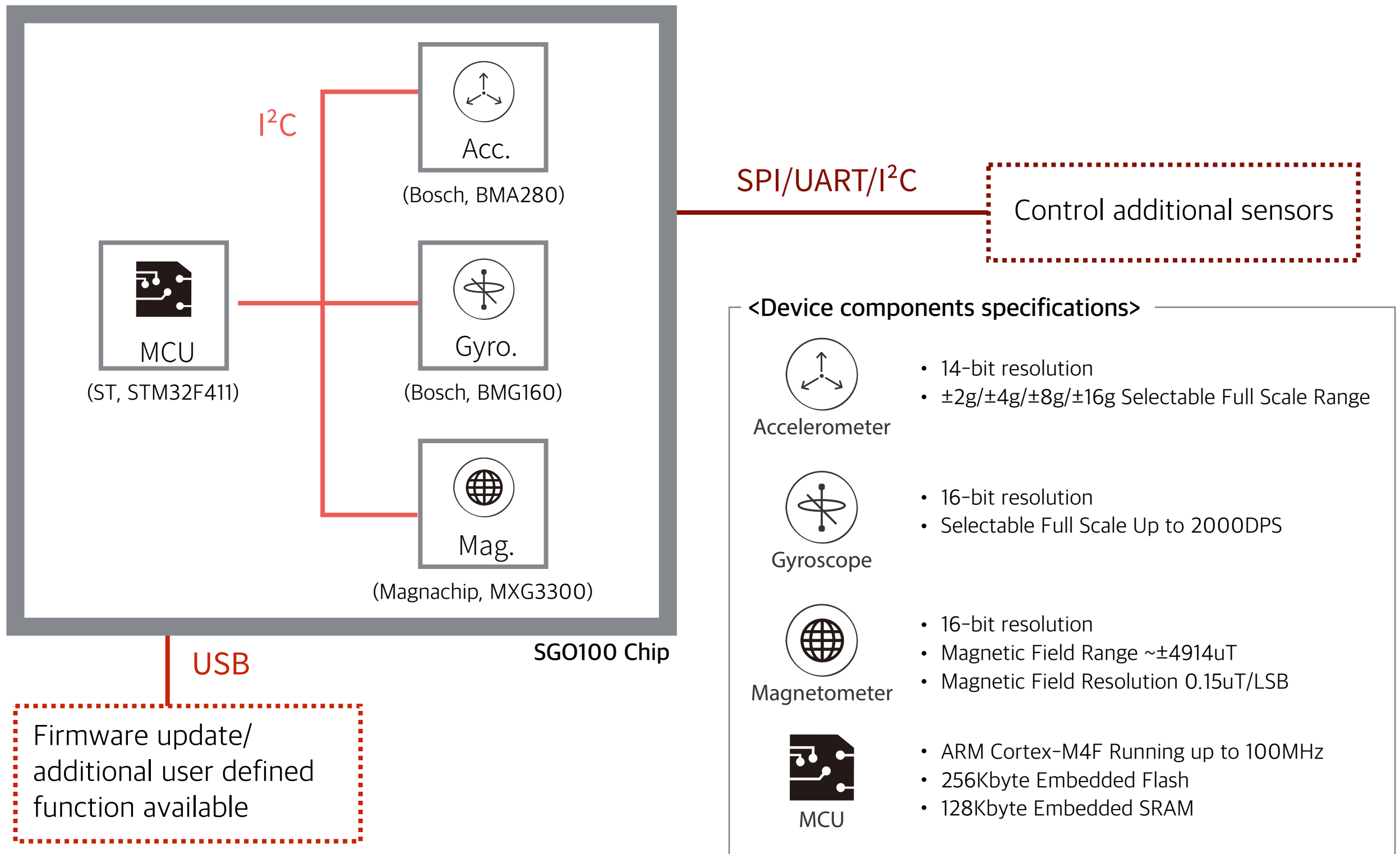


# SGO100 (One-chip sensor platform with 9-axis sensor fusion)

## ▶ Hardware Specifications



## ▶ Variations for each application

| Mode Variation<br>(current consumption measuring condition:<br>MCU running in 48MHz & sensor full operation) | Operation |   |   |   | Possible Applications  | Features   |
|--|-----------|---|---|---|--|--|
|  | MCU       | A | G | M |  |  |
| 1 Power-down Mode<br>(current consumption: TBD, 44µA)  |           |   |   |   | -  | - Extreme low-power (while not using)  |
| 2 External Input Mode<br>(current consumption: TBD, 6.57mA)  | ○         |   |   |   | -  | - Customers can connect additional sensors such as ambient light sensors, heart-rate sensors or pressure sensors |
| 3 Acc. Only<br>(current consumption: TBD, 6.7mA)   | ○         | ○ |   |   | Low-end applications (low-end smart phones, wearables, pedometers, gaming devices, etc.) | - Simple motion detection (shock, free fall, motion/no-motion, tilt)   |
| 4 6-axis IMU Mode<br>(current consumption: TBD, 11.7mA)  | ○         | ○ | ○ |   | Activity tracking applications (wearables, cameras-for image stablization,               | - Intensified motion detection (shock, free fall, motion/no-motion, tilt, rotation)                              |
| 5 6-axis E-compass Mode<br>(current consumption: TBD, 8.7mA)   | ○         | ○ |   | ○ | Low-power consumption applications (air mouse, wearables, IoT devices, etc.)             | - Estimates orientation<br>- Can perform as a gyroscope (virtual gyroscope)                                      |
| 6 9-axis full operation<br>(current consumption: TBD, 13.7mA)  | ○         | ○ | ○ | ○ | High-end applications (high-end smart phones, VR, indoor navigations, drones, etc.)      | - Estimate orientation with gyroscope drift compensation and higher accuracy                                     |