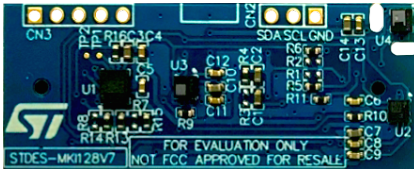


## Smart MEMS multi-sensor module



### Features

- The board integrates:
  - iNEMO inertial module [LSM6DSO](#)
  - Magnetometer [LISMDL](#)
  - Pressure sensor [LPS22HH](#)
  - Humidity sensor [HTS221](#)
- RoHS compliant

### 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

### Description

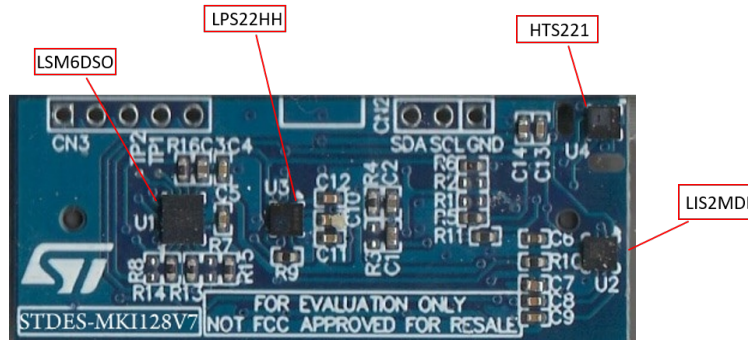
The enhanced embedded sensor topology of the [STDES-MKI128V7](#) MEMS sensor module helps you save development time and effort when developing smart, creative prototypes for a wide range of applications.

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 ([LISMDL](#)), a dust-resistant full-mold absolute pressure sensor ([LPS22HH](#)), and a relative humidity and temperature sensor ([HTS221](#)).

Product summary	
Smart MEMS Multi-sensor module	<a href="#">STDES-MKI128V7</a>
iNEMO inertial module, 3-axis accelerometer, 3-axis gyroscope, always-on eco power mode	<a href="#">LSM6DSO</a>
Digital 3-axis magnetometer	<a href="#">LISMDL</a>
Digital nano pressure sensor	<a href="#">LPS22HH</a>
Digital sensor for relative humidity and temperature	<a href="#">HTS221</a>
Applications	Sensing Virtual-Augmented Reality Wearable

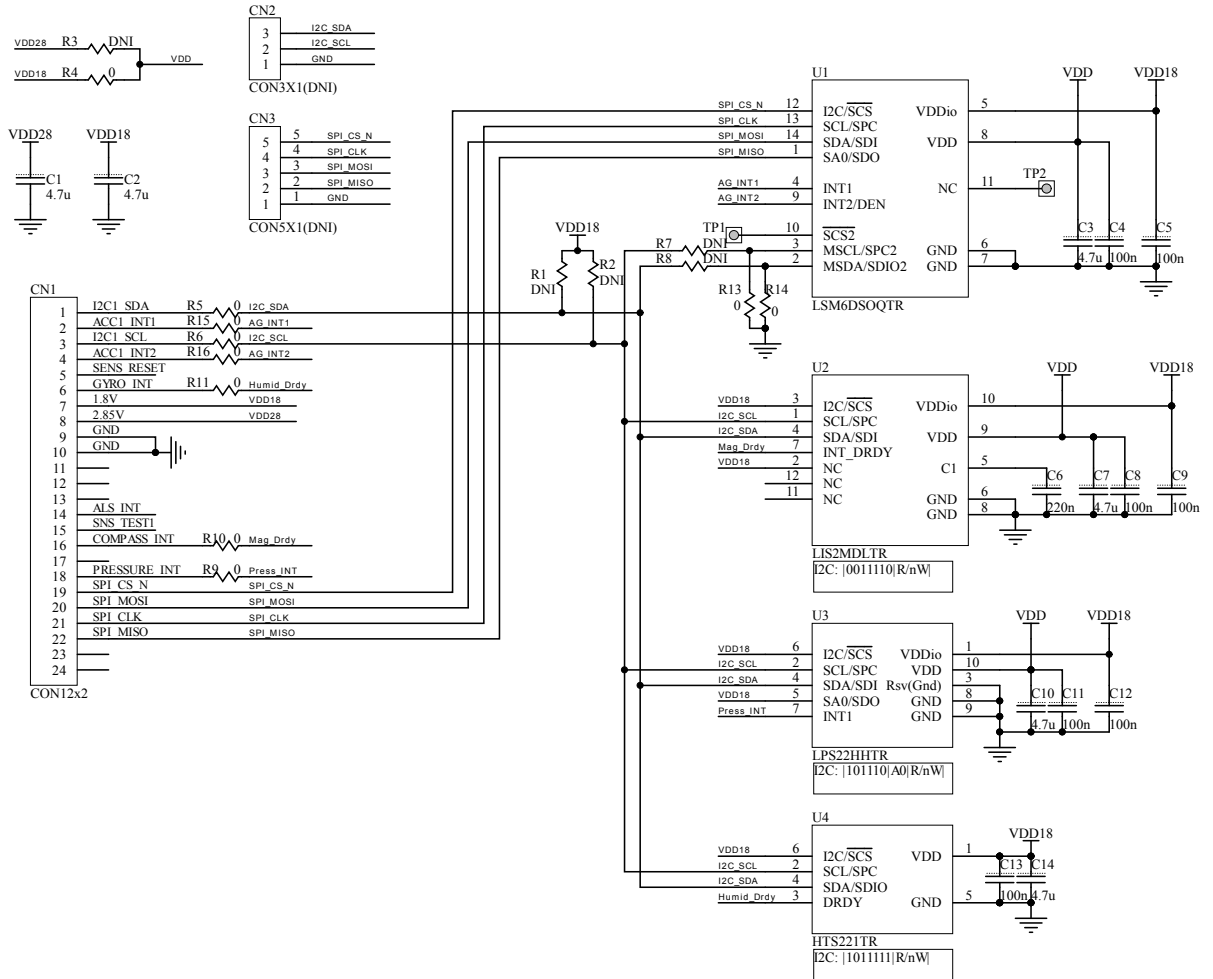
# 1 PCB overview

Figure 1. PCB overview



## 2 Schematic diagrams

Figure 2. STDES-MKI128V7 circuit schematic



## Revision history

**Table 1. Document revision history**

Date	Version	Changes
20-Jul-2020	1	Initial release.
19-Nov-2020	2	Updated cover page image and product summary table.

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