





Ct-G340

Specifications Sheet

(Rev. G, TTL, with Ct-G348SLP)



Features:

-  SiRF StarIII low power single chipset
-  40.64 x 71.12 x 1.4 mm
(1.6 x 2.8 x 0.5 inch)
-  TTFF(C/W/H) : 42 / 38 / 1 sec.
-  RoHS compliance

1. Introduction

The Connectec GPS Ct-G340 (SiRFstar III) module is high performance, low power, 20-channel TTL level GPS receiver, based on the SiRFStarIII/LP single chipset technology while providing fast time-to-first-fix. Its far reaching capability meets the sensitivity requirements of car navigation as well as other location-based applications. Connectec GPS Ct-G340 (SiRFstar III) is designed to allow quick and easy integration into GPS-related applications, especially for compact size devices, such as:

- ✚ Fleet Management / Asset Tracking
- ✚ AVL and Location-Based Services

1.1. Features

Hardware and Software

- ✚ Based on the high performance features of the SiRF Star III low power single chipset.
- ✚ Dimensions: 40.64 x 71.12 x 1.4 mm (*1.6 x 2.8 x 0.5 inch*)
- ✚ RoHS compliant (lead-free)

Performance

- ✚ Cold/Warm/Hot Start Time: 42 / 38 / 1 sec. at open sky and stationary.
- ✚ Reacquisition Time: 0.1 second

Interface

- ✚ DIP type pitch 2.0mm- 2x10 pin header.
- ✚ Protocol: NMEA-0183 compliant.
- ✚ Baud Rate: 4800 bps.
- ✚ Right angle MCX (RMCX) RF Connector.



2. Specifications

Technical Specifications

Feature	Item	Description
Chipset	GSC3f/LP Series	SiRFstarIII/LP single chip technology
General	Frequency	L1, 1575.42 MHz
	C/A code	1.023 MHz chip rate
	Channels	20
Accuracy	Position	10 meters, 2D RMS
		5 meters 2D RMS, WAAS corrected
		< 5meters(50%), DGPS corrected
	Velocity	0.1 meters/second
Time	1 microsecond synchronized to GPS time	
Datum	Default	WGS-84
Time to First Fix(TTFF) (Open Sky & Stationary Requirements)	Reacquisition	0.1 sec., average
	Hot start	1 sec., average typical TTFF
	Warm start	35 sec., average typical TTFF
	Cold start	42 sec., average typical TTFF
Dynamic Conditions	Altitude	18,000 meters (60,000 feet) max.
	Velocity	515 meters/second (1000 knots) max.
	Acceleration	4g, max.
Power	Main power input	3.3 ~ 5.0 VDC
	Power consumption	≈250 mW (continuous mode)
	Supply Current	≈50mA @5.0 VDC
	Backup Power	2.0 ~ 5.0 VDC input.
Interface	Pin Header	DIP type pitch 2.0mm 2x10 pin header
	Protocol messages	NMEA-0183@4800 bps



Environmental Characteristics

Items	Description
Operating temperature range	-40 deg. C to +85 deg. C
Storage temperature range	-55 deg. C to +100 deg. C

Physical Characteristics

Items	Description
Length	1.6in / 40.64 mm
Width	2.8 in / 71.12 mm
Height	0.5in / 1.40 mm
Weight	16g(net)



3. Software

The Connectec Ct-G340 (SiRFstar III) module includes GSW3.2.X series, the SiRF standard GPS software for SiRFstarIII low power single chipset receivers. Features include:

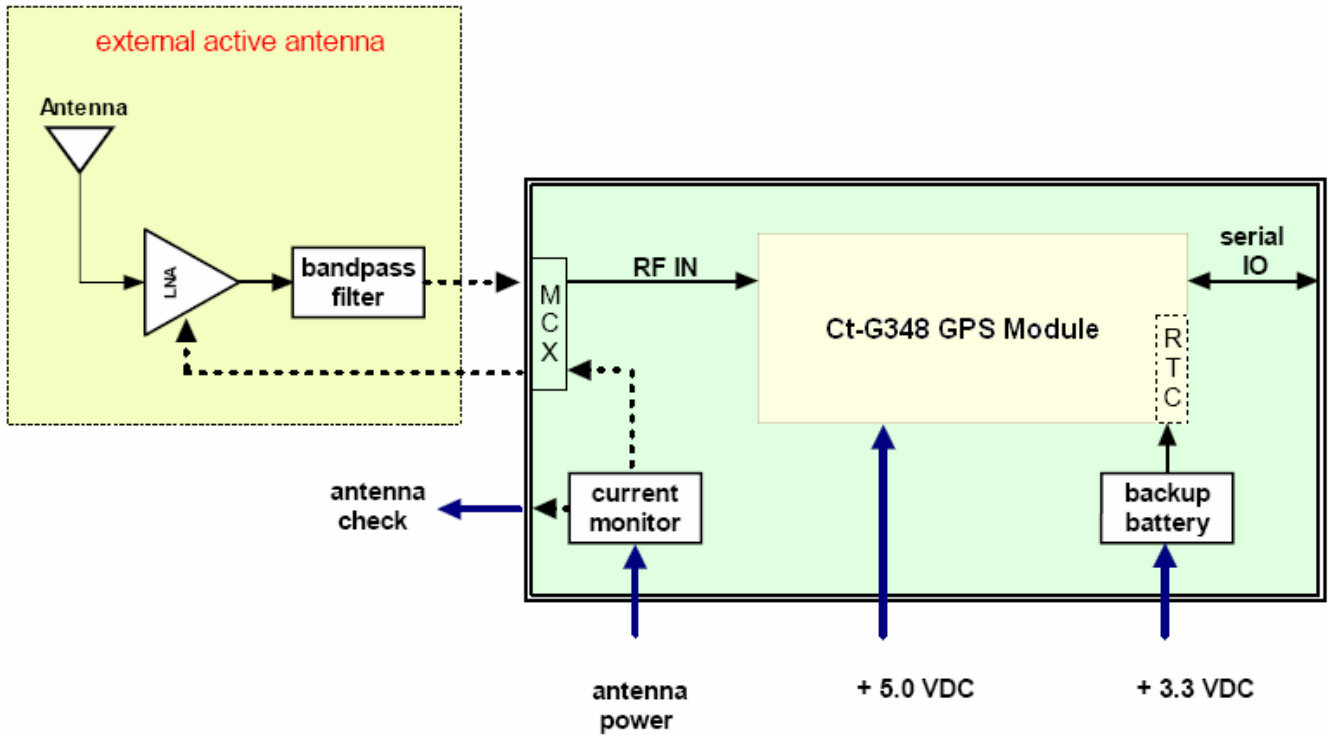
- ✦ Excellent sensitivity
- ✦ High configurability
- ✦ 1 Hz position update rate
- ✦ Supports use of satellite-based augmentation systems like the US WAAS or European EGNOS system (**Option**)
- ✦ Real-time Operating System (RTOS) friendly
- ✦ Capable of outputting either NMEA(default) or SiRF proprietary binary protocols
- ✦ Runs in full power operation (default) or optional power saving modes

Default configuration is as follows:

Items	Description
Core of firmware	SiRF GSW3.2.X
Baud rate	4800, 9600, 19200, 38400 or 57600 bps (default 4800)
Code type	NMEA-0183 ASCII
Datum	WGS-84
Protocol message	GGA(1sec), GSA(5sec), GSV(5sec), RMC(1sec), VTG(1sec)
Output frequency	1 Hz

4. Technical specifications

4.1. Block Diagram



4.2. PCB Drawing (Unit : mm)

