



A cross-sectional diagram of a semiconductor device. The structure consists of three main layers: a top layer of Aluminum (Al) contacts, a middle layer of n<sup>++</sup> Layer, and a bottom layer of Relaxed Si<sub>0.8</sub>Ge<sub>0.2</sub> Buffer. The top layer is blue, the middle layer is green, and the bottom layer is dark green. The middle layer is 30 nm thick, and the bottom layer is 2.5 μm thick. The top layer is 30 nm thick. The middle layer is 30 nm thick. The bottom layer is 2.5 μm thick. The top layer is 30 nm thick. The middle layer is 30 nm thick. The bottom layer is 2.5 μm thick.

Al

n<sup>++</sup> Layer  
30 nm

Al

Relaxed Si<sub>0.8</sub>Ge<sub>0.2</sub> Buffer  
2.5 μm

Si (001) Substrate