

Infineon acquires GaN Systems

Becoming a leading GaN Power House

24 October 2023



Transaction rationale focused on scale and complementary capabilities



Combine complementary skills in application understanding and product definition to shape industry leading GaN based solutions



Accelerate Go-2-Market and revenue generation by leveraging IFX sales force to drive GaN Systems products into the market



Increase scale by combining IFX in-house and GaN System foundry manufacturing capacity

Scale, breadth, quality and deep application knowledge combined to accelerate GaN adoption



Perfect fit: Infineon and GaN Systems will propel customers' success



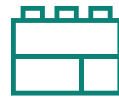
GaN portfolio

Broad portfolio of discrete and integrated MV and HV GaN products, incl. system enabling components (e.g. drivers, controllers)



Manufacturing capabilities

Dual-site in-house production combined with strong foundry partnerships



Perfect fit

Leading GaN IP and the industry's strongest R&D force to create highly innovative GaN based solutions



Application know-how

Best-in-class application know-how for creating new and improved systems, providing competitive advantage for our customers



Roadmap acceleration

Significant roadmap acceleration and faster time-to-market through unmatched R&D resources and application understanding

The acquisition supports our vision of driving decarbonization and digitalization, as GaN allows for higher efficiency



GaN provides superior switching performance, which results in **higher efficiency** and **lower system cost**



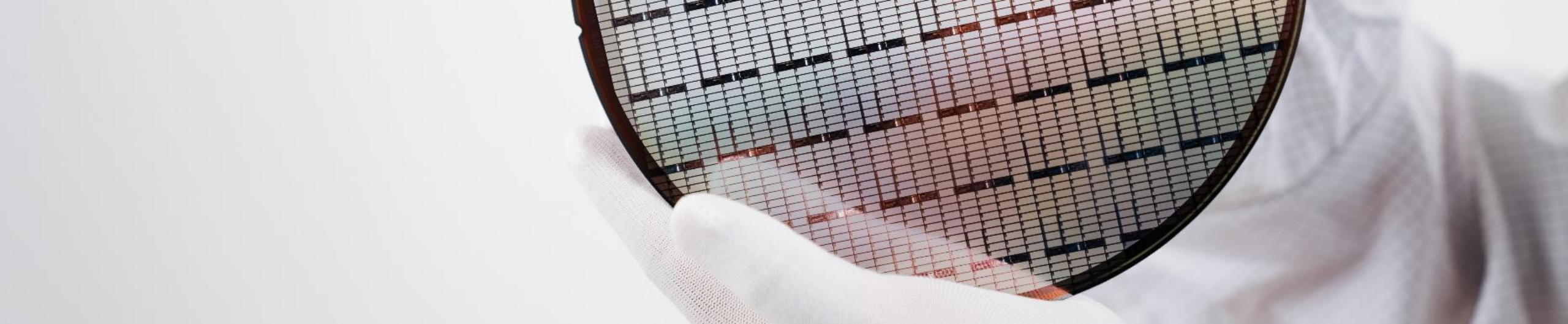
We are the **#1 in power, technology leader**, with 20 years of innovation in GaN providing all components (controllers, drivers, switches) for a **full system solution offering**



Our GaN technology offers **unmatched quality**, backed by **supply stability** through in-house manufacturing



GaN Systems acquisition positions Infineon to be a leading GaN Power House



Leading IP & strongest R&D force



Leading patent portfolio for GaN – >350 patent families

~450 strong GaN team
high double-digit USD m GaN R&D p.a.

Best-in-class application understanding
incl. automotive

Leveraging foundry + IDM advantages

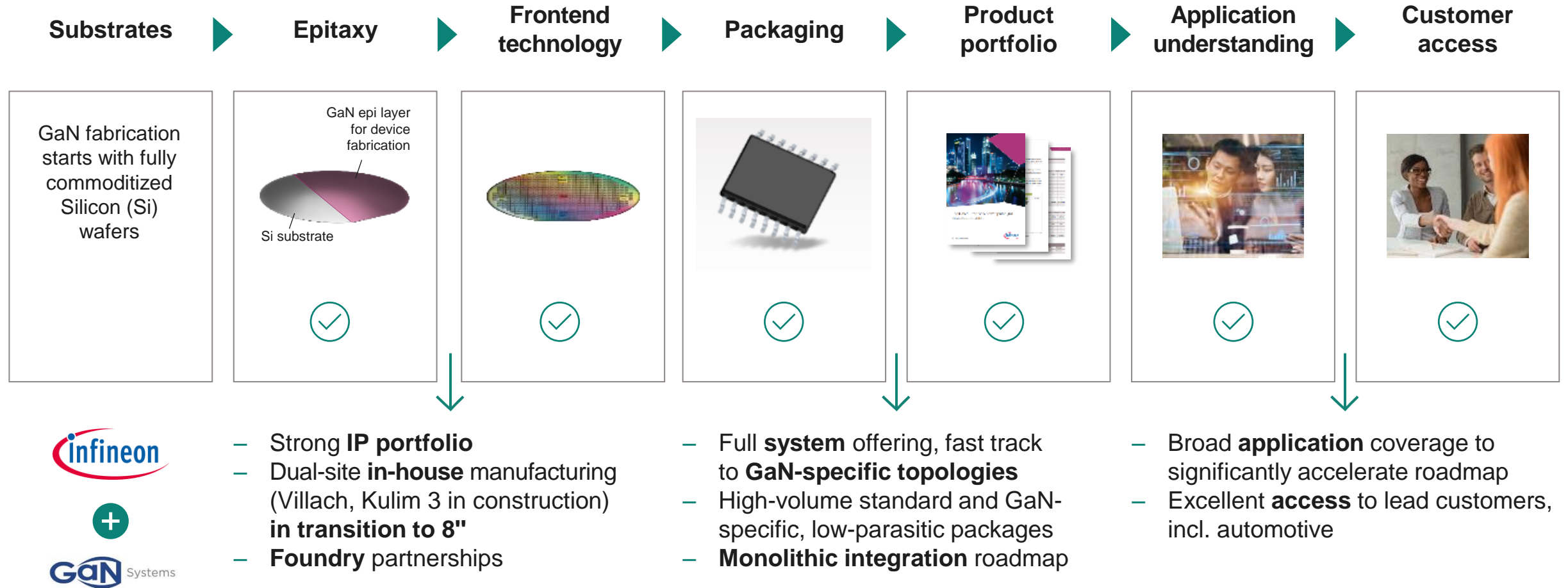


We own key IP and all frontend process steps

We combine foundry partnerships and dual-site in-house production, ready for 8"

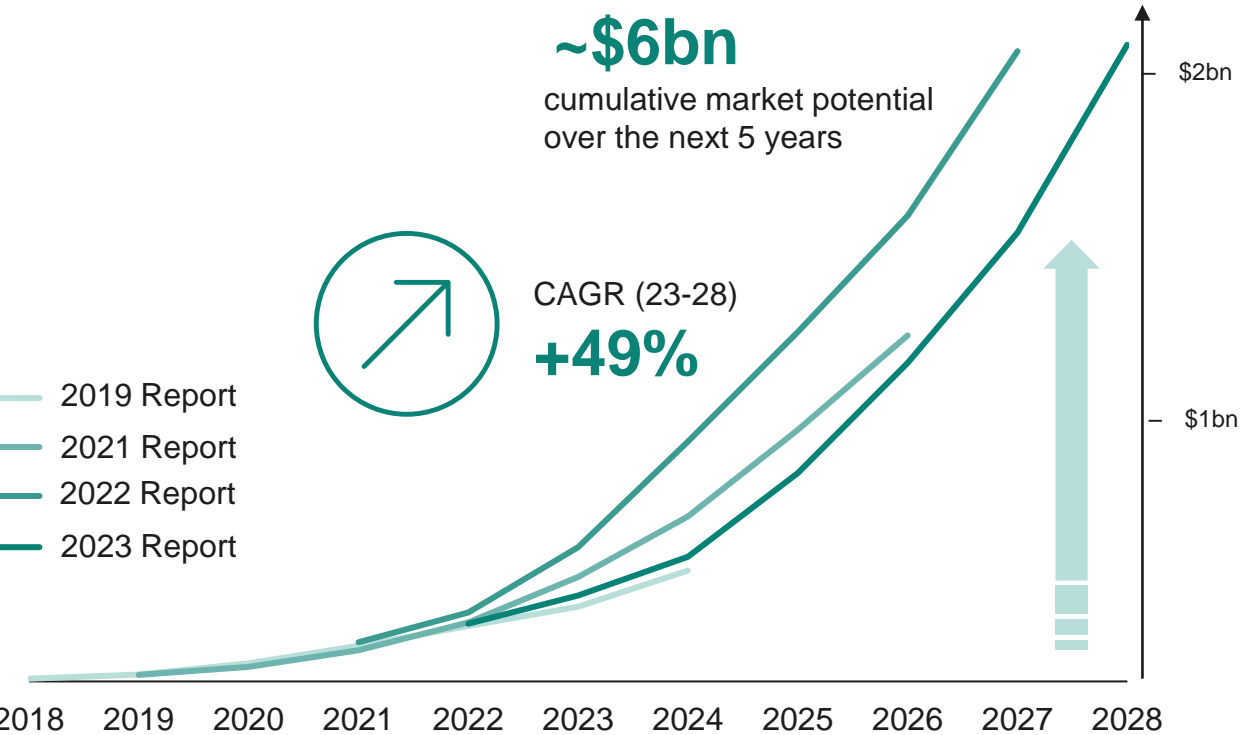
We target a leading market position

Joining forces and adding complementary strengths creates a winning formula for the GaN market







GaN market is taking off, driven by key power applications

GaN market forecasts over time



Superior switching performance results in **higher efficiency** and **lower system cost**.

Applications w/ **tipping point** reached or in sight:

 <p>Charger, adapter</p>	 <p>Server (high voltage)</p>
 <p>Residential solar</p>	 <p>On-board charger</p>

Source: Yole: Power GaN Report 2023 & Compound Semiconductor Market Monitor-Module I Q4 2023.

GaN brings significant value proposition in many applications

On-board Charger



On-board charger: increasing power density from today's 2kW/l to 10kW/l with GaN

HP SMPS



HP-SMPS for server: GaN is enabling highest power density and efficiency, to enable Accelerated- and AI computing at lowest TCO

Charger & Adapter



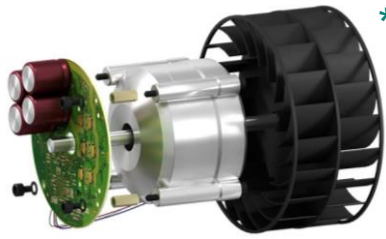
High-density charger & adapter: GaN enables smallest form factors for multiport chargers & adapters

Renewables



ESS DCDC converter: highest efficiency and space reduction with GaN vs Si implementation

Motor Control



GaN increases of overall system efficiency by reduction of motor-current ripple and switching losses

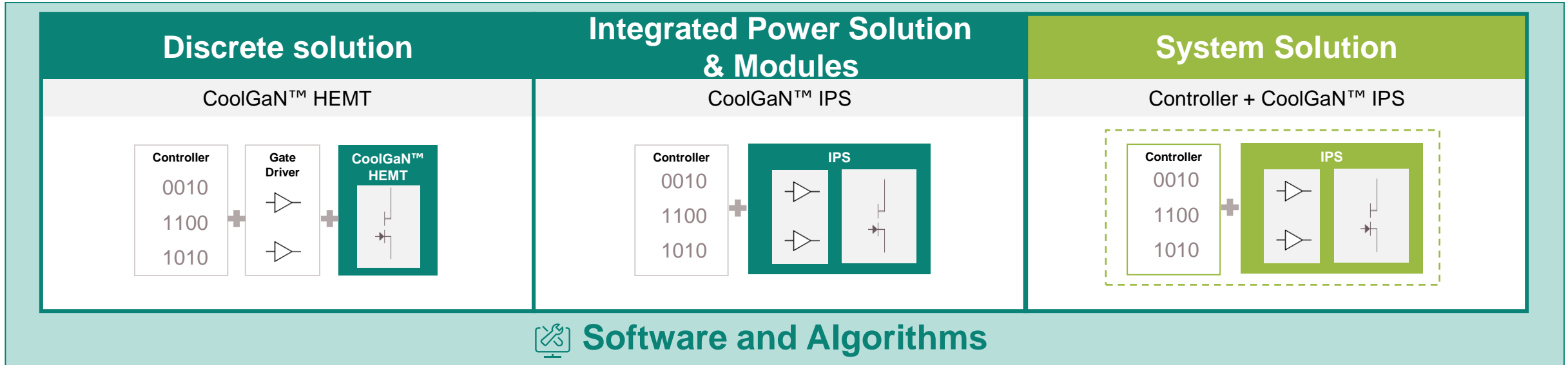
48V DCDC



48V to ~7V/1V conversion: with GaN brings smaller form factors to Accelerated- and AI computing as well as Telecom brick converters

* image source: gansystems.com

Our offering: Discretes, Integrated Power Solutions & Modules, System Solutions



Design flexibility

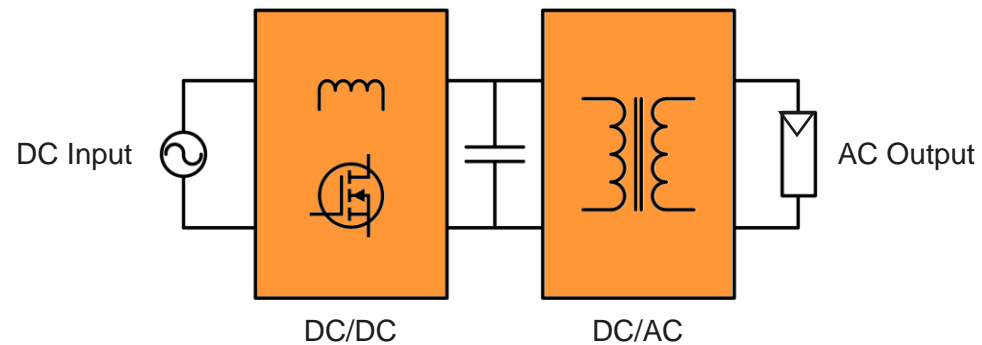
System development effort

Customer support

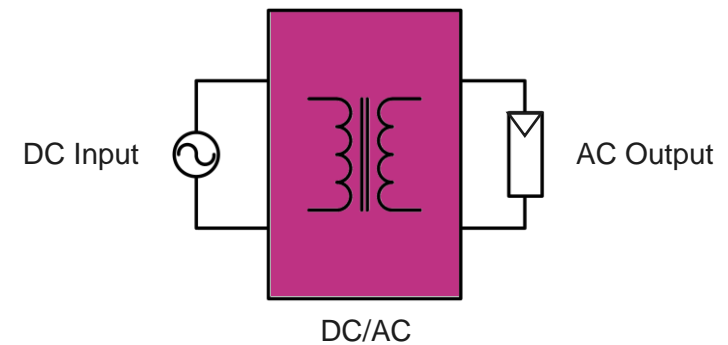
GaN is not a drop-in replacement for Si, best-in-class application know-how crucial for completely new and improved systems

Example: different topologies for a solar inverter

Si Two Stages



GaN Single Stage



VS

- Higher power density and therefore smaller ✓
 - Higher efficiency ✓
 - Reduced complexity/system cost ✓
- But: system redesign required**

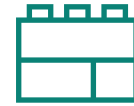
Summary: Infineon completes acquisition of GaN Systems Becoming a leading GaN Power House



This acquisition is another milestone in Infineon's strategic development, strengthening and accelerating our profitable growth and key competencies



Combined strengths in R&D resources, application understanding and customer project pipeline will significantly accelerate our joint GaN roadmap



We reinforce our global leadership in power systems through mastery of all relevant power technologies, in silicon, silicon carbide or gallium nitride



We will inform customers in a timely manner about any relevant changes that may occur during the integration process



