



Cree Capacity Expansion Announcement

7 May 2019



\$1 Billion

for Silicon Carbide and GaN Capacity

The investment is allocated between silicon carbide materials growth and wafer fabrication

\$450M

for materials expansion and the creation of a materials **mega factory** as well as build out a **second** crystal growth factory

\$450M

to build out an existing building and create an automotive qualified 200mm capable wafer fab

\$100M

in other investments associated with growing the business

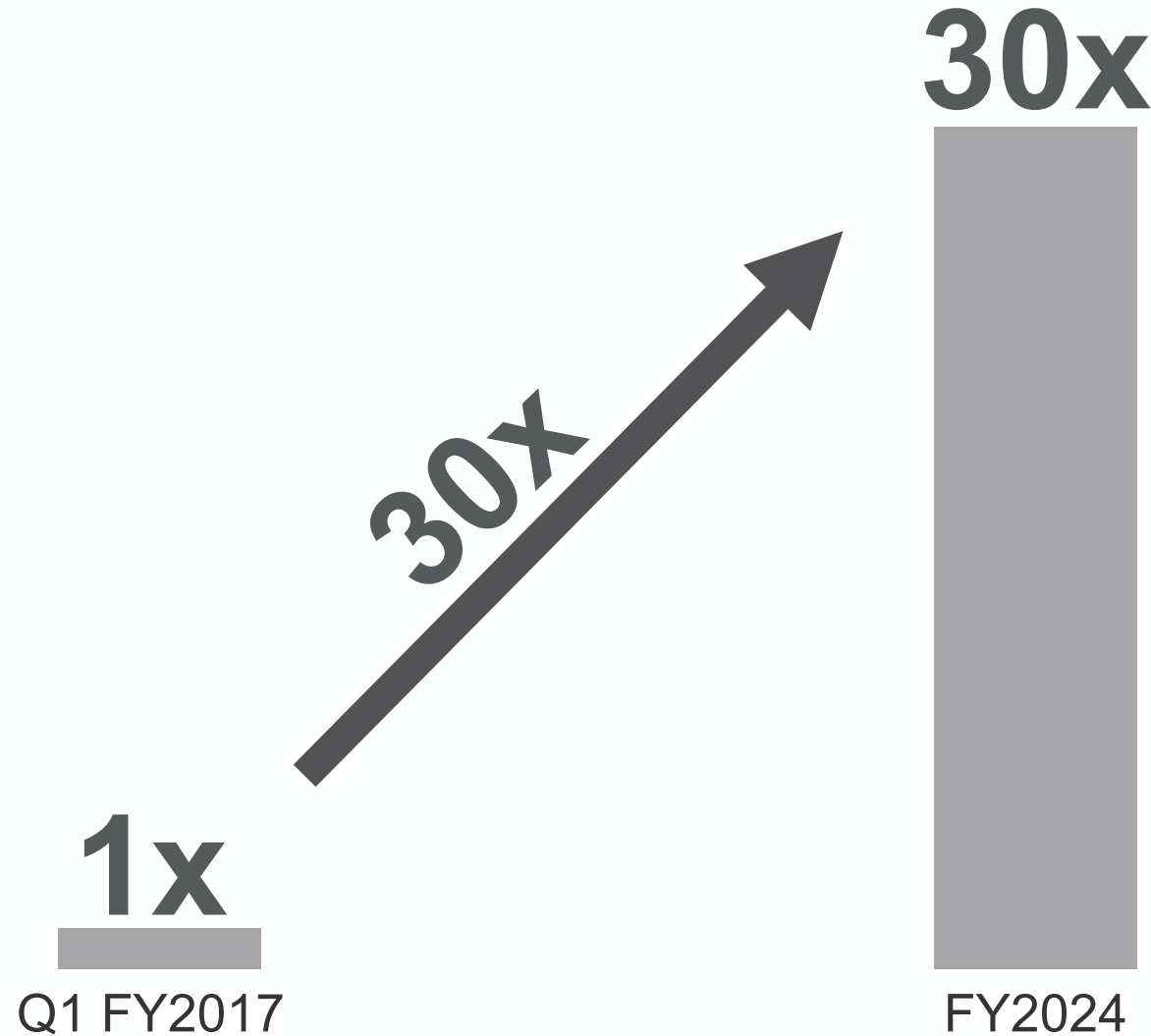


Build out the North Fab in an empty building on Cree's Durham campus



Convert a smaller fab to a second silicon carbide crystal growth facility

Additional capacity translates up to a 30x increase ramping through FY2024



Automotive OEMs have committed to EV investment

VOLVO
Announces every new model will run at least part on electric power in 2019

FORD
Announces investing \$25B to do that introduce EVs

VW
Announces EV versions of all 300 vehicles by 2030;

DAIMLER
Targets 15-25% EV production by 2025; investing \$11B

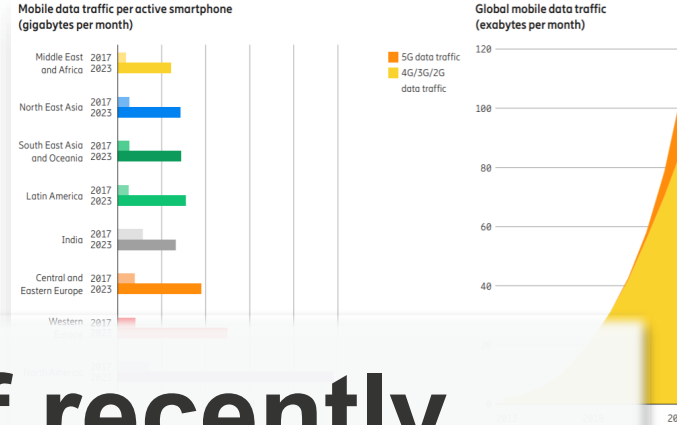
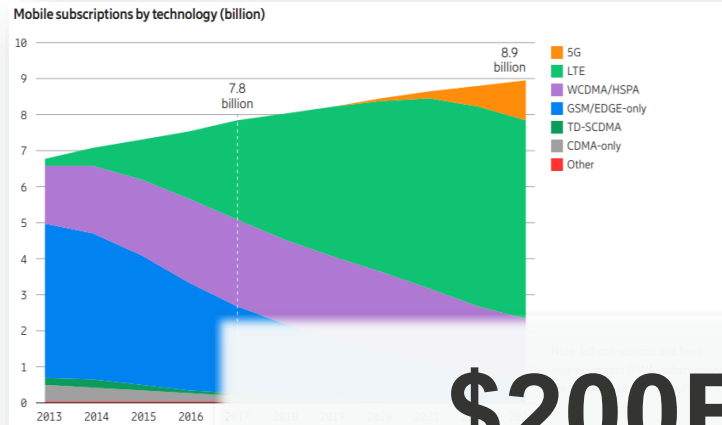
AUDI
Announces that one third of all Audi models will be electric by 2025

GM
Announces all-electric, zero emissions future with 20 vehicles by 2023

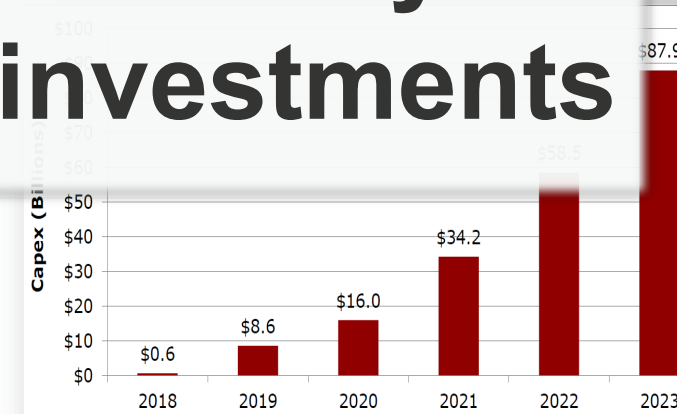
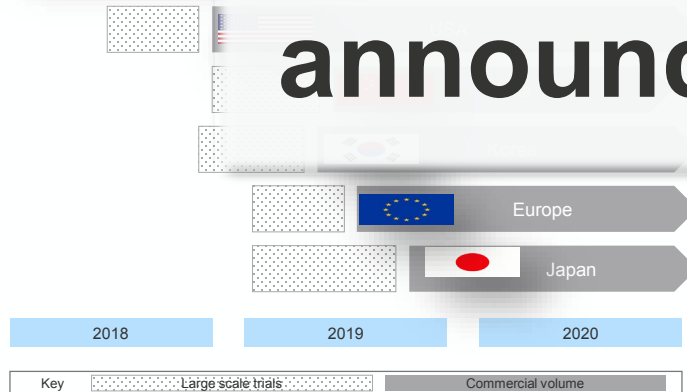
BMW
Committed to 25 new EVs by 2025

\$300B of investments announced over the last 18 months

Communications infrastructure customers are pre-investing significantly for 5G ramp-up



\$200B of recently announced investments



- # of mobile subscribers increasing
- New 5G needed & rolling out

- Explosion of data demand
- Significant CAPEX in next years

Cree to invest \$1 billion over 5 years to expand its silicon carbide capacity

WILL YIELD:

30x

increase in silicon
carbide wafer
fabrication

30x

increase in silicon
carbide and GaN
materials production

WILL LEVERAGE:

EXISTING

253,000 SQ FT
facility

200 mm

equipment

WILL DELIVER:



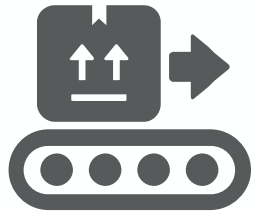
State-of-the-art
automotive-qualified
production facility



Lower cost of silicon carbide
for customers

Capacity expansion will address that growing demand

INCREASING THE SUPPLY OF SILICON CARBIDE WILL:



Give customers access to the supply they need to drive business growth



Reduce the cost of silicon carbide for customers, driving its mass adoption



Introduce overall system-level benefits and innovation gained through the technology's inherent superiority



Enable customers to overcome the barriers to adoption and accelerate those markets

Summary

- Cree to invest up to \$1 billion to expand its silicon carbide and GaN capacity in order to drive the transition from silicon to silicon carbide and GaN and meet the growing market demand driven by EVs, 5G and industrial applications
- This expansion will generate up to a 30-fold increase in silicon carbide wafer fabrication capacity and up to a 30-fold increase in silicon carbide and GaN materials production to meet the expected market growth by 2024
- The five-year investment leverages an existing building and state-of-the-art, mostly refurbished 200mm equipment to build an automotive-qualified production facility

