TAU1105

Multi-System GNSS Positioning Module

Standard

PRODUCT DESCRIPTION

TAU1105 is a multi-system GNSS positioning module, which is based on the state of art CYNOSURE III architecture. It supports BDS-3 (BeiDou Navigation Satellite System 3). Besides, it is capable of tracking most of the global civil navigation systems (BDS, GPS, GLONASS, Galileo, QZSS and SBAS).

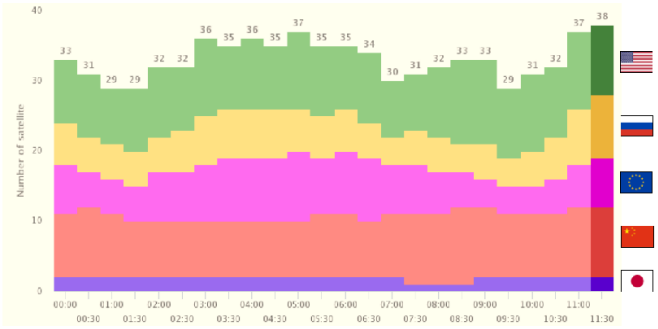


(10.1mm*9.7mm*2.5mm)

TAU1105 integrates efficient power management architecture, while providing high sensitivity and low power GNSS solutions which make it suitable for automotive navigation, fleet management, navigation applications on consumer electronics.

HIGHLIGHTS

- Concurrent reception of 5 systems (GPS+QZS+BDS+GAL+GLO) 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 module with cost-effective antenna (L1 only) design



APPLICATIONS

Automotive Navigation

Asset Tracking Terminals

Fleet Management

Model:

Product	GNSS							Features			Interfaces				Accuracy			Grade		
	Multi-band	GPS	BDS	GLONASS	Galileo	QZSS	IRNSS	Build-in LNA	Data Logging	D-GNSS	USB	UART	I2C	SPI	Meter	Sub-Meter	Centi-Meter	Standard	Professional	Automotive
TAU1105	S	•	•	•	•	•		•	•			•	•		•			•		

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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

Time to First Fix(TTFF)

Hot start	1s
Cold start	28s

Sensitivity

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

Velocity & Time Accuracy

GNSS	0.1m/s CEP
1PPS	20ns

Interfaces

UART	1
I2C	1

Antenna

Active antenna
Passive antenna

Safety Supervision

Antenna short circuit protection
System clock stop detection
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
	GNSS	24mA@3.3V
Standby	12uA	

ENVIRONMENT DATA

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

PACKAGE

Format	18 PIN LCC
Dimensions	10.1*9.7*2.5mm

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