

# DC-DC CONVERTER FOR PV MODULE INTEGRATION

Group MsC1 – 760

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# AGENDA

- INTRODUCTION
- MODULE INTEGRATED CONVERTER (MIC)
- PROBLEM STATEMENT
- OBJECTIVES
- GROUP PROCESS

# INTRODUCTION

- Why PV solar energy?
- What is the problem?
- How can it be solved?

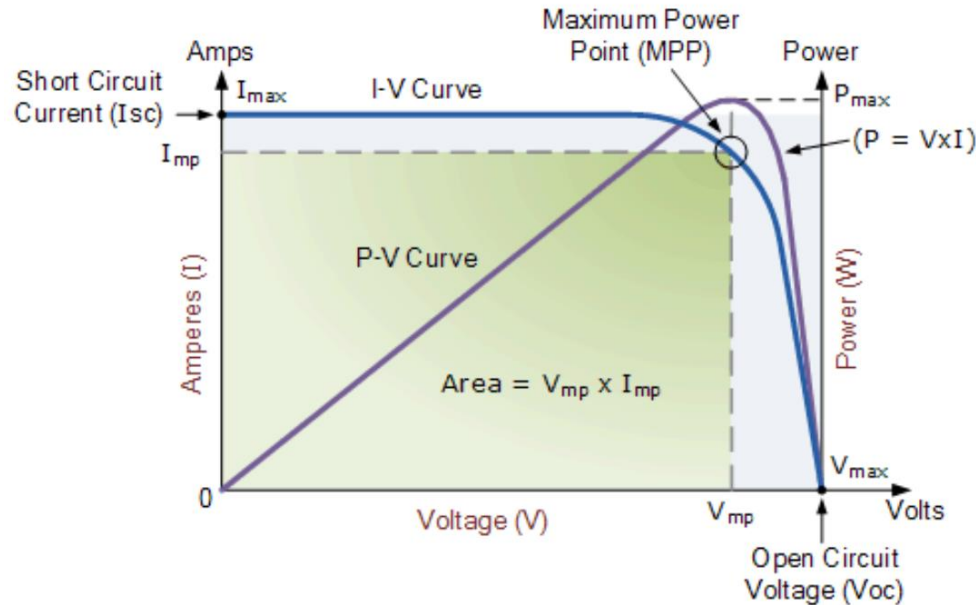


# AGENDA

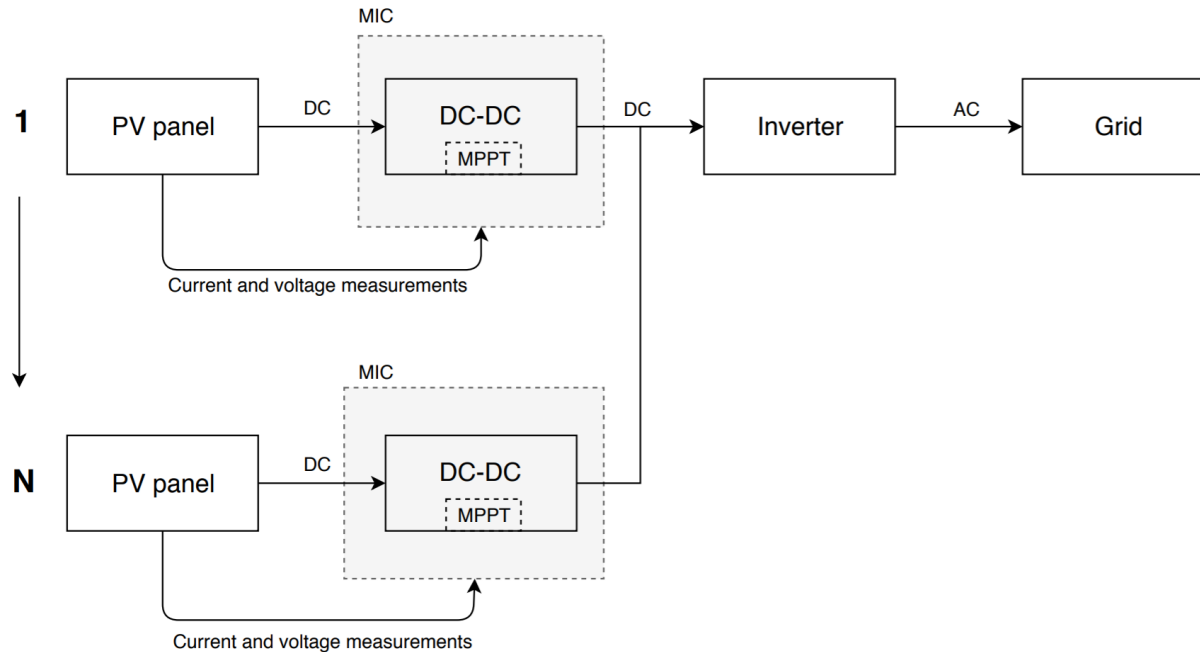
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# MODULE INTEGRATED CONVERTER - MIC

## ➤ MPPT → Maximum Power Point Tracking



# MODULE INTEGRATED CONVERTER - MIC



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# PROBLEM STATEMENT

- **How can a module integrated converter be designed to maximize the PV power generation under real conditions?**

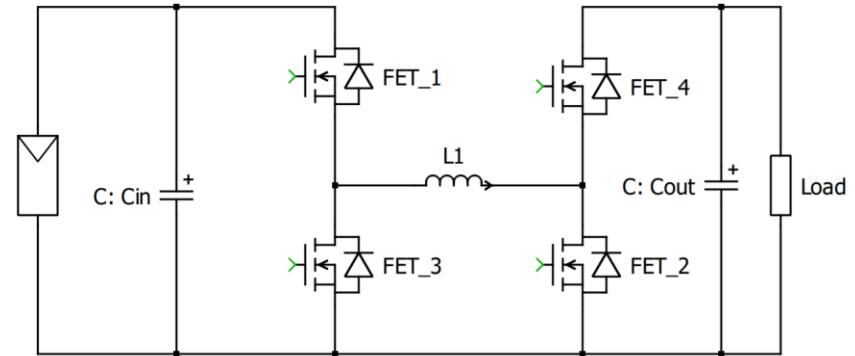


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# OBJECTIVES

- ✓ Design of DC-DC converter.
- ✓ Design of MPPT control system.
- ✓ Hardware implementation.
- ✓ Test & Validation using PV simulator.



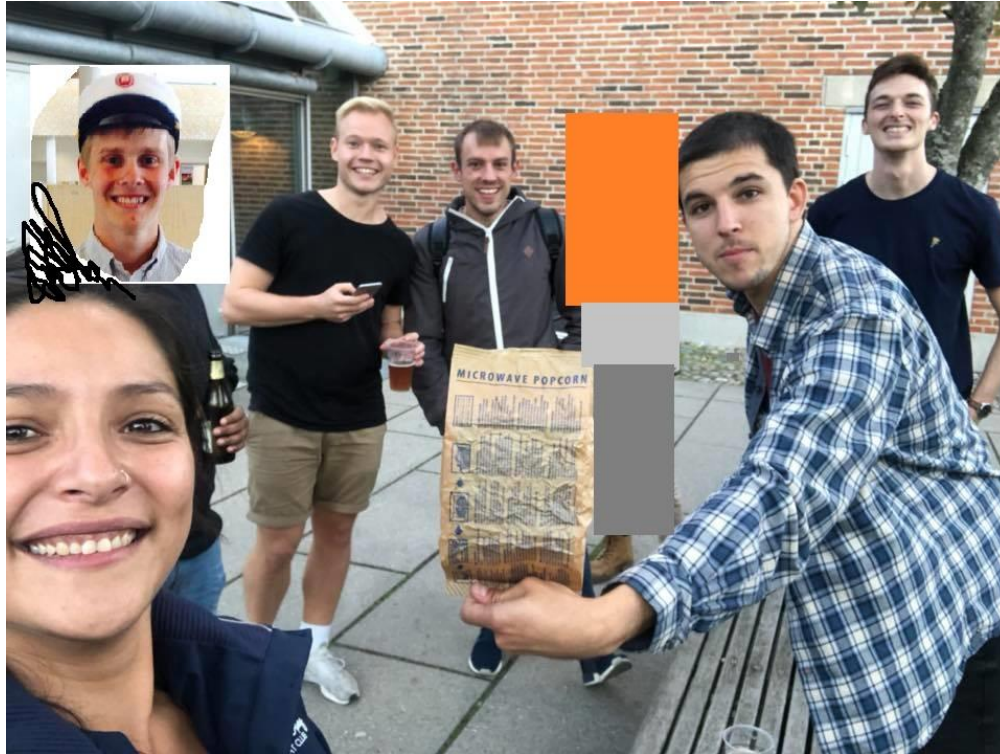
Non-inverting Buck-Boost converter



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# Group process



# Thank you

Questions? 😊

