RA Ecosystem Partner Solution
Fleet Tracker Solution

Solution Summary

The GT&T Fleet Tracker (FT) for Renesas RA MCUs is a reliable GPS and 4G fleet tracking unit, based on a proven design and years of field experience. Development and enhancement is made easy and straight-forward through Renesas' hardware offerings and Flexible Software Package (FSP).

Features/Benefits

Market Advantage

- Ready-To-Manufacture solution
- Based on a reliable proven design
- Ready-To-Go and can be tailored to customer's needs
- Access to GT&T's engineering and market know-how
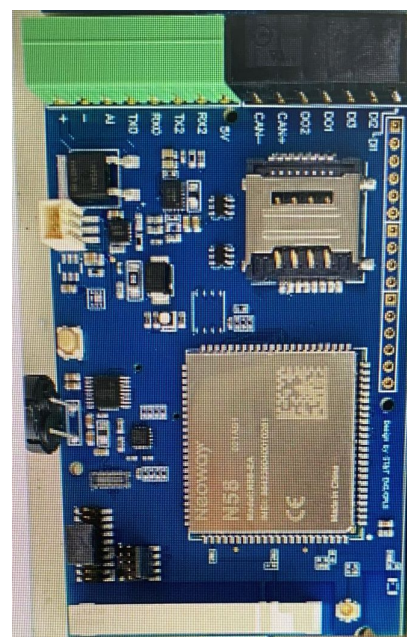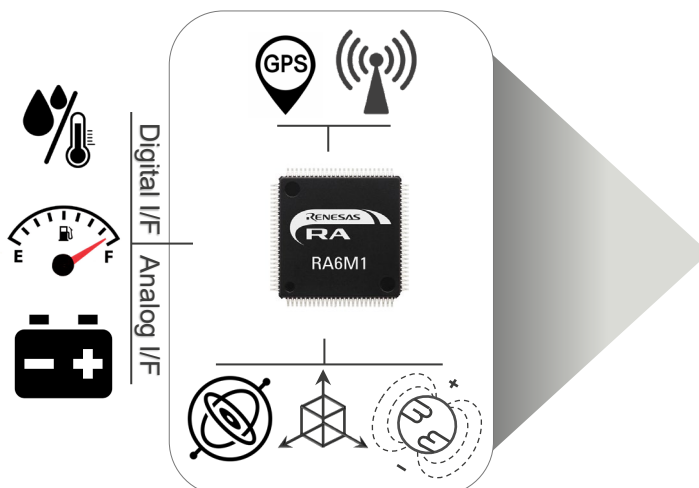- Minimizes R&D investment

Technical Features

- Based on Renesas' RA6M1 MCU family with Renesas' analog & power management devices
- Uses the Neoway N58 LTE Cat.1 module
- Firmware development supported by Renesas FSP with FreeRTOS and e2studio IDE
- Supports direct interfacing to external digital and analog inputs, and digital outputs
- Possesses 9 Degrees-Of-Freedom, 9DOF, sensor for driver behaviour monitoring
- Dirty power protection
- Logging of locations in communications dead-zones areas
- Firmware Over-The-Air upgrade
- Can be used for non-fleet IoT applications, as a communications adaptor board

Target Markets and Applications

- GPS tracking applications
- Internet-of-Things devices and equipment monitoring

Diagrams/Graphics

2021.08

GT&T Profile

GT&T Engineering is a *turnkey solutions provider* in the domain of transportation, telematics and telemetry.

Established in 2003, GT&T has acquired the necessary engineering skills, field experience and domain expertise in solving industrial and software problems for its customers.

GT&T develops its own Intellectual Property and engines in delivering effective solutions.

On the front or device end, these are:

1. Hardware design and production of its own fleet tracking telematics unit, known as the GBox series, and other telemetry devices. This runs the whole process of development from schematics, gerber layout, component selection and sourcing, prototyping, production, field trials and integration to the backend software.

2. Firmware development for small devices in C and embedded Java, targeting Renesas' processors.

3. Experience in sourcing, qualifying and integration of sensors.

4. Expertise in integrating with industrial machinery such as generators and vehicles.

On the software platform side, we are a Microsoft technology-based team. Our developers specialized on:

1. Microsoft Azure-based applications
2. MS Powerapps on mobiles
3. Business Intelligence using MS PowerBI
4. MS Dynamics 365, Sharepoint and SQL Server
5. Reporting using SQL Server Reporting Service (SSRS)
6. C# and Javascript

We use Power BI, R Statistics and clustering tools as part of our analysis and analytics efforts for our customers. We are also experienced in algorithm and scheduling adaptations.

Our key management personnel have previous experience in ports, logistic and public and school bus transit systems.

We are also retained by large enterprises from the Waste Collection, Transportation, Event Management industries, and Industrial Engineering sectors as their internal engineering departments, and consult on their businesses to give them the necessary competitive edge.

We are an alliance partner with Renesas Electronics. For more info contact Renesas:

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