

# ORG4572-MK05

# 10Hz update rate and integrated Flash memory



### GNSS module in compact 7x7 mm footprint

Ideal to track exciting, fast-paced activities without delay, battery drain or clunky devices.

The ORG4572-MK05 is a multi-GNSS module built with the MT3333 SoC from MediaTek to provide impeccable performance and an incredibly fast update position calculation rate. With its fast, battery-saving TTFF, and a Flash memory for location data and firmware updates - stored even when the power is off, the low power solution is best in class. You can start building your GNSS solution right away since no external components are required.

The low-power solution is fully integrated (includes LNA, SAW filter, TCXO, RTC, and RF shield) and enables ultra-compact designs for a wide range of applications, such as IoT, wearables and sports cameras and UAVs designed to follow action sports and other fast-moving activities.

## **SPECIFICATIONS**

| Dimensions | Weight | DC supply | Accuracy | I/O Voltage | Update rate | Internal | GNSS SOC |
|------------|--------|-----------|----------|-------------|-------------|----------|----------|
| (LxWxH) mm | (gr)   | (V)       | (m)      | (V)         | (Hz)        | memory   |          |
| 7x7x1.8    | 0.2    | 3.3       | <2.5     | 3.3         | 1-10        | Flash    | MT3333   |

## **FEATURES**



# GPS, GLONASS, Galileo, BeiDou, QSZZ

+ UART/SPI/I2C interfaces supported

+ Ultra-high sensitivity down to -165dBm

+ Intelligent design improving time to market

+ Rapid update rate and superior memory

→ Jamming Rejection - 12 multi-tone Active Interference Cancellation (AIC)

+ Continuous connectivity with minimal power consumption

+ Miniature low-power architecture with low power modes

+ Internal storage of up to 8,000 location points

★ 8 Megabit built-in flash

# **GPS / GNSS MODULES**





#### **Outstanding performance from first fix**

The GPS/GNSS modules achieve improved time to first fix (TTFF) and highly accurate real-time positioning of approximately 1.5m, enhanced signal-to-noise ratio (SNR), and a position fix of 1sec (hot start)



#### The world's smallest form factor

The miniature GPS/GNSS modules integrate an LNA, SAW filter, TCXO, RTC crystal, and a power management unit, in addition to the GNSS SOC



#### Ultra-sensitivity is key

OriginGPS proprietary Noise-Free Zone<sup>111</sup>
technology enhances sensitivity and noise
immunity, both essential under challenging signa
conditions such as those in urban canyons.



#### Integrated and simple to integrate

Designed for a simple integration process, the modules offer a complete system-in-package (SIP with an industry-leading small surface-mount technology (SMT) footprint.



# Low power consumption saves resources

Requiring a very short acquisition time for TTFF, OriginGPS modules consume substantially less battery power. In addition, all modules include a range of low power modes.



#### **Multi-constellation**

OriginGPS modules simultaneously suppor multi-constellations, enabling continuous tracking of all satellites in view.

## Why choose an OriginGPS GPS/GNSS module?

| + Small form factor                              | Utilizing the smallest PCB space possible enables end product miniaturization and plenty of space to design.   |  |  |
|--|--|--|--|
| <ul><li>Minimizes RF design challenges</li></ul> | Modules RF front-end, LNA, SAW filter, TCXO and RTC are all integrated, while Hornet modules also include an integrated antenna.   |  |  |
| + Superior RF performance                        | Noise Free Zone (NFZ) technology eliminates ground currents, lowering noise floor, which results in superior C $/N_0$ - the leading performance indicator in GPS/GNSS receivers. |  |  |
| <b>┿</b> Fast TTM                                | A true plug-and-play solution with commands and data communicated over UART/I2C/SPI in standard NMEA format.   |  |  |
| Design review included                           | Our technical team will review your schematic and board layout files. We are RF experts, so you don't have to be.  |  |  |

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