

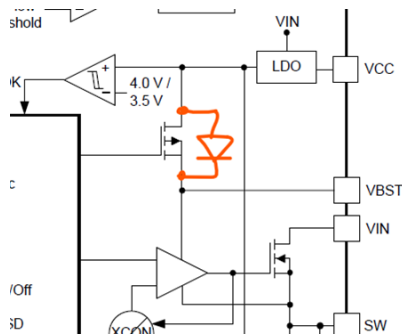
Q&A

1. check how boot cap is charged during DCM since customer find many failures happens at light load.

→ The boot cap charge design in DCM is same with CCM mode.

When low side on, internal PMOS turns on while low side mosfet turns on and VCC charge the cap across the PMOS.

When low side off, internal PMOS will turns off, VCC will charge the cap across the body diode of PMOS.



2. check current capability of internal trace on Vcc to see if it's enough for driver.

→ Confirmed, both VCC and BST trace support 1A Ipeak, enough for driver.

3. check if negative voltage on SW will damage the part or affect the logic. Customer test shows -4~5V at worst case.

→ For this result, it impacts the high side VDS (Vin-SW) only, bigger undershoot bigger H-VDS

4. check if high slew rate load transient may have some bad effect.

→ We tried 20A/us, no abnormal found.