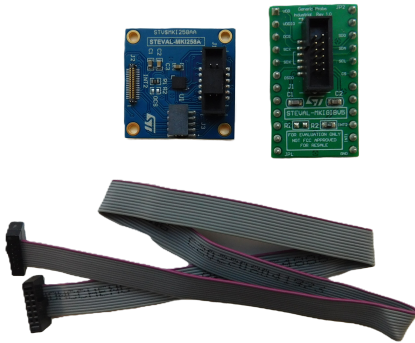


ISM6HGK256X evaluation kit, based on intelligent IMU with simultaneous low-g and high-g acceleration detection



Features

- User-friendly ISM6HGK256X board
- Complete ISM6HGK256X pinout for a standard DIL 24 socket
- Fully compatible with STEVAL-MKI109D evaluation platform
- RoHS compliant

Description

The **STEVAL-MKI258KA** is an adapter kit designed to facilitate the evaluation of the **ISM6HGK256X** 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 **ISM6HGK256X** 6-axis IMU. The presence of this square PCB ensures to put the sensor board on the system to be measured.

The sensor is soldered precisely in the center of the square PCB to conveniently mount the board on the equipment used for the analysis through double-sided adhesives.

The **STEVAL-MKI258KA** can be mounted using the holes located in each corner of the PCB.

The STEVAL-MKIGIBV5 can be plugged into a standard DIL-24 socket. The kit provides the complete **ISM6HGK256X** pinout and comes ready to use with the required decoupling capacitors on the VDD power supply line.

The **STEVAL-MKI258KA** is supported by the **STEVAL-MKI109D** evaluation platform, which includes a high-performance 32-bit microcontroller functioning 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 **STEVAL-STWINBX1** using an ad hoc connector mounted on the STEVAL-MKI258A board.

Product summary	
ISM6HGK256X evaluation kit, based on intelligent IMU with simultaneous low-g and high-g acceleration detection	STEVAL-MKI258KA
Intelligent IMU and high-g, low-g accelerometer sensor up to 320 g and embedded AI for activity tracking	ISM6HGK256XTR
Professional MEMS tool: evaluation board for all ST MEMS sensors	STEVAL-MKI109D
Applications	Asset tracking

Schematic diagrams

Figure 1. STEVAL-MKI258A circuit schematic

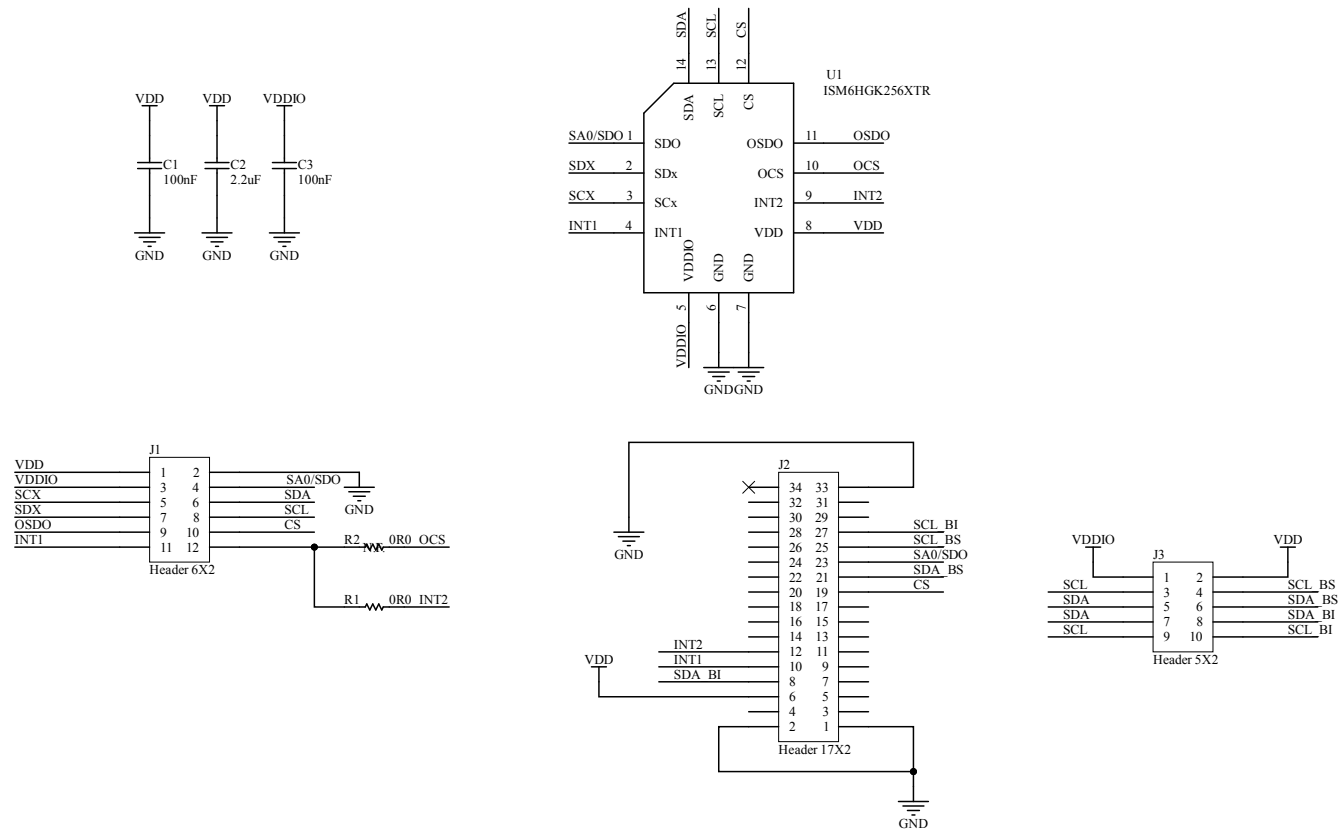
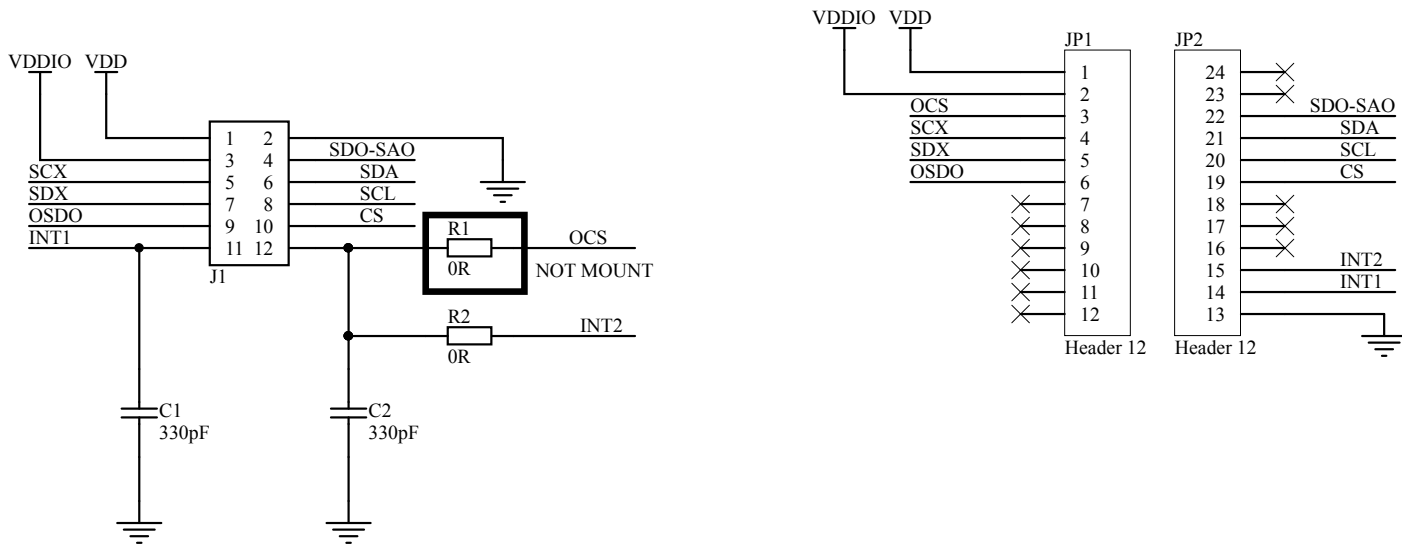


Figure 2. STEVAL-MKIGIBV5 circuit schematic



2 Kit versions

Table 1. STEVAL-MKI258KA versions

PCB version	Schematic diagrams	Bill of materials
STV\$MKI258KAA ⁽¹⁾	STV\$MKI258KAA schematic diagrams	STV\$MKI258KAA bill of materials

1. This code identifies the STEVAL-MKI258KA evaluation kit first version. The kit consists of a STEVAL-MKI258A whose version is identified by the code STV\$MKI258AA and a STEVAL-MKIGIBV5 whose version is identified by the code STEVAL\$MKIGIBV5A.

Revision history

Table 2. Document revision history

Date	Revision	Changes
23-Sep-2026	1	Initial release.

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