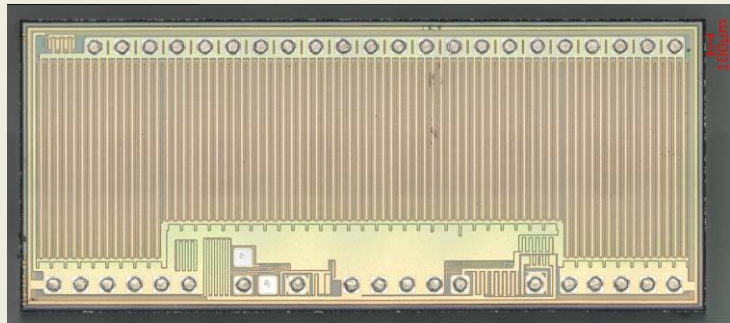


NAVITAS' NV6117 GAN POWER IC CIRCUIT ANALYSIS REPORT

July 2018. LTEC Corporation released a detailed circuit analysis report of this new 650V GaN Power IC. NAVITAS is the first GaN manufacturer to introduce a GaN FET and GaN drive circuit on the same die. NV6117 is the second product released by NAVITAS.



Package



Die (Top metal)

Product outline

- $V_{dss}=650V$, $R_{ds(ON)}=110m\Omega$ (typ.)

Device features

- Integrated GaN transistors, resistors and capacitors
- Separate power supply voltage path leads to each circuit block
- Cross-current (shoot-through) due to turn-off delay, overshoot, and ringing are prevented by the careful layout and the integration of the GaN pre-driver block.

Application

- Smallest 45W AC adaptor having 600kHz switching frequency and small PCB size.

The 34-page report includes package image, X-ray, metal image of each layer, element symbols and an extracted hierarchical schematic.

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