

TAU1201/TAU1204

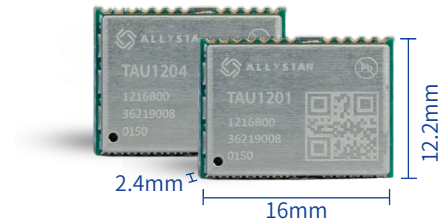
Multi-Band Multi-System GNSS Positioning Module

Standard

PRODUCT DESCRIPTION

TAU1201/TAU1204 is a high-performance dual-band 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 all global civil navigation systems (BDS, GPS, GLONASS, Galileo, IRNSS, QZSS and SBAS).

TAU1201/TAU1204 integrates efficient power management architecture, while providing high precision, high sensitivity and low power consumption GNSS solutions which make it suitable for automotive navigation, fleet management, navigation applications on consumer electronics.



HIGHLIGHTS

- Supports all civil GNSS systems
- Supports BDS-3 signal: B1C, B2a
- Concurrent reception of L1 and L5 band signals
- Sub-meter position accuracy; superior in multi-path mitigation and lower noise in city valley
- Smart jammer detection and suppression
- Highly integrated module, the best cost-effective high precision solution
- Supports single IRNSS mode

APPLICATIONS



Automotive Navigation



Lane-level Navigation



Fleet Management



Asset Tracking Terminals

Product Selector:

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
TAU1201	D	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•		
TAU1204	D	•	•		•	•	•	•	•	•	•	•	•		•			•		

GENERAL SPECIFICATIONS

GNSS Engine

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

GNSS Reception

TAU1201	GPS/QZSS	L1C/A, L5C
	BDS	B1I, B2a
	GLONASS	L1OF
	Galileo	E1, E5a
	SBAS	L1
TAU1204	GPS/QZSS	L1C/A, L5C
	BDS	B1I, B2a
	Galileo	E1, E5a
	IRNSS	L1
	SBAS	L1

Position Accuracy

GNSS <1m CEP

Time to First Fix(TTFF)

Hot start 1s
Cold start 30s

Sensitivity

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

Velocity & Time Accuracy

GNSS 0.1m/s CEP
1PPS 20ns

Interfaces

USB 1
UART 1
SPI 1
I2C 1

Antenna

Active antenna
Passive antenna

Operation Limit

Velocity 515 m/s
Altitude 18,000 m

Safety Supervision

Antenna short circuit and open circuit detection
Antenna short circuit protection

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	L1 band: 22mA@3.3V
	GNSS	L1+L5 band: 36mA@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*16.0*2.4mm

