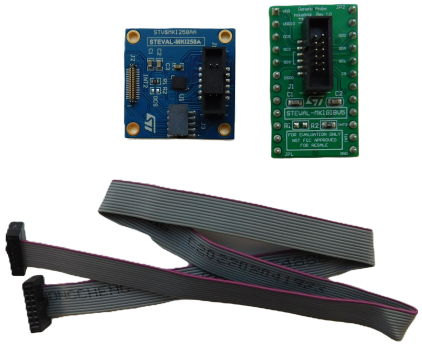
# STEVAL-MKI258KA

Data brief

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



| 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 |

## 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.

# 1 Schematic diagrams

**Figure 1. STEVAL-MKI258A circuit schematic**

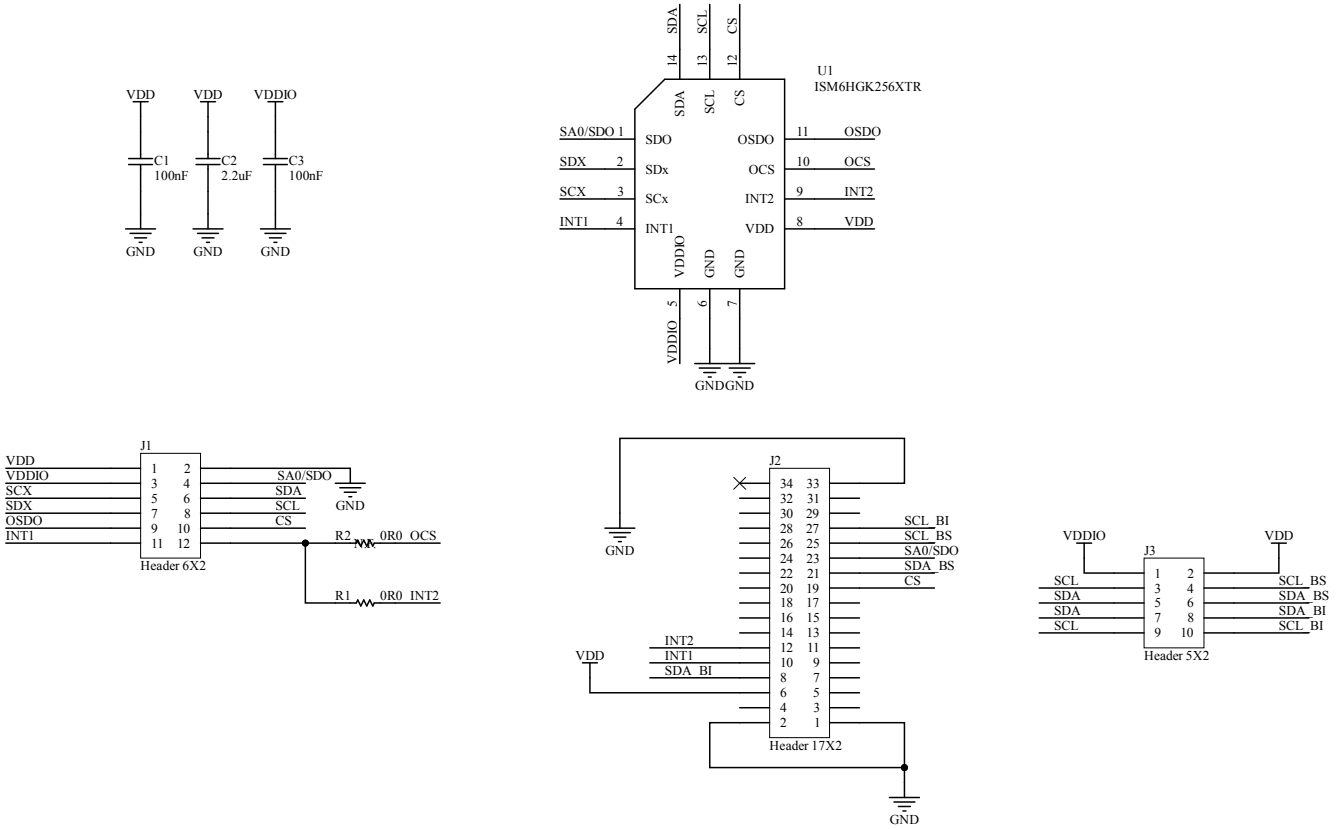
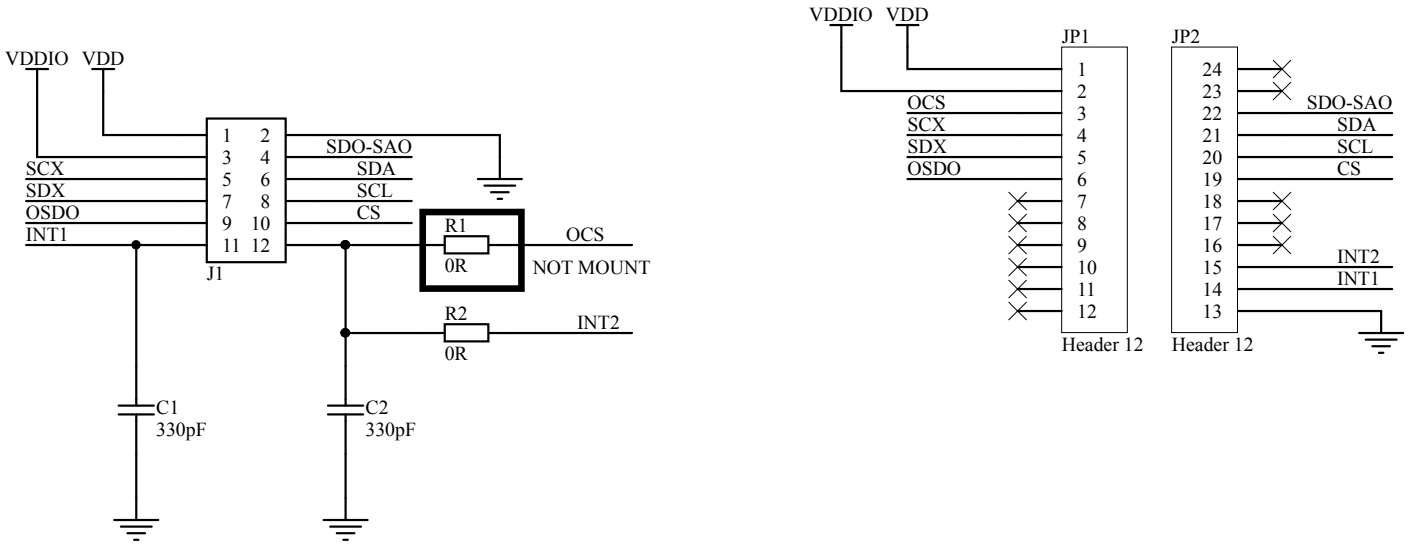


**Figure 2. STEVAL-MKIGIBV5 circuit schematic**



# 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. |
| 16-Oct-2026 | 2 | Updated Description. |

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