

# Tracker



## Introduction

A compact precise location tracker which provides real-time location information to the server and end user using the cellular network. This product can be used in a wide range of applications including:

- Real-time fleet tracking
- Smart livestock to track the location of the cattle
- Location tracking collars for domestic pets
- Health wearables for elderly people, especially suffering from Alzheimer, to track their real-time location

## MCU- STM32F107VCT6:

Product Range	STM32 Family STM32F1 Series Microcontrollers
Architecture	ARM Cortex-M3
No. of Bits	32bit
CPU Speed	72MHz
Program Memory Size	256KB, 256KB
RAM Memory Size	64KB
No. of Pins	100Pins
MCU Case Style	LQFP
No. of I/O's	80I/O's
Embedded Interface Type	CAN ENET I2C SPI UART USB
Supply Voltage Min	2V
Supply Voltage Max	3.6V
MCU Family	STM32
MCU Series	STM32F1
RoHS Phthalates Compliant	Yes
MSL	MSL 3 - 168 hours
SVHC	No SVHC (17-Dec-2015)
Clock Frequency	72MHz
Controller Family/Series	STM32

Flash Memory Size	256KB
IC Generic Number	32F107VCT
MPU Core Size	32bit
No. of ADC Inputs	16
No. of PWM Channels	16
No. of Timers	10
Operating Temperature Max	85°C
Operating Temperature Min	-40°C
Operating Temperature Range	-40°C to +85°C
Oscillator Type	External Internal
Peripherals	ADC DAC DMA PWM Timer
Supply Voltage Range	2V to 3.6V
Termination Type	Surface Mount Device

## GPS module - NEO\_M7:

- TTL level, compatible with 3.3V/5V systems
- Baud rate 9600 only
- Operating voltage: 2.7V-5.0V (VCC input)
- Operating current: 35mA

## Sim800 GSM/GPRS module:

- Frequency Bands: 850/900/1800/1900MHz
- GPRS multi-slot class: 12/10
- Supply Voltage: 3.4V ~ 4.4V
- Operation temperature: -40°C ~ +85°C
- GPRS mobile station: class B
- Interface: USART
- GPRS class 12: Uplink/Downlink up to 85.6Kbps
- PBCCH support
- Embedded TCP/UDP protocol
- FTP/HTTP/POP3/SMTP
- (U)SIM card (1.8V/3V)