

STDES-MKI128V7

Smart MEMS Multi-sensor module



Simplify your creativity with our smart multi-sensor module for flexible prototyping

The enhanced embedded sensor topology of the STDES-MKI128V7 MEMS sensor module helps you save development time and effort when developing smart, creative prototypes for a wide range of applications.

This compact board integrates the iNEMO inertial module (LSM6DSO) with 3D accelerometer and 3D gyroscope that is particularly suitable for smartphones with OIS/ EIS and AR/VR systems, a magnetometer (LIS2MDL), a dust-resistant full-mold absolute pressure sensor (LPS22HH), and a relative humidity and temperature sensor (HTS221).

KEY FEATURES

The board integrates:

- iNEMO inertial module (LSM6DSO)
- Magnetometer (LIS2MDL)
- Pressure sensor (LPS22HH)
- Humidity sensor (HTS221)
- RoHS compliant

KEY APPLICATIONS

- Personal computing
- Tablets and mobile phones with OIS/EIS and AR/VR systems
- Gaming and virtual reality input devices
- Wellness and wearable devices
- Drones and robotics
- IoT devices including industrial and factory automation systems

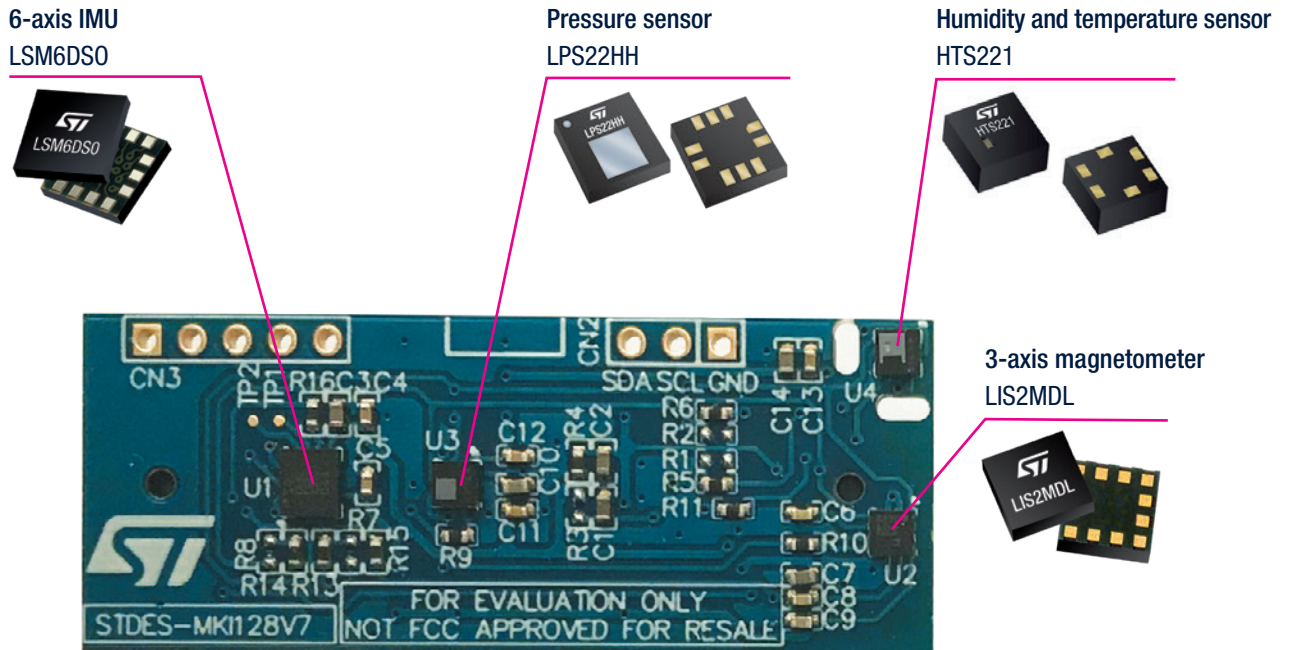
Smart multi-sensor module

Compact board embeds a complete set of motion and environmental sensors

The STDES-MKI128V7 multi-sensor module integrates a complementary set of motion and environmental sensors. It is a robust and easy-to-assemble building block for quick system prototyping and development.

The multi-sensor module and its companion software brings a convenient and unique sensor subsystem solution for developing complete platforms addressing smartphone and tablet applications, gaming, augmented reality, indoor navigation and localization-based services.

It is the perfect companion for intrinsic development platforms offering both software and hardware development tools to enable a fast evaluation and seamless product development.



Embedded sensors

Part number	Description	Temperature range (°C)	Package
LSM6DSO	iNEMO 6DoF inertial measurement unit (IMU), with advanced digital functions, Finite State Machine	-40 to +85	LGA-14L (2.5 x 3.0 x 0.83 mm)
LPS22HH	MEMS nano pressure sensor: 260-1260 hPa absolute digital output barometer	-40 to +85	HLGA-10L (2 x 2 x 0.73 mm) Full-molded
HTS221	Capacitive digital sensor for relative humidity and temperature measurements	-40 to +120	HLGA-6L (2 x 2 x 0.9 mm)
LIS2MDL	Magnetic sensor, digital output, 50 gauss magnetic field dynamic range, ultra-low-power, high-performance 3-axis magnetometer	-40 to +85	LGA12 (2 x 2 x 0.7 mm)



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