

HiPoSwitch – WP1

Highly efficient switchmode power converter

- Re-definition of GaN HEMT parameters
 - Significantly smaller chip size
 - Low Eoss and Qoss, Vgs max increased
 - Target package selected
- Design of chosen power factor correction (PFC) topology
 - GaN HEMT driver circuits developed
 - Current sense topology selected
 - Parallel architecture due to smaller GaN switch
 - Switching frequency determined based on further simulation
 - Design of PFC test board
- Tests of GaN HEMT samples
 - First samples operated on test board
 - Comparison measurements done with silicon devices