

S4554GNS-LP

High-Performance 88 Channel GLONASS + GPS Receiver

FEATURES

- 88 Channel GLONASS+GPS L1 C/A Code
- Perform 10 million time-frequency hypothesis testing per second
- Open sky hot start 1 sec
- Open sky cold start 29 sec
- Cold start sensitivity -145dBm
- Navigation sensitivity -159dBm
- 400mW acquisition
- 250mW tracking
- Accuracy 2.5m CEP
- Operating temperature -40 ~ +85°C
- RoHS compliant

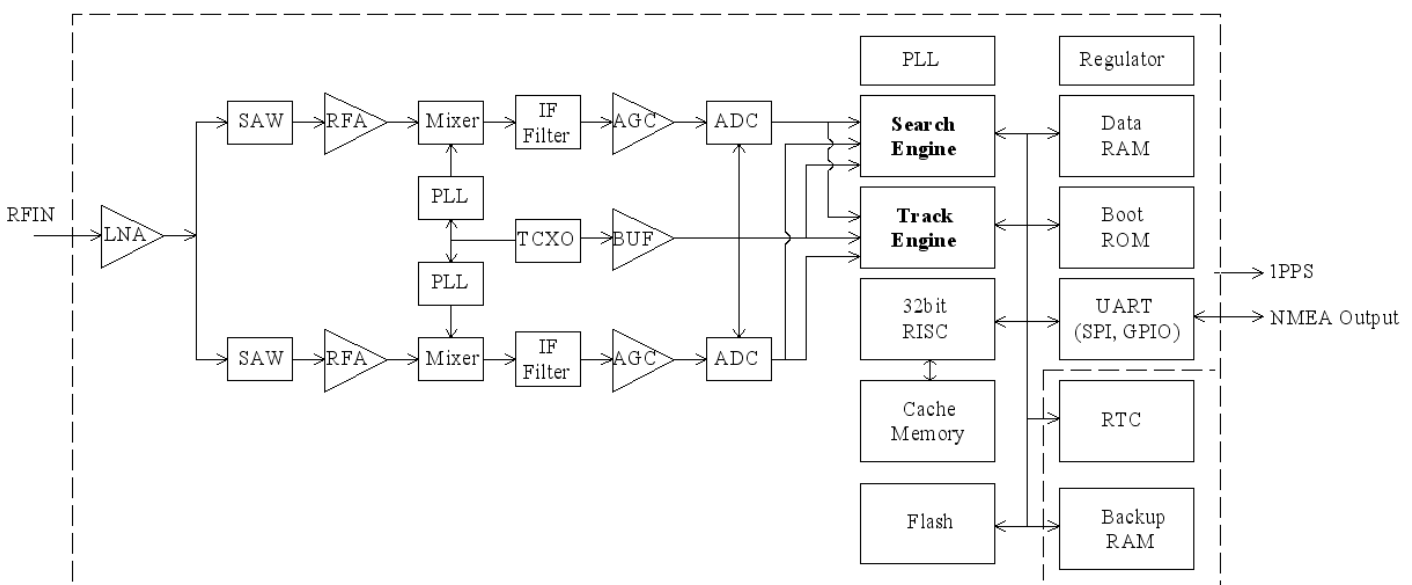
The S4554GNS-LP offers GPS+GLONASS positioning to provide increased satellite availability for positioning in challenging environments at a very cost-effective price. It offers 22 tracking channels of L1 GPS and GLONASS code and carrier phase tracking for increased positioning accuracy and availability.

The S4554GNS-LP features 88 channel GPS receiver with fast time to first fix and improved -145dBm cold start sensitivity. The superior cold start sensitivity allows it to acquire, track, and get position fix autonomously in difficult weak signal environment. The receiver's -155dBm tracking sensitivity allows continuous position coverage in nearly all application environments. The high performance search engine is capable of testing 10,000,000 time-frequency hypotheses per second, offering industry-leading signal acquisition and TTFF speed.

Applications

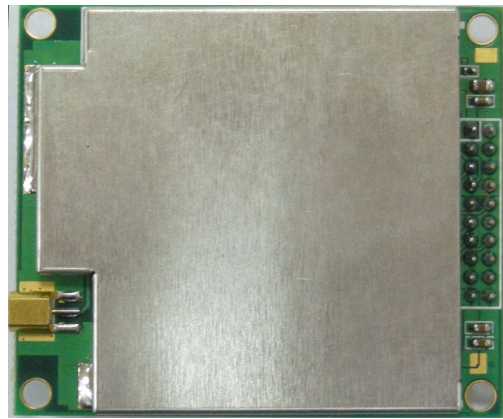
- Automotive Navigation
- Vehicle Tracking
- Marine Navigation
- Timing reference

The receiver is suitable for in vehicle car navigation system that requires high performance continuous navigation and low cost.



TECHNICAL SPECIFICATIONS

Receiver Type	L1 C/A code, 88-channel
Modes	GLONASS GPS GLONASS + GPS
Accuracy	Position 2.5m CEP Velocity 0.1m/sec Time 60ns
Startup Time	1 second hot start < 29 second warm start 29 second cold start
Reacquisition	1s
Sensitivity	-145dBm cold start -159dBm navigation
Update Rate	1Hz
Operational Limits	Altitude < 18,000m or Velocity < 515m/s
Serial Interface	3.3V LVTTTL level
Protocol	NMEA-0183 V3.01 GPGGA, GNGLL, GNGNS, GPGSA, GLGSA, GNGSA GPGSV, GLGSV, GNVTG, GNRMC 38400 baud, 8, N, 1
Datum	Default WGS-84 User definable
Input Voltage	3.3V DC +/-5%
Power Consumption	400mW acquisition 250mW tracking
Dimension	54mm L x 45mm W
Weight:	16g
Interface Connector	20 pin male header, 2.0mm pitch
Operating Temperature	-40°C ~ +85°C
Storage Temperature	-55 ~ +100°C
Humidity	5% ~ 95%



ORDERING INFORMATION

Part Number	Description
S4554GNS-LP	GLONASS/GPS Receiver

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