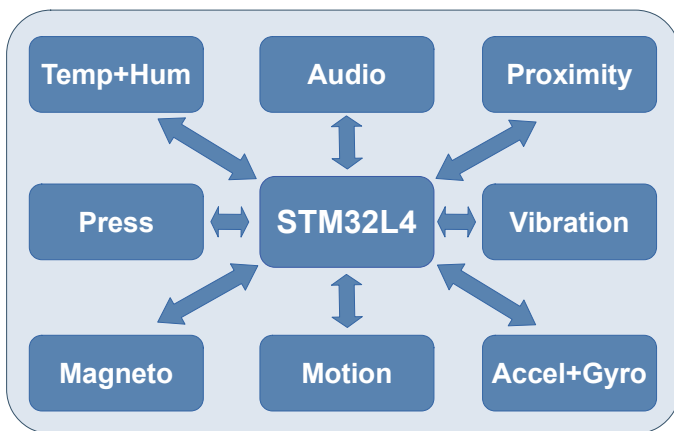
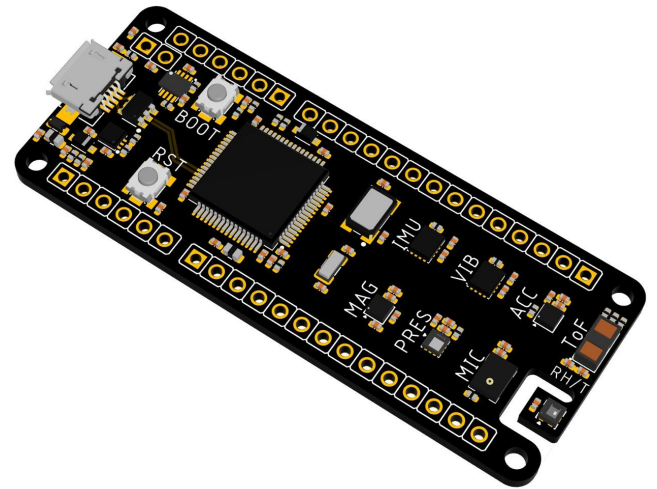


## GENERAL DESCRIPTION

The **PortRoyal** Arduino MKR format board features a powerful Cortex M4 processor and a rich assortment of sensors from STMicroelectronics.

The board is compatible with Arduino IDE thanks to the STM32duino project or can be programmed with STM32CubeIDE and tools to unleash the full power of the MCU.



## FEATURES

The **PortRoyal** board features a complete assortment of sensors for multiple uses.

### Hardware Features

MCU Core:

- ARM® Cortex®-M4+ CPU at 80 MHz
- 512 kBytes Flash
- 160 kBytes RAM
- -40 to 85°C operating temp. (125 °C available)
- Voltage range 1.71 V to 3.6 V
- Low power modes down to 0.29 µA
- Run at 84 µA / MHz
- 12 bit ADC up to 5 MSPS

NFC:

- ST25DV64K
  - 8192 bytes user memory
  - I<sup>2</sup>C interface

Sensors:

- VL53L3CX proximity
- IIS3DWB vibration
- ISM330DHCX accelerometer + gyroscope
- IIS2DH motion
- IIS2MDC magnetometer
- LPS22HH pressure
- HTS221 temperature & humidity
- IMP34DT05 audio

## Target Applications:

- 24/7 always-on sensor processing at ultra-low power consumption.
- IoT Battery powered devices
- Environmental Monitoring
- Smart metering, Industrial monitoring and control, Home energy management systems, Smart parking,
- Smart Building, Building Information Management Systems

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Order Code	Description
BLK-PRY-xxxxx	PortRoyal – Multi Sensor Board