

GaAs Foundry: Challenges and Future

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Since the pure-play semiconductor wafer foundry business model established by Taiwan Semiconductor Manufacturing Company (TSMC) in 1987, the last few years have shown that the pure-play foundry model does work for GaAs in RF/microwave industry with over 25% of worldwide GaAs IC produced at foundries now. GaAs wafer foundry has become an indispensable part of the RF/microwave semiconductor supply chain. It is anticipated the share of GaAs wafers produced at foundries will continue to grow along with the strong growth in smartphones and tablets with increasing GaAs content per device. In this presentation, the future and challenges that GaAs foundries are facing will be discussed from various perspectives including technology, manufacturing, application and market.