

“GNSS Receiver BOB with IRNSS”

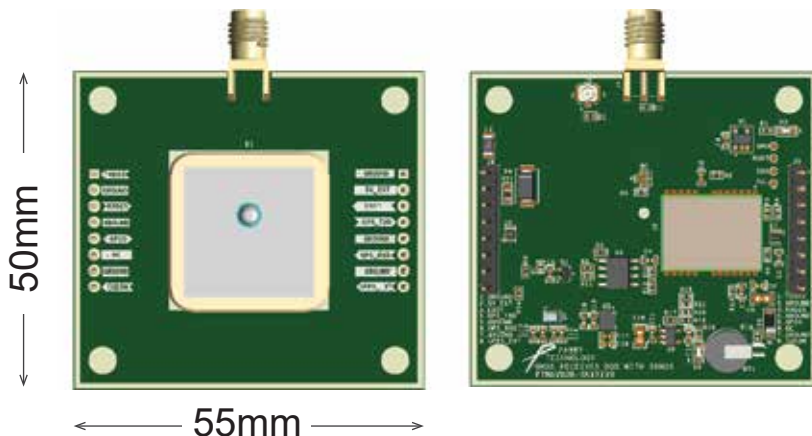


is a Breakout Board having satellite navigation receiver, capable of supporting

band L5-NavIC (India) and L1-GAGAN/GPS/-GLONASS signals to provide 3D navigation. It has optional mounting of IMU sensors for Dead Reckoning applications and can also support optional RTK module. SkyTraQ chipset combined with best board level RF design of BOB and matched antenna, offers superior cold start sensitivity that allows to acquire, track, and get position fix autonomously even in difficult and weak signal environments.

Features of SkyTraQ GNSS Receiver chipset

- L1, L5 signal reception to support GPS and NavIC. Works with NavIC, GAGAN, GLONASS, GPS satellites and more. Support for AGPS.
- Support for Automotive Dead Reckoning (ADR), Odometer-less Dead Reckoning (ODR) with either built-in sensors within the GNSS BOB or with external sensors.
- Optional Real-time Kinematic (RTK) module for Centimetre level precision and accuracy.



GNSS RECEIVER BOB WITH IRNSS

Mounting options for external antennas—SMA (Jack), U.FL (Plug)

Mounting options for IMU sensor with Accelerometer, Gyro (I2C interface), and Barometric pressure Sensor for Dead Reckoning

Works from external $5V \pm 5\%$, 120mA DC input. Has onboard 3.3V LDO with input overvoltage protection

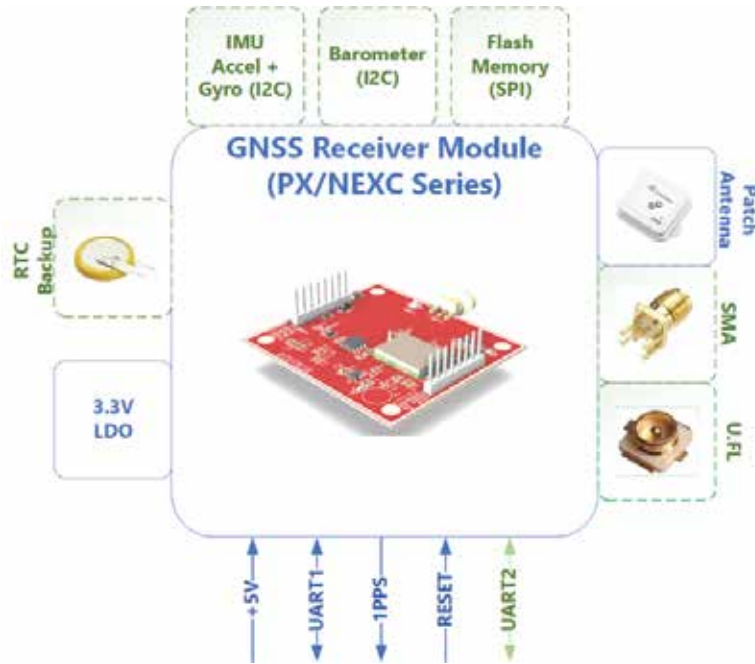
ESD protection for all interface pins

BOB can be ordered with various options of GNSS receiver modules

Benefits

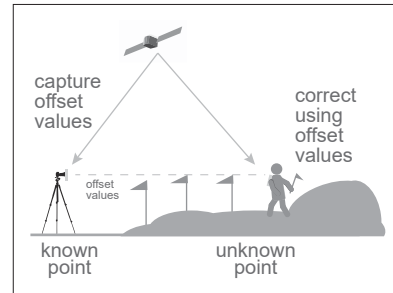
- + Proper ground plane and RF layout design
- + Suitable on board or external antennas for best overall system performance
- + Possibility to use any external antenna with antenna matching option
- + One BOB suitable for multiple requirements (GPS, NavIC, ODR, RTK)

Block Diagram



Applications

RTK



IRNSS



Dead Reckoning



Product Ordering Guide

Part number : **PTNAVBOB-SKXYZV0**

Variant	Value	Option	Description
XY	00	S1216F8-GI3	GNSS Simple Precision Receiver BOB for L1 GAGAN/GPS/GLONASS, L5 NavIC tracking, Venus 8 positioning engine
	01 07	PX1120S PT100-0S*	GNSS Simple Precision Receiver BOB for L1 GPS/Beidou/ Galileo/GLONASS tracking, Phoenix positioning engine
	02 08	PX1125S-01 PT100-0D*	GNSS Simple Precision Receiver BOB for L1 GPS/GAGAN, L5 NavIC tracking, Phoenix positioning engine
	03 09	PX1120D* PT100-2R*	GNSS Dead Reckoning Receiver BOB for L1 GPS/Beidou/ Galileo/GLONASS tracking, integrated Accel, Gyro, Barometric sensors, Phoenix positioning engine
	04 10	PX1125D-01* PT100-5S*	GNSS Dead Reckoning Receiver BOB for L1 GPS/GAGAN, L5 NavIC tracking, external Accel, Gyro, Barometric sensors, Phoenix positioning engine
	05 11	PX1122C* PT100-5D*	GNSS Carrier Phase Measurement Receiver BOB for L1/L2C GPS/QZSS, L1/L2 GLONASS, B1I/B2I Beidou, GalileoE1/E5b tracking, Phoenix positioning engine
	06 12	PX1122R* PT100-2C*	GNSS RTK Receiver BOB for L1/L2C GPS/QZSS, L1/L2 GLONASS, B1I/B2I Beidou, GalileoE1/E5b tracking, Phoenix positioning engine
Z	0	Patch Antenna	Patch Antenna on BOB
	1	U.FL	U.FL interface in BOB for external passive antenna
	2	SMA	SMA interface in BOB for external passive antenna

Example Order Part Number: *PTNAVBOB-SK000V0*

* Request for availability through e-mail: sales@elementzonline.com