

# STEPP III

## Automotive Vehicle Location solution

Quad Band GSM/GPRS Engine

Voice, SMS, Data, TCP/IP

High sensitive 20 channel SiRFstarIII GPS

Li-Polymer (1100 mA) backup battery

Automotive temperature range

Configurable history function

Configurable geo-fencing

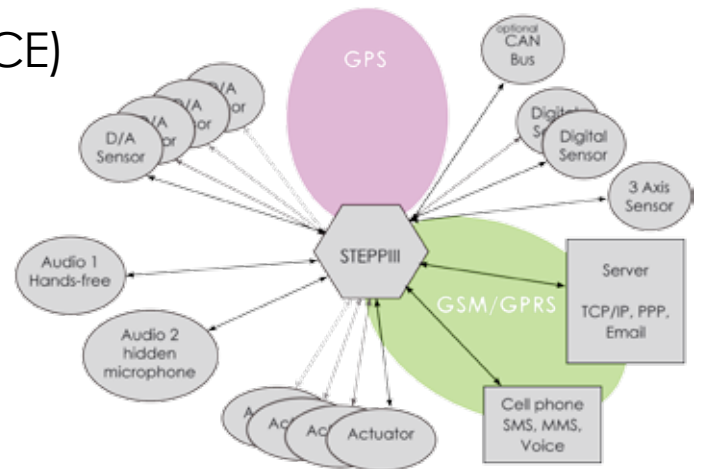
CAN interface (optional)

Fully specified (FTA, FCC, E1, CE)

3-Axis motion sensor

Online Tracking

Evalkit including evaluation  
and configuration tool



## The FALCOM STEPP III

is a Plug & Play GSM/GPRS/GPS terminal with an embedded configurable software application. The device concept is targeting for direct implementation as a mobile client in a wide range of high volume, low-cost, flexible system solutions like AVL, fleet management, vehicle security and recovery and other related areas.

The tracking functionality of the embedded mobile client application is combined with variety of alert messaging capabilities. The configurable alert messages contain current position and status report and use 2 digital and 4 analogue inputs and 4 digital outputs as hardware backbone. In addition to that two predefined inputs are detecting ignition line and main power (car battery) failure. Depending on the specific system

solution scenario four digital outputs allow the remote control of external actuators. The integrated two audio channels allow voice communication too.

The STEPP III concept reduces the efforts for the creation of a turn key tracking and security solution to the definition of the server (dispatcher) application. In this way the time-to-market, the design-in risk and the total cost of solution are substantially reduced.

The STEPP III-Evalkit provides an easy and efficient way to evaluate and configure all system parameters of the mobile client. The configuration of the STEPP III can be done via local serial link or remotely via the GSM network.

## Software features

- Configurable geo-fencing
- Configurable history with more than 300.000 records
- Configurable localisation and status report upon dispatcher request
- Configurable localisation and status report by timer
- Configurable two digital and four analogue inputs for alert messaging
- Four digital outputs for remote control of external actuators
- Configurable sleep mode
- Controlled by PFAL commands
- Voice, SMS, CSD, TCP, e-mail



## Applications

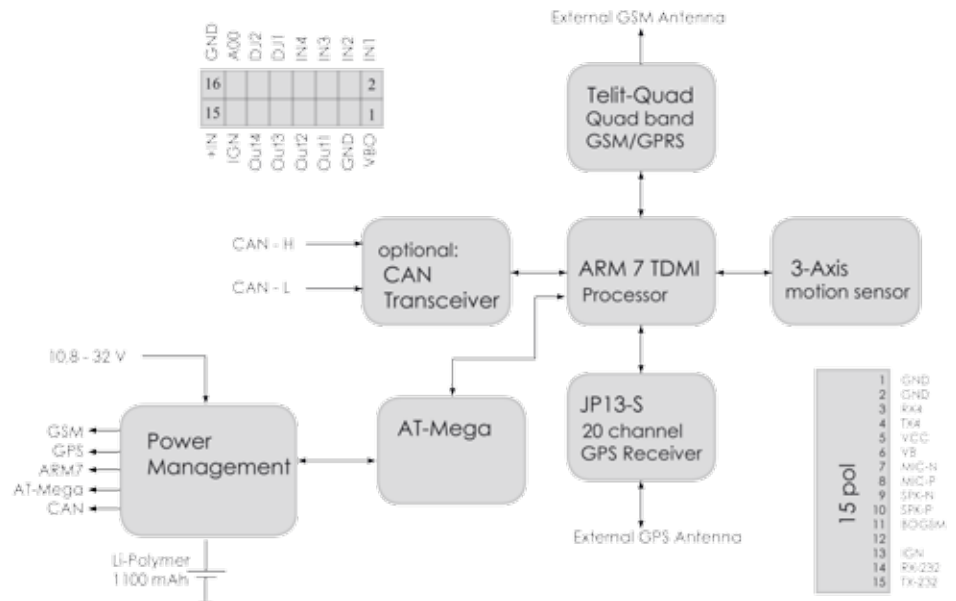
- Fleet management
- Vehicle management
- Remote tracking and monitoring
- Safety and security
- Off-road applications
- Real-time Navigation and Positioning
- Pay-as-you-drive

## trace4you

- Real time tracking
- History data
- Geofence etc.



## Block diagram



## Technical specification

<b>GSM / GPRS core</b>	Hot start (open sky): < 1 sec., average
STEEP III: Telit GE864-QUAD module	Cold start: < 42 sec., average
850/900/1800/1900 MHz	
<b>GSM services</b>	<b>Power supply</b>
Phone, Data, SMS	DC 10,8 - 31,2 V
	Build-in Lilon battery
<b>GPRS services</b>	<b>Physical characteristics</b>
GPRS class B, class 10	Dimensions (LxWxH): 55 x 88 x 22 mm
TCP/IP (accessible via PFAL commands)	Weight: approx. 120 g
<b>Processor</b>	<b>Temperatur range</b>
ARM7/TDMI	Operation*: -30 ° to +80 °C
	Charging: 0 ° to +40 °C
	Discharging: -20 ° to +60 °C
<b>GPS core</b>	<b>Interfaces</b>
OEM single board 20 channel GPS revceiver	16pin MOLEX 43045-1609:
C/A code: 1.023 MHz chip	2 digital inputs, 4 analogue inputs
SiRFstarIII	4 digital outputs, ignition, power input,
TXCO	15pin AMP 5-558556-1:
Casing: fully shielded	RS232 (Rx, Tx),
Memory: 2 MB / 512 kB	Speaker, Microphone,
<b>GPS datum</b>	Power Output, Vbatt
WGS-84	SIM card reader for small 3 V SIM cards
<b>DGPS accuracy</b>	GPS RF connector 50 Ohm FAKRA/Radiall
Position 1 to 5 m typical	GSM RF connector 50 Ohm FAKRA/Radiall
Velocity 0.05 m/sec typical	3 LED's (user programmable)
<b>GPS acquisition rate</b>	<b>Motion sensor</b>
Hot start: < 18 sec., average	3 axis motion sensor

\*These temperatures can affect the sensitivity and performance of the unit