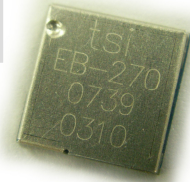


GPS Engine Board



EB-270/ EB-271

EB-27x is an ultra miniature 10.4 x10.5 mm² GPS engine board. It provides superior navigation performance under dynamic conditions in areas with limited sky view like urban canyons. High sensitivity up to **-158dBm** for weak signal operation without compromising accuracy. EB-27x series is your best choice for embedded applications.



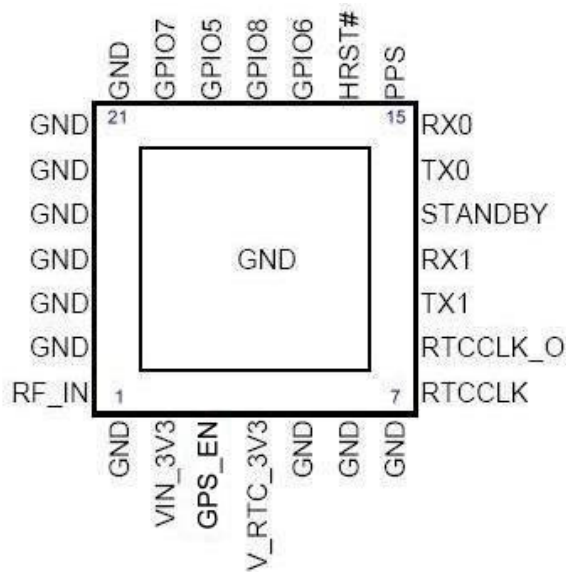
Key Features :

- Small form factor: 10.4 x 10.5 x 2.0 mm
- Lead-Free – RoHS/WEEE compliant
- High sensitivity -158dBm
- Tracks 51-Channel of satellites
- Fast Position Fix
- Low power consumption
- Backup Battery :
EB-270 DC 1.0~1.5V
EB-271 DC 1.5~6.0V

Applications :

- Handheld devices
- Automotive and Marine Navigation
- Automotive Navigator Tracking
- Emergency Locator
- Geographic Surveying
- Personal Positioning
- Sporting and Recreation
- Embedded applications : PDA, DSC, Smart phone, UMPC, PND, MP4

PIN Definition :



PIN Coordinates

Unit:mm

Pin #	X	Y	Pin #	X	Y
1	0.00	0.00	15	6.60	10.40
2	1.10	0.00	16	5.50	10.40
3	2.20	0.00	17	4.40	10.40
4	3.30	0.00	18	3.30	10.40
5	4.40	0.00	19	2.20	10.40
6	5.50	0.00	20	1.10	10.40
7	6.60	0.00	21	0.00	10.40
8	8.55	1.90	22	-1.95	8.50
9	8.55	3.00	23	-1.95	7.40
10	8.55	4.10	24	-1.95	6.30
11	8.55	5.20	25	-1.95	5.20
12	8.55	6.30	26	-1.95	4.10
13	8.55	7.40	27	-1.95	3.00
14	8.55	8.50	28	-1.95	1.90



TRANSYSTEM INC.

An A+ supplier of RF microwave & GPS products

Ultimate

EB

EB-27x Specifications

Specification	Description
General	L1 frequency, C/A code (SPS) 51 independent tracking channels
Sensitivity	-158dBm /Tracking; -146dBm /Acquisition
Update Rate	Up to 5Hz
Accuracy	Without aid: 3.0m 2D-RMS <3m CEP (50%) without SA (horizontal) DGPS (WAAS, EGNOS, MSAS, RTCM): 2.5m
Acquisition (open sky)	Cold Start:36sec Warm Start:33sec Hot Start:1sec
Reacquisition	< 1sec
Dynamics	Altitude: 18000m (max.) Velocity: 515m/sec (max.) Vibration: 4G (max.)
Supply Voltage	DC 3.0~6 V
Power Consumption	< 27.5mA @ 2.85V (w/o Active ANT) / Tracking
Backup Battery	EB-270: DC 1.0~1.5V EB-271: DC 1.5~6.0V
NMEA Message	NMEA0183 v3.1 baud rate 4800/9600/.../115200, default 115200 Selectable Output: GGA, GLL, GSA, GSV, RMC, and VTG
Datum	Default WGS-84
Antenna	External Active Antenna Output Voltage: 2.85 VDC
Serial Interface	UART
Operating Temperature	-30°C to 85°C
Storage Temperature	-40°C to 85°C
Operating Humidity	≤95%, non condensing
Mounting	SMT Type, 28 Pin
Dimension	10.4 x 10.5 x 2.0(H) mm

*Specifications subject to change without prior notice.

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No.1-2 Li-Hsin Rd.I, Science-Based
Industrial Park, Taiwan, R.O.C.
T: +886-3-5780393 / F: +886-3-5784111
sales@transystem.com.tw
www.transystem.com.tw