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| Sprints | Task | Weeks |
| 1 | * Calculate the total power consumption of the sensors and electronics inside the baby. ✓ * Order new batteries, based on power consumption. (Maybe a new charger). * Test the charging and discharging the system simultaneously. ✓ * Order the adapter. ✓ | 7 |
| 2 | * Test the evaluation units (if arrived). | 1 |
| 3 | * Make experiments of integrating the buck converter, BMS and fuel gauge evaluation units using the existing batteries. * Configuring the fuel gauge. * Communicating the remaining capacity measurement of the fuel gauge with the main microcontroller. * Powering the sensors using the output of the prototype. | 2,3 |
| 4 | * Designing a PCB that integrates the 3 evaluation units and eliminating the unneeded features in each evaluation units. * Connecting the integrated system with the new batteries. * Powering the sensors using the output of the prototype. | 3,4 |
| 5 | * Documenting all the findings | 5,6 |
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Questions to Jan:

1. **Is it safe to test the battery using the main socket?**

Yes

1. **In choosing the Amps hour of the battery should we consider the voltage drop of the battery when it is discharging?**

No, because the voltage curve of high-quality batteries is very smooth.

1. **How to use microcontroller to configure the fuel gauge? Is it something that we should do or the ESE?**

It is better to buy the adapter.

1. **Any tips to choose a small battery? A known battery manufacturer or supplier?**

Search in Conrad.

1. **Is integrating the 3 evaluation units a wise idea?**

**Can the integrated EUs be a final prototype?**

No, the integrated evaluation unit is a prove of principle. The final prototype is the final design of a product.

1. **Is it wise to start now designing a PCB that integrates the three ICs, or is it wiser to first try to integrate the 3 evaluation units?**

It is better to first experiment in integrating the 3 evaluation units.