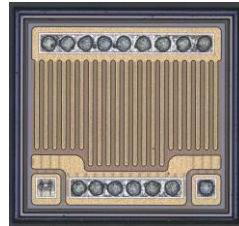


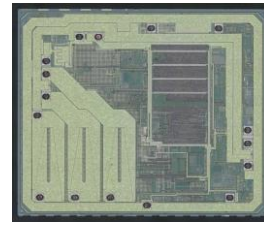
## **GaN HEMT(650V): STMicroelectronics VIPERGAN50 Structure Analysis Report**



**Package Photo**



**Chip Photo(GaN HEMT)**



**Chip Photo(Control IC)**

### **Overview**

In April 2022, STMicroelectronics announced the high-voltage GaN (Gallium Nitride) converter named “VIPERGAN50”. This product is designed to simplify the construction of single-switch flyback converters with a maximum power output of 50W. It incorporates a 650V-rated GaN power transistor for the purpose of achieving high efficiency and compact size. The applications for this product span various consumer and industrial devices, including power adapters, USB Power Delivery-compatible chargers, household appliances, air conditioners, LED lighting, and power supplies for smart meters.

### **Product features**

**Model Number: VIPERGAN50 Equipped with 650V E-mode power GaN transistor**  
**Product release date: April 2022**

### **Report Contents (94 pages)**

This report is a structural analysis report based on the results of planar and cross-sectional analyses. The report covers the following aspects:

- ( i ) Planar Analysis: Wiring layout and connectivity estimation of the GaN chip, Function estimation of the control IC.
- ( ii ) Cross-Sectional Analysis: Structural analysis of the GaN chip, Structural examination of the control IC.
- ( iii ) GaN-Epi Layer Thickness and Composition Analysis.
- ( iv ) Comparison with Other Products (such as GaN Systems and Navitas).

### **Report price**

**Delivered one week after order placement**

**Please contact us for report pricing.**

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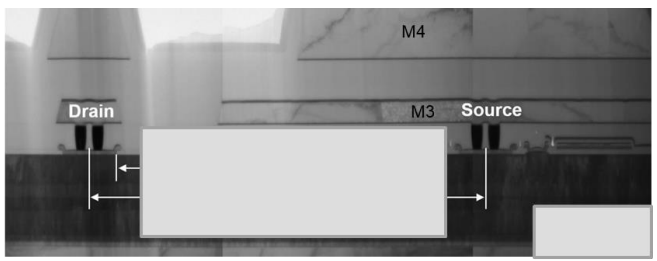
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# Excerpt from the structural analysis report

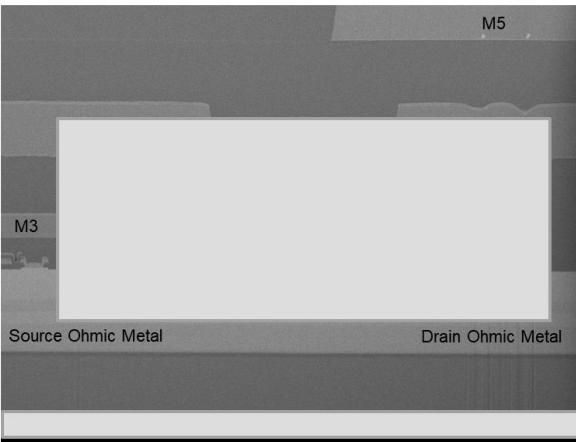


GaN-Epi Structure

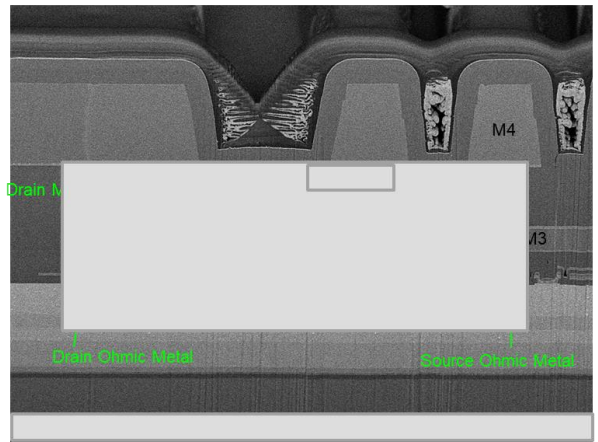
	Source-Drain Pitch	Lgd
STMicro ViperGaN50		
GaN Systems GS66504B		
Navitas NV6117		



GaN Systems GS66504B



STMicro ViperGaN50



Navitas NV6117

