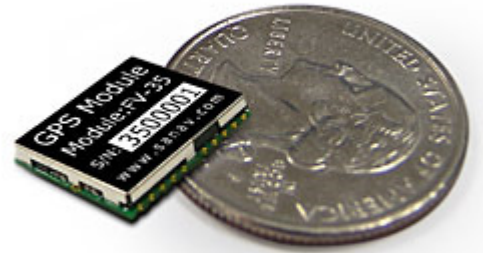


FV-35 “GPS Receiver Module”

Overview:

FV-35 is currently the most compact GPS engine board module.

With the SIRF STAR III GPS technology the FV-35 is high sensitive.



Features:

20 parallel channels

SMT type with stamp holes

High quality stereo. Audio output

TCXO design

0.1 second reacquisition time

small form factor with embedded SIRF Star III single chip technology

NME-0183 compliant protocol / customize protocol

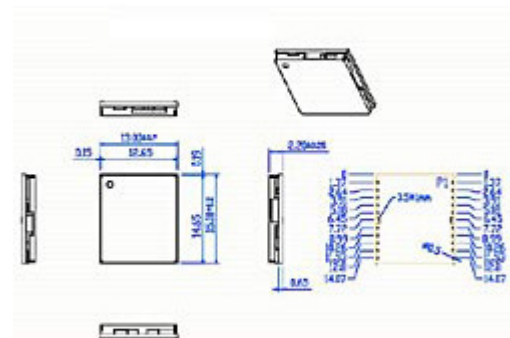
Enhanced algorithm for navigation stability

Excellent sensitivity for urban canyon and foliage environments

DGPS (WAAS, ENGOS) Support

Auto recovery while RTC crashes

Built in LNA and SAW filter



Applications:

Automotive navigation / Personal positioning and navigation

Marine navigation / Timing application

**Specification FV-35 GPS
Module**

Parameter	Specification
Chipset	SIRF STAR III, GSC 3f/LP (Digital, RF in a single package)
Frequency	L1 1575.2 MHz
Code	C.A. Code
Channels	20 parallel
Sensitivity (Acquisition)	-159 dBm
Start up Time	Cold Start 35s (open sky) typ. Warm Start 35s (open sky) typ. Hot Start 1s (open Sky) typ.
Reacquisition	0.1 sec typical
Position accuracy	10m @ 2D RMS
Maximum Altitude	18000m
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 testmode 4 and single channel simulator
Protocol setup	I shall store the protocol setup in the SRAM memory
DGPS	1. WAAS, EGNOS 2. RTCM protocol
<u>Interface:</u>	
LNA	17dB Gain (typ.)
I/O Pin	22 pin
Mechanical consumption:	
Weight	3.5g

<u>Power consumption:</u>	
VCC	DC3.3 +/-5%
	GPS: 33mA @ 3.3V (Acquisition w/o ext. Antenna) typical
Current	32 mA @ 3.3 V (tracking w/o ext. Antenna) typical 11mA @ 3.3 V (Standby mode w/o ext. Antenna) typical
Environment	
Operating temperature	-40°C ~ 85°C
Storage temperature	-40°C ~ 85°C
Humidity	95%