



# RA Ecosystem Partner Solution

## FSP201 6-axis IMU



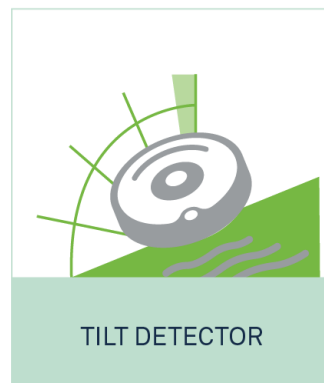
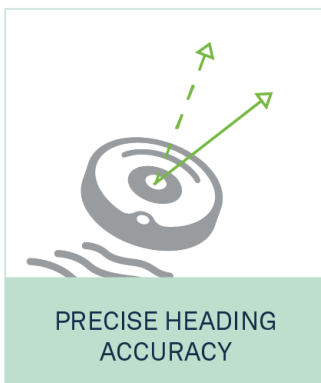
### Solution Summary

Ceva's FSP201 sensor hub provides superior planar heading and 6-axis IMU performance ideal for high-volume, cost-conscious consumer robots, XR, 3D audio, and other motion-based devices. The FSP201 application-specific standard product (ASSP) integrates high-performance sensor hub software into the low-power [RA2L1](#) 32-bit Arm Cortex M23 MCU.

### Features/Benefits

- MotionEngine™ 6-axis Sensor Fusion – Provides raw, calibrated and fused sensor orientation data with best-in-class heading accuracy and stability
- Choose Your Sensor – Low-cost MEMS sensors from top sensor vendors are supported
- Improved Performance – With our specialized interactive calibration software, top performance is achieved even with low-cost sensors
- Stabilized Game Rotation Vector – Corrects orientation drift slowly and imperceptibly to the user to maintain immersion
- Dynamic Calibration – Our algorithms constantly monitor changes in sensor performance and temperature during live operation to deliver the highest performance
- Intelligent Power Management – Manages sensor states to conserve power without sacrificing quality of motion data
- Auto-Centering – Dynamically recenters the soundstage in 3D audio applications to eliminate drift
- Flexible Integration – I2C and simplified UART communication available

### Diagrams/Graphics



### Target Markets and Applications

- Robotics
- 3D Audio
- XR body tracking
- Asset tracking

<https://www.ceva-ip.com/product/fsp201>



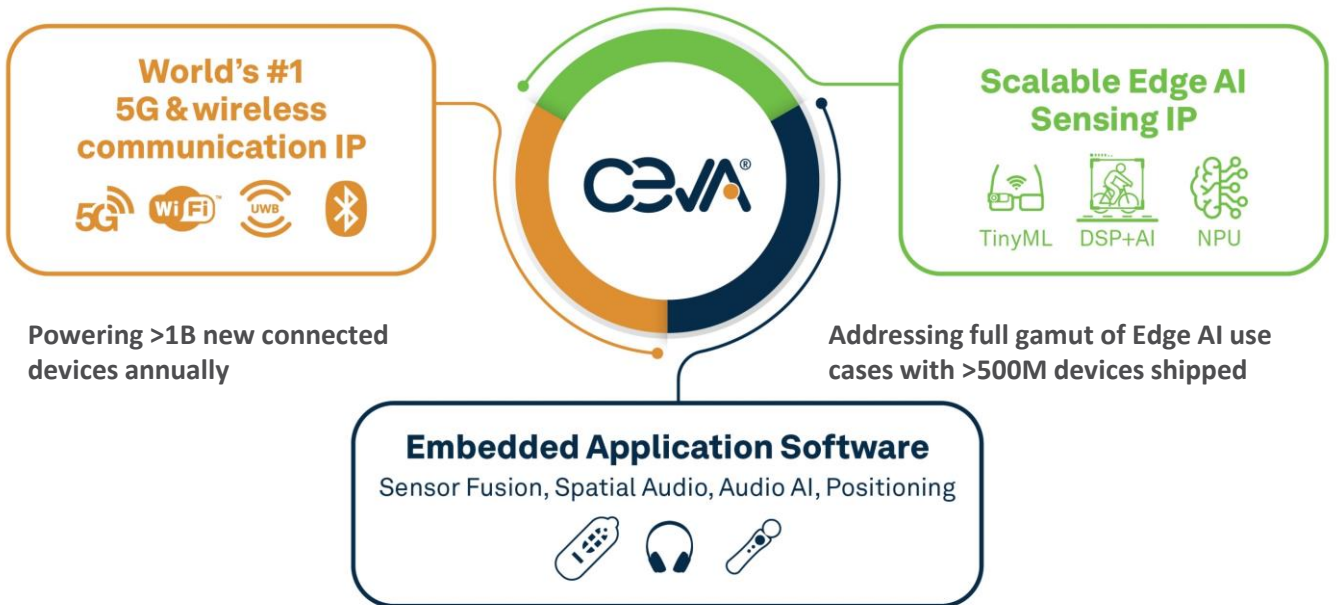
### > Who We Are

We are passionate about the smart edge. Our wireless communications and edge AI sensing technologies are at the heart of today's most advanced smart edge products. We deliver the technology that enables a smarter, safer, and more interconnected world. We excel in providing the technology and market expertise our customers need to be successful, and we've been doing it for over 30 years. Ceva is already powering more than 17 billion of the world's most innovative smart edge products.

### > What We Do

We provide our customers with comprehensive, vertically integrated hardware and software solutions that enable them to develop intelligent, connected devices with superior performance, power efficiency and flexibility. Whether it is sensing, analyzing and applying AI to data from a camera, a microphone or an inertial measurement unit, or connecting a device using 5G, NB-IoT, Bluetooth, UWB or Wi-Fi, our unique technology portfolio and SoC design services lowers barriers-to-entry, time-to-market and costs associated with getting to market.

### > The Ceva IP Portfolio



Powering >1B new connected devices annually

Addressing full gamut of Edge AI use cases with >500M devices shipped

Ceva software IP powering >300M devices

End markets: Consumer IoT Mobile Automotive Infrastructure Industrial PC