Software Design Document

1. **General**

This document is intended to describe the design of software for low-speed vehicle battery pack. There are three main functions of this software:

1. *Data collection*. The voltage, current and temperature data are needed to be collected.
2. *Data processing and storing*. The data need to be pre-processed before storing to or restore from external Flash memory.
3. *Data distribution*. All data will be distributed to server wirelessly.

The general software diagram is shown as below:

1. **FreeRTOS**
2. **Data structure**
3. **ADC**
4. **External Flash**
5. **Wifi**