

# Meeting summary: 04/10/18

## Present during meeting

- Lajos Török (Supervisor)
- Dezso Sera (SV)
- Nicolás Murguizur
- Nicolai Haugaard
- Estefanía Ruiz
- Thassilo Lang

## Meeting Agenda

1. Feedback regarding the P0 document.
2. Feedback P1 gantt diagram (which you can find in the P0 document)
3. More details about the converter requirements.
4. Information about the P0 presentation.

## Meeting discussion

1. Comments were given to improve the P0.
  - a. Add synopsis
  - b. Update Gantt chart:
    - i. adding Milestones,
    - ii. more specific tasks names, for example MPPT evaluation should be MPPT research → Members don't know exactly what the task consist on
    - iii. Atomize tasks including more details, what will be the output of the task, how to measure the level of success.
    - iv. Add milestones to the writing task as right now it is too general, decide a report person in charge.
    - v. Time must be left for second iteration of PCB building.
    - vi. Dependence between tasks is lacking. For example MPPT algorithm has dependence on small signal model creation.
  - c. The cover picture's source should be elsewhere, for example in the preface.
  - d. Remove photovoltaic effect explanation, PN junction explanation.
  - e. Remove system including battery as it is not object of the project.
  - f. Include microinverter topologies and DCDC converter with comparison among them. Microinverters are usually more expensive and less efficient. Enphase Microinverters were proposed to find information about commercial microinverters.
  - g. Change the pictures to improve quality as high zooming led to pixelated images. Consider the Microsoft Visio as an option.
  - h. SEPIC/ZETA; all group members must know the general features of the converters, what the topologies are and how do these converters work, otherwise these must be removed.
  - i. Give further explanation of buck boost mode duty cycles.
2. RT-BOX manual was handed.
3. Example MIC product datasheet was sent by email by Dezso. The product features that can be found in this document will be considered in order to set real world constraints to our design.

4. 'Be ready to answer questions about every topic you write about, take responsibility for the words you write'. 'Try to minimize the *attack surface*'.
5. The conduction losses are decreased when using a transistor instead of a diode if the current is low enough. For example using a diode which characteristic voltage is 0.5 V and a MOSFET which  $R_{on}$  is 10 mOhm, the conduction losses are lower while the current is lower than 40 A.
6. The components should be selected from ROnline DK. (<https://dk.rs-online.com/web/>)