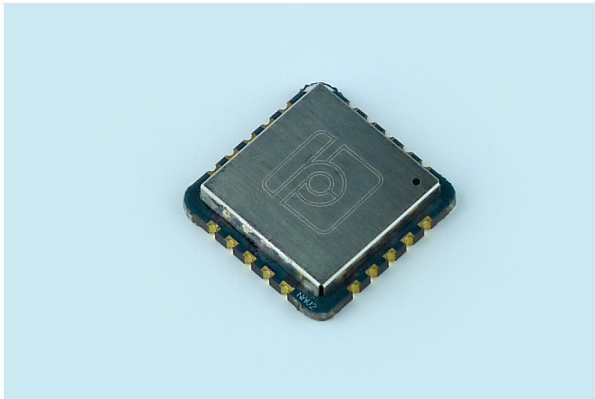




LPMS-NAV2

High Accuracy Navigation Sensor

LPMS-NAV2 is an inertial sensor for navigation application, which is composed of a high accuracy one-axis gyroscope and a 3-axis accelerometer. With the use of our novel fusion algorithm, LPMS-NAV2 can achieve precise heading information with ultra-low drift errors. The output data includes heading angle, angular speed and acceleration via UART interface. The high performance and affordable price of LPMS-NAV2 make it specially suitable for the applications of mobile robot/vehicle navigation.

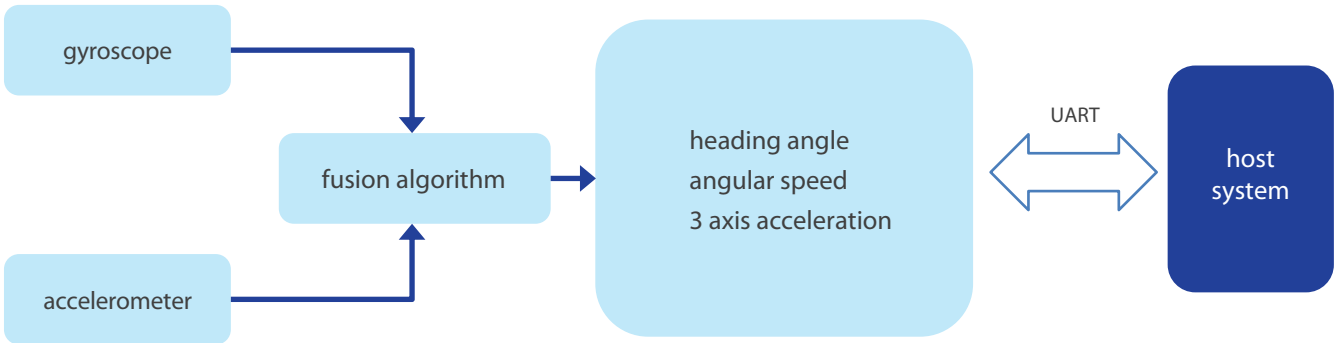


Main Features

- based on MEMS inertial sensors
- integrating one-axis gyro and 3-axis accelerometer
- novel sensor fusion algorithm
- precise heading data output
- low noise
- high robustness
- interface: UART

Application:

- robotics
- motion capture
- automated guided vehicle (AGV)
- stability control





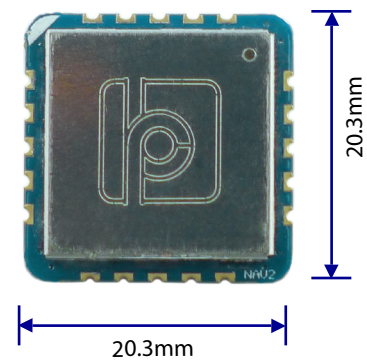
LIFE PERFORMANCE RESEARCH

Specifications

Parameter	LPMS-NAV2
Size	20.3×20.3×3.8mm
Weight	2.3g
Heading range	±180° / 0~360° (selectable)
Angle resolution	0.01° (Max.)
Angular speed range	± 400dps
Acceleration range	± 4g
Data output rate	10~100Hz selectable
UART baudrate	19200~115200bps selectable
Heading linear error	< 0.1°/m
Angle random walk (f=10Hz)	0.18°/√h
Bias stability (f=10Hz)	< 5°/h
Power consumption	< 36.5 mW@3.3V
Power supply	3.3~5.5V DC
Working temperature	-20~80°C
Stock temperature	-40~85°C

Dimension

LPMS-NAV2:



LPMS-NAV2 Package



GUI in Windows

