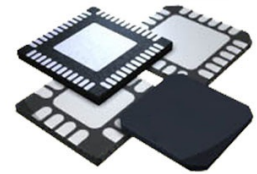



## GPS Receiver 1575.42MHz 1.32V/1.89V/3.6V Automotive 56-Pin VFQFPN EP Tray



Images are for reference only

<b>Manufacturer:</b>	<a href="#">STMicroelectronics, Inc</a>
<b>Package/Case:</b>	QFN
<b>Product Type:</b>	Discrete Semiconductor Modules
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active

[Inquiry](#)

### General Description

STA8089FG belongs to Teseo III family products. The device is a single die standalone positioning receiver IC working on multiple constellations (GPS/Galileo/GLONASS/BeiDou/QZSS). The device is backward compatible with STA8088FG, this enables fast customer application migration. The device is offered with a complete GNSS firmware which performs all GNSS operations including tracking, acquisition, navigation and data output with no need of external memories. STA8089FGBD can run also TESEO-DRAW the STMicroelectronics dead reckoning firmware.

## Key Features

STMicroelectronics positioning receiver with 48 tracking channels and 2 fast acquisition channels supporting GPS, Galileo, GLONASS, BeiDou and QZSS systems

ST-DRAW (Dead Reckoning Automotive Way) supported (STA8089FGBD only)

Pin to pin compatible with STA8088FG

Single die standalone receiver embedding RF Front-End and low noise amplifier

Fast TTFF

High performance ARM946 MCU (up to 196 MHz)

256 Kbyte embedded SRAM

In-package SQI Flash Memory (16 Mbits)

Real Time Clock (RTC) circuit

32-bit Watch-dog timer

3 UARTs

1 I2C master interface

1 Synchronous Serial Port (SSP, Motorola-SPI supported)

USB2.0 full speed (12 MHz) with integrated physical layer transceiver

2 Controller Area Network (CAN)

2 channels ADC (10 bits)

Operating condition:

Main voltage regulator (VINL): 1.8 V  $\pm$  5%

Backup voltage (VINB): 1.6 V to 4.3 V

Digital voltage (VDD): 1.0 V to 1.32 V

RF core voltage (VCC): 1.2 V  $\pm$  10%

IO Ring Voltage (VddIO): 1.8 V  $\pm$  5% or 3.3 V  $\pm$  10%

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Package:

VFQFPN56 (7 x 7 x 1.0 mm) 0.4 mm pitch

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Ambient temperature range: -40/+85°C

## Recommended For You

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### **STA5620**

STMicroelectronics, Inc  
QFN

### **ST25RU3993-BQFT**

STMicroelectronics, Inc  
QFN48

### **ST25R95-VMD5T**

STMicroelectronics, Inc  
QFN32

### **STA8090FG**

STMicroelectronics, Inc  
BGA

### **STA8088GA**

STMicroelectronics, Inc  
QFN

### **ST95HF-VMD5T**

STMicroelectronics, Inc  
QFN32

### **ST25DV16K-JFR6D3**

STMicroelectronics, Inc  
12UFDFPN

### **ST25R3920-AQWT**

STMicroelectronics, Inc  
VFQFPN32

### **ST25DV04K-IER6C3**

STMicroelectronics, Inc  
DNF8

### **STA8089GA**

STMicroelectronics, Inc  
QFN

### **STA8088FG**

STMicroelectronics, Inc  
VFQFPN56

### **ST25DV04K-IER6S3**

STMicroelectronics, Inc  
SOP8

### **SMA661ASTR**

STMicroelectronics, Inc  
SOT666

### **ST25R3916-AQWT**

STMicroelectronics, Inc  
QFN32

### **STMB2WB55CGU7**

STMicroelectronics, Inc  
UFQFN48