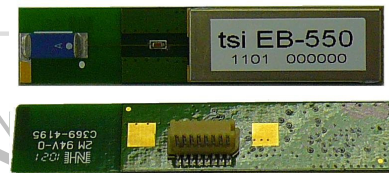


## GPS Engine Board

### EB-550

EB-550 is a complete GPS engine with antenna in miniature 43 x 9 x 4 mm dimension. It provides great navigation performance under dynamic conditions in areas with limited sky view like urban canyons. High sensitivity up to **-165dBm\*** for weak signal operation without compromising accuracy. EB-550 brings the best GPS reception with compact size for all kinds of embedded applications.



#### Key Features :

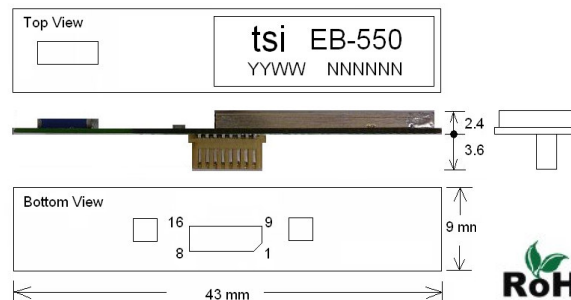
- Small form factor: 43 x 9 x 2.4 mm
- High sensitivity -165dBm\*
- Tracks 66-Channel of satellites
- Fast Position Fix
- Low power consumption
- Integrate GPS antenna
- Support off line AGPS.
- Lead-Free – RoHS/WEEE compliant

#### Applications :

- Handheld devices
- Automotive and Marine Navigation
- Emergency Locator
- Geographic Surveying
- Personal Positioning
- Sporting and Recreation
- Embedded applications

#### PIN Definition :

Pin #	Name	Pin #	Name
1	GND	9	GND
2	GND	10	GND
3	GND	11	RXA
4	GND	12	TXA
5	GND	13	CTRL
6	GND	14	Vcc
7	GND	15	GND
8	GND	16	GND



\* Refer to chip specifications

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An A+ supplier of RF microwave & GPS products

# Ultimate

# EB

## Specifications

<i>Item</i>	<i>Description</i>
<b>General</b>	L1 frequency, C/A code (SPS) 66 independent tracking channels
<b>Sensitivity*</b>	-165dBm /Tracking; -148dBm /Acquisition
<b>Update Rate</b>	Up to 10Hz
<b>Accuracy</b>	<3m CEP (50%) without SA 2.5m DGPS (WAAS, EGNOS, MSAS, RTCM)
<b>Acquisition (open sky)</b>	Cold Start: 35sec Warm Start: 34sec Hot Start: 1.5sec
<b>Reacquisition</b>	< 1sec
<b>Dynamics</b>	Altitude: 18000m (max.) Velocity: 515m/sec (max.) Vibration: 4G (max.)
<b>NMEA</b>	NMEA0183 v3.1 GGA, GSA, GSV, RMC ( Default ) / GLL, VTG (Optional )
<b>Datum</b>	Default WGS-84
<b>Antenna</b>	Build-in chip antenna
<b>Power Supply</b>	DC 3.0V ~ 4.2V
<b>Current</b>	30mA @ 3.3V / Tracking
<b>Interface</b>	UART, Baud rate : 4800/9600( Default )/.../115200
<b>Mounting</b>	Molex 16 pin male (52465-1629) board to board connector
<b>Dimension</b>	43 x 9 x 2.4 (H, include shielding box) mm
<b>Operating Temp.</b>	-30°C to 85°C
<b>Storage Temp.</b>	-40°C to 85°C
<b>Operating Humidity</b>	≤ 95%, non condensing

\* Refer to chip specification.

\*\* Specifications subject to change without prior notice.

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