



Standard

PRODUCT DESCRIPTION

TAU1111 is a multi-system GNSS positioning module, which is based on the state of the art CYNOSURE III architecture. It supports BDS-3 (BeiDou Navigation Satellite System 3). Besides, it is capable of tracking all the global civil navigation systems (BDS, GPS, GLONASS, Galileo, QZSS and SBAS).

TAU1111 integrates efficient power management architecture, while providing high sensitivity and low power GNSS solutions which make it suitable for navigation applications on automotive and consumer electronics, as well as fleet management.



(TAU1111: 12.2*16*2.4mm)

HIGHLIGHTS

- Concurrent reception of 5 systems (GPS, BDS, GLONASS, Galileo, QZSS and SBAS) to maximize satellites visibility in L1 band
- Provides greater accuracy with more available measurements
- High sensitivity design and low power management
- Smart jammer detection and suppression
- Highly integrated SMD module with cost-effective antenna (L1 only) design

APPLICATIONS



Automotive Navigation

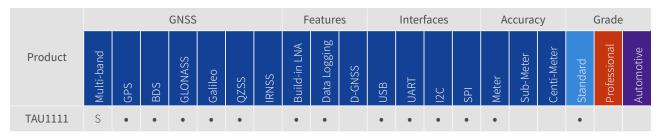


Asset Tracking Terminals



Fleet Management

Product Selector:



GENERAL SPECIFICATIONS

GNSS Engine

Cynosure III GNSS Engine 40 GNSS tracking channels 10Hz maximum update rate

GNSS Reception

GPS/QZSS: L1C/A, L1C^[1] BDS: B1I, B1C^[1] GLONASS: L1OF Galileo: E1 SBAS: L1

*[1] Supported by specific firmware upgrade

Position Accuracy

GNSS

2.5m CEP

0.1m/s CEP

20ns

1s

28s

Time to First Fix(TTFF)

Hot start Cold start

Sensitivity

Cold Start	-148dBm
Hot Start	-155dBm
Reacquisition	-158dBm
Tracking & Navigation	-162dBm

Velocity & Time Accuracy

GNSS		
1PPS		

Interfaces

UART	1
12C	1
USB	1
SPI	1

Antenna

Active antenna Passive antenna

Safety Supervision

Antenna short circuit protection Low voltage detection

Operation Limit

Velocity	515 m/s
Altitude	18,000 m

Operating Condition

Main voltage	1.8~3.6V
Digital I/O voltage	1.8~3.6V
Backup voltage	1.8~3.6V

Power Consumption

Operating	GPS+QZSS	18mA@3.3V
Operating	GNSS	24mA@3.3V
Standby	12uA	

ENVIRONMENT DATA

Operation temperature	-40°C ~ +85° C
Storage temperature	-40°C ~ +85° C
Certification	RoHS & REACH

PACKAGE

Packaging	24 PIN LCC
Dimensions	12.2*16*2.4mm



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