

Snubberless Soft-Switching of SiC Power Electronics

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Objective

- The project aims to investigate a new type of switching where the parasitic capacitance of the silicon carbide transistor is used as snubber capacitor. Extremely fast switchings are foreseen. This implies a great improvement from an energy perspective. Additionally, this means that the switching frequency can be increased drastically. This implies that the passive components of the circuit can be reduced dramatically. Together with a reduced need for cooling this results in radically reduced amount of material and cost.

