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(54) **NITRIDE-BASED SEMICONDUCTOR  
DEVICE AND METHOD FOR  
MANUFACTURING THE SAME**

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**ABSTRACT**

A nitride-based semiconductor device includes a nitride-based semiconductor wafer, a protecting layer, and a plurality of connecting bumps. The nitride-based semiconductor wafer comprises a plurality of nitride-based dies. Each of the nitride-based dies comprises a connecting surface and a plurality of connecting pads and the connecting pads are embedded in the connecting surface. The protecting layer is disposed on the connecting surfaces of the nitride-based dies. The connecting bumps are embedded in the protecting layer. Every connecting bump connects one of the connecting pads. Every connecting bump has a first polished plane, and the first polished plane is free from the protecting layer. A manufacturing method of nitride-based semiconductor device is also provided.

