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(54) **INTEGRATED CIRCUIT STRUCTURES HAVING BACKSIDE HIGH**

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(57) **ABSTRACT**

Structures having backside high voltage capacitors for front side GaN-based devices are described. In an example, an integrated circuit structure includes a front side structure including a GaN-based device layer, and one or more metallization layers above the GaN-based device layer. A backside structure is below and coupled to the GaN-based layer, the backside structure including metal layers and one or more alternating laterally-recessed metal insulator metal capacitors.