

Tiny dual-band GNSS low power module



Features

- Simultaneous multi-constellation and multi band GNSS
- -162 dBm tracking sensitivity
- 1 m CEP position accuracy
- Embedded Flash
- FW upgrade
- V_{CC}/V_{BAT} supply voltage range: from 1.8 V to 3.6 V
- V_{CC_IO} 1.8 V and 3.3 V
- Tiny LCC 18 pin package (9.7x10.1)
- Wide operating temperature range (from -40 °C to 85 °C)
- Free FW configuration
- 12. μ A standby current and 36 mA GNSS L1&L5 current consumption

Description

The Teseo-LIV4F module is an easy to use global navigation satellite system (GNSS) standalone low power module, embedding Teseo IV single die standalone positioning receiver IC working simultaneously on multiple constellations (GPS/Galileo/Glonass/BeiDou/QZSS).

The Teseo-LIV4F modules bring the proven accuracy and robustness of Teseo IV multi bands chips accessible to all: the embedded firmware and the complete evaluation environment save development time, while the compactness and cost-effectiveness of this solution make it ideal for several applications, such as insurance, goods tracking, drones, tolling, anti-theft systems, people and pet location, vehicle tracking, emergency calls, fleet management, vehicle sharing, diagnostics and public transportation.

With its 9.7x10.1 mm tiny size, Teseo-LIV4F is offering superior accuracy thanks to the on-board temperature compensated crystal oscillator (TCXO) and a reduced time to first fix (TTFF) relying to its dedicated real time clock (RTC) oscillator.

Teseo-LIV4F provides also the real-time assisted GNSS.

Teseo-LIV4F module, being a certified solution, optimizes the time to market of the final applications with a temperature operating range from -40 °C to 85 °C.

Product status link	
Teseo-LIV4F	
Product summary	
Order code	Teseo-LIV4F
Marking	Teseo-LIV4F
Temperature range	from -40 °C to 85 °C
Package	LCC-18 (9.7 mmx10.1 mm)
Packing	Tape and reel

Revision history

Table 1. Document revision history

Date	Version	Changes
20-Oct-2020	1	Initial release.

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, please refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2020 STMicroelectronics – All rights reserved