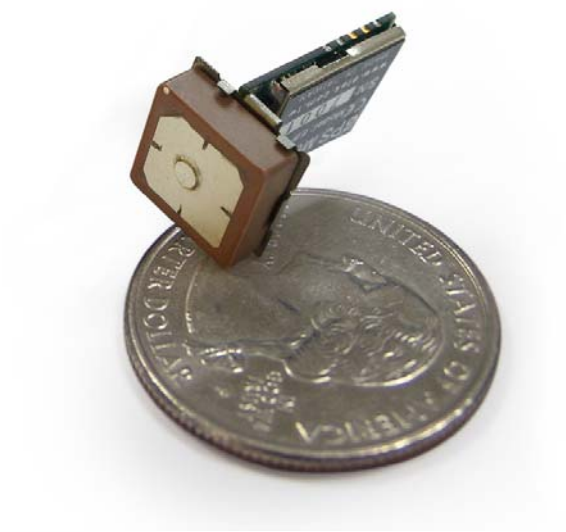
T-type GPS Engine Board

MODEL: EB-12T



Introduction:

EB-12T is the newest generation of Sanav EB series GPS engine board. This low-powered, small form factor board is powered by SiRF Star III technology. The T-type design of **EB-12T** is the best choice for embedding in portable devices and receivers like PND, mobile phone, car holder, personal locator, digital camera, and vehicle locator. The high sensitivity of **EB-12T** provides great performance when going through the urban canyon and foliage.

Features:

- Assembled in the form of T-type
- 20 parallel channels
- -159 dBm high GPS sensitivity
- Excellent sensitivity for urban canyon and foliage environments
- Operable from 3.3V, average tracking current is 45mA@3.3V; average acquisition current is 50mA@3.3V
- TCXO design
- NMEA-0183 compliant protocol/custom protocol
- SBAS (WAAS and EGNOS) support
- 4 Mbits Flash Memory
- SMT type with stamp holes
- Lead-free

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Applications:

- Personal Navigation Device including GPS PDA and GPS Handheld
- Mobile phone and smart phone
- GPS receiver and GPS mouse
- Personal positioning and navigation
- Automotive/Marine navigation
- Timing application

Specification:

Function	Specification
GPS receiver	
Chipset	SiRF Star III, GSC3f/LPSingle Chipset
Frequency	L1 1575.42MHz.
Code	C.A. Code.
Channels	20 parallel
Sensitivity (Tracking)	-159dBm.
Cold start	42 sec (Signal Strength > 30 dB-HZ)
Warm start	35 sec (Signal Strength > 30 dB-HZ)
Hot start	1 sec (Signal Strength > 30 dB-HZ)
Reacquisition	0.1sec typical
Position accuracy (95%)	10m 90%
Maximum altitude	18000 m
Maximum velocity	514 m/s
Trickle power mode	Duty cycle ≦ 34%. (Variable)
Update rate	Continuous operation: 1Hz
Testability	It shall be able to be tested by SiRF test mode 4 and single channel simulator.
Protocol setup	It shall store the protocol setup in the SRAM memory.
Interface	
I/O Pin	14pin stamp holes
Mechanical requirements	
Weight	≦6g
Power consumption	
Vcc	DC 3.3 ±5%
Current	Typ. 45mA (tracking situation) Typ. 50mA (acquisition sitoation)
Environment	
Operating temperature	-40 °C ~ 85 °C
Storage temperature	-40 °C ~ 85 °C
Humidity	≦95%

＊This specification is subject to change without prior notice

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