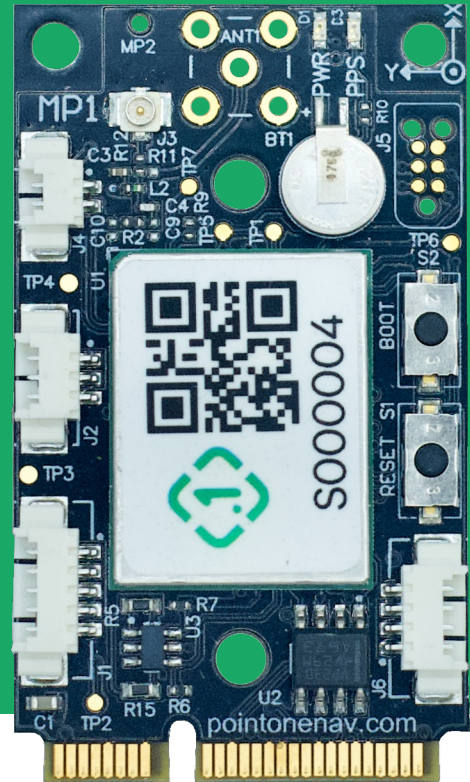


Standard Dev Kit Data Sheet

Point One Navigation is pleased to offer our Standard Development Kit, an Inertial Navigation System that delivers precise positioning to a variety of applications in a convenient form-factor for prototyping and also scaled and deployment.



Features

ST TeseoV dual frequency L1/L5 GNSS receiver

64-bit low power ARM processor architecture

10 Hz position update rate with (optional) 6DOF output over USB

Powerful performance in lightweight, compact mini PCI Express form factor

Multiple configurations for location, dead reckoning, and heading

CAN and wheel encoder vehicle odometry inputs

Benefits

Access to Polaris, the industry's highest performance GNSS correction service, and other RTCM3 compliant correction services

Position accuracy better than 10 cm global frame

Tightly coupled sensor fusion with integrated FusionEngine to achieve centimetre-level accuracy

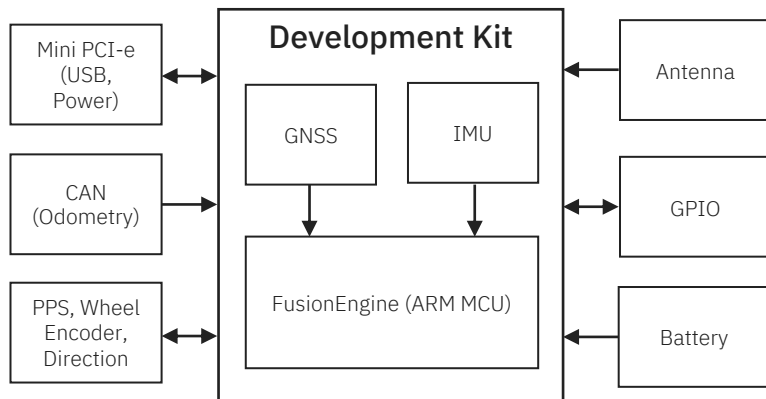
Simple integration into research, prototype, and production systems

Open-sourced tools for configuring, controlling, and analysing recorded data

Easy to use GUI for configuration and viewing, available on all compute platforms

Interface

Input Voltage	5V (USB)
Power (Typical)	1.2 W
Odometry	CAN, Wheel Encoder
IO	PPS, Battery



Performance

Open Sky	<10 cm, 1-sigma accuracy; 1 m PL, TIR = 10 ⁻⁷ , availability = 99%
Urban	<30 cm, 1-sigma accuracy; 3 m PL, TIR = 10 ⁻⁷ , availability = 99%

Mechanical

Dimensions	30 mm x 50.95 mm x 6 mm (Mini-PCI Express)
Antenna	u.FL (MMCX available on request)
IO Connectors	Molex MicroFit
Storage	-40° C to +85° C (95% RH)
Operation	0° C to + 60° C (90% RH)

Web Store

store.pointonnav.com

Navigation Specification

Signal Tracking

GPS L1C/A, BeiDou B1-I, B1-C, GALILEO E1

GPS L5, BeiDou B2a, Galileo E5a

QZSS, SBAS, EGNOS

Inertial

+/- tbd deg / sec, +/- 4 g

Output

Point One FusionEngine binary, NMEA 0183

10 Hz PVT updates (configurable)

Support

GitHub github.com/PointOneNav/

Documents pointonnav.com/docs/