

PRODUCT DESCRIPTION

TAU1105 is a GNSS positioning module, which is based on the state of art CYNOSURE III architecture. It supports GPS, BeiDou, GLONASS, Galileo, and QZSS.

TAU1105 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, and fleet management.

HIGHLIGHTS

- Concurrent reception of GPS, BDS, GLONASS, Galileo, and QZSS
- High sensitivity design and low power management
- Smart jammer detection and suppression
- Highly integrated labelling module, the best cost-effective GNSS solution



0 01:00 02:00 03:00 04: 00:30 01:30 02:30 03:30 00 05 04:30 00 07:00 08:00 09:00 10:00 11:00 06:30 07:30 08:30 09:30 10:30 11:30 05:30

APPLICATIONS



Product Selector

Automotive Navigation

Asset Tracking

Fleet Management

Bike Sharing

Battery Sharing

| | | |
|------|--|----|
| | | GΝ |
| | | |





(10.1*9.7*2.5 mm)





GENERAL SPECIFICATIONS

GNSS Engine

Cynosure III GNSS Engine 40 GNSS tracking channels 5 Hz maximum update rate

GNSS Reception

GPS/QZSS: L1C/A BDS: B1I GLONASS: G1 Galileo: E1

Position Accuracy

GNSS

1m CEP

1s

28s

1

1

Time to First Fix (TTFF)

Hot start Cold start

Sensitivity

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

Velocity & Time Accuracy

| GNSS | 0.1 m/s CEP |
|------|-------------|
| 1PPS | 20 ns |

Interfaces

UART I2C*

*: Supported upon request with special firmware.

Antenna

Active antenna Passive antenna

Website: www.allystar.com

Antenna Supervision

Antenna short circuit protection and open circuit detection

Operation Limit

| Velocity | 515 m/s |
|----------|---------|
| Altitude | 18,000m |

Operating Condition

| Main voltage | 2.0-3.6 V |
|---------------------|-----------|
| Digital I/O voltage | 1.8-3.6 V |
| Backup voltage | 1.8-3.6 V |

Power Consumption

| Operating | GPS/QZSS | 25 mA @ 3.3V |
|-----------|----------|--------------|
| | GNSS | 35 mA @ 3.3V |
| Standby | 12 uA | |

ENVIRONMENT DATA

| Operation temperature | -40°C to +85°C |
|-----------------------|-------------------|
| Storage temperature | -40°C to +85°C |
| Certification | RoHS, REACH, FCC, |
| | CE-RED |

PACKAGE

| Package | 18 PIN LCC |
|------------|-----------------|
| Dimensions | 10.1*9.7*2.5 mm |



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