

TAU1201/TAU1204

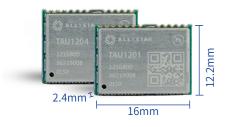
Multi-Band Multi-System GNSS Positioning Module

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

	GNSS				Features		Interfaces			Accuracy			Grade							
Product	Multi-band	GPS	BDS	GLONASS	Galileo	QZSS	IRNSS	Build-in LNA	Data Logging	D-GNSS	USB	UART	12C	SPI	Meter	Sub-Meter	Centi-Meter	Standard	Professional	Automotive
TAU1201	D	•	•	•	•	•		•	•	•	•	•	•	•		•		•		
TAU1204	D	•	•		•	•	•	•	•	•	•	•	•	•		•		•		

Product Selector:

GENERAL SPECIFICATIONS

GNSS Engine

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

GNSS Reception

	GPS/QZSS	L1C/A, L5C				
	BDS	B1I, B2a				
TAU1201	GLONASS	L10F				
	Galileo	E1, E5a				
	SBAS	L1				
	GPS/QZSS	L1C/A, L5C				
	BDS	B1I, B2a				
TAU1204	Galileo	E1, E5a				
	IRNSS	L1				
	SBAS	L1				

Position Accuracy

GNSS

<1m CEP

0.1m/s CEP

20ns

1s 30s

Time to First Fix(TTFF)

Hot start	
Cold start	

Sensitivity

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

Velocity & Time Accuracy

GNSS	
1PPS	

Interfaces

USB	1
UART	1
SPI	1
12C	1

Antenna

Active antenna Passive antenna

Operation Limit

Velocity Altitude 515 m/s 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			
Operating	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 Dimensions 24 PIN LCC 12.2*16.0*2.4mm



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