



# ST sensors 10-year longevity program



# ST sensors longevity program

# 10-year longevity commitment program ensures continuous supply for 10 years



## ST focuses on markets with long product life cycles

This program protects the investments of customers who need state-of-the-art sensors for projects with a long development, certification and life cycle time



10-year longevity from product introduction date

Design and manufacturing for higher robustness

Calibration & testing for higher accuracy & quality

Higher endurance to shock and vibration

Extended temperature range



# ST sensors longevity program A complete portfolio







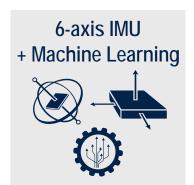






High accuracy

High reliability







High-bandwidth microphones



# ST sensors longevity program

### ST MEMS and sensors benefits from ST Longevity Program

Title	Starting date of Longevity Commitment
A3G4250D	January 2015
AIS2DW12	July 2019
AIS328DQ	January 2015
AIS3624DQ	January 2015
ASM330LHH	April 2019
I3G4250D	March 2015
IIS2DH	March 2015
IIS2DLPC	July 2018
IIS2ICLX	July 2020
IIS2MDC	September 2017
IIS328DQ	March 2015
IIS3DHHC	December 2017
IIS3DWB	January 2020
IMP23ABSU	June 2020
IMP34DT05	September 2018
ISM303DAC	September 2017
ISM330DHCX	October 2019
ISM330DLC	July 2017
STTS22H	October 2019

#### **Terms & Conditions**

STMicroelectronics provides a minimum longevity commitment of 10 years for the products listed on the longevity web page.

The 10 years longevity commitment includes the period of notification as set forth in the standard STMicroelectronics end-of-life notification policy (PTN).

In case of significant volume decrease, technology or manufacturing changes, a switch to a comparable product, another technology or a different manufacturing facility could be decided by STMicroelectronics who will notify customers using the standard STMicroelectronics product/process change policy (PCN).







# ST sensors longevity program portfolio





# Inertial sensors

### Gyroscope & 6-axis IMU

13G4250D



- 3-axis digital gyroscope
- High linearity and stability over temperature and time

#### ISM330DLC



- Dual-channel output
- Low power
- Smart features
- Accelerometer with wide bandwith and low noise
- Cur Cons HP: 0.75 mA combo
- FS: gyro up to 2000 dps; axel up to 16 g







2.5 x 3 x 0.86 mm

- - Enhanced machine Learning Core and Finite State Machine (FSM)
- High accuracy and stability
- Accelerometer with wide bandwidth and low noise
- Cur Cons HP: 0.90 mA gyro; 1.2 mA combo
- FS: gyro up to 4000 dps; axel up to 16 g
- Extended operating temp: -40 to +105°C

A3G4250D



• 3-axis digital gyroscope



AEC-Q100 qualified



ASM330LHH





2.5 x 3 x 0.86 mm

- High accuracy and stability
- Ideal for navigation/TCU
- AEC-Q100 qualified



- FS: gyro up to 4000 dps; axel up to 16 g
- Extended operating temp: -40°C +105°C





# Inertial sensors

#### Accelerometer

#### IIS2DH



Low power

 Wide bandwidth (2 kHz)





Ultra low power

 High versatility: on the fly changes from ultra low power to high resolution/high performance modes

#### **IIS3DWB**



• 3-axis digital accelerometer

• Ultra wide and flat bandwidth (6 kHz)

• Low noise (75  $\mu$ g/ $\sqrt{Hz}$ )

• Low power (1.1mA)

• Extended operating temperature: -40°C +105°C

Ideal for vibration monitoring

#### IIS328DQ



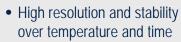
 Extended operating temp: -40°C +105°C

QFN Package

#### IIS3DHHC



• 3 axis digital inclinometer



• High-end ceramic package





5 x 5 x 1.7 mm



• 2 axis digital inclinometer

• Machine Learning Core & Finite State Machine

• FS:  $\pm 0.5/1.0/2.0/3.0$ 

• Ultra high resolution & stability over temperature & time

• Low power (0.42 mA)

• Extended operating temperature: -40 to +105°C

#### AIS328DQ



4 x 4 x 1.8 mm

FS: up to 8 g

## AIS3624DQ



4 x 4 x 1.8 mm

FS: up to 24 g

#### • QFN Package



AEC-Q100 qualified



#### AIS2DW12



AEC-Q100 qualified

robustness

Ultra low power



Superior mechanical

#### AIS2IH



2 x 2 x 0.93 mm

- Ultra Low power
- High resolution, performance and configurability
- Extended operating temp: -40°C +115°C
- AEC-Q100 qualified





# Inertial and environmental sensors

### Magnetometer

#### IIS2MDC



- 3-axis magnetometer
- High dynamic range and high-resolution magnetic sensing
- AMR technology

#### ISM303DAC



- 3 axis mag + 3 axis axel
- Dynamic switch between high resolution/High frequency and low power modes
- AMR technology

- Dynamic range: ± 50 Ga
- Noise RMS [HP] = 3 mGa

Top port digital

microphone

High performance

### Microphone

#### IMP34DT05



- 3 x 4 x 1 mm
- Sensitivity -26±3 dB AOP 122.5 dBSPL
- SNR 64 dB

#### IMP23ABSU



3.5 x 2.65 x 0.98 mm

- Ultrasound bandwidth (up to 80 kHz)
  - Bottom port analog single ended microphone
    - Ultra low power, high performance
- Sensitivity: 38dB ±1dB
- AOP: 130 dBSPL
- SNR: 64dB

### Temperature

#### STTS22H



2 x 2 x 0.5 mm

Accuracy (max); ±0.5°C [-10/60°C]

- Digital temperature sensor (I2C / SMBus 3.0)
- High accuracy
- Ultra low power (1.7uA in one shot mode)
- Exposed pad down
- Extended operating temp: -40°C +125°C



# Thank you



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