

Taiwan-Asia Semiconductor Corporation Investor Conference

2022/11/22

Safe Harbor Statement



■ This Presentation contains certain forward-looking statements that are based on current expectations and are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements.

■ Except as required by law, we undertake no obligation to update any forward–looking statements, whether as a result of new information, future events or otherwise.

CONFIDENTIAL 2 / 20



Company Overview

CONFIDENTIAL 3 / 20

Company Profile



Nov. 2021

Renamed TASC

Formerly named: OPTO TECH CORPORATION

Mar. 2022

Subsidiary Established

- [PASC]

Jan. 2022

Split the system business group

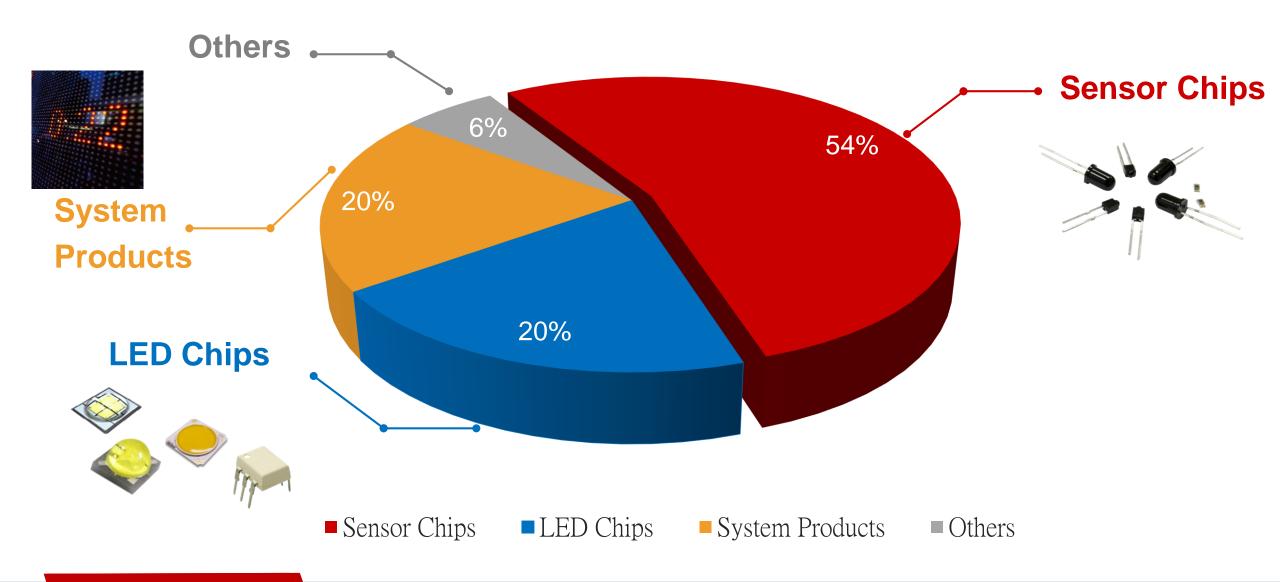
Subsidiary Established - 「OPTO TECH CORPORATION」

Nov. 2022

Invest in the Compound Semiconductor products

Products

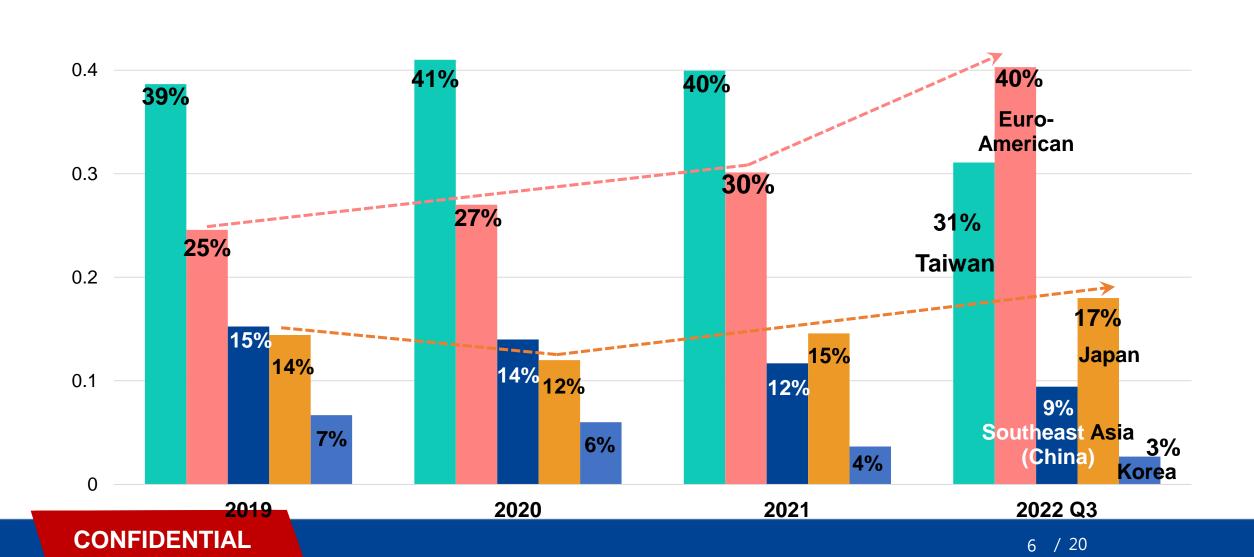




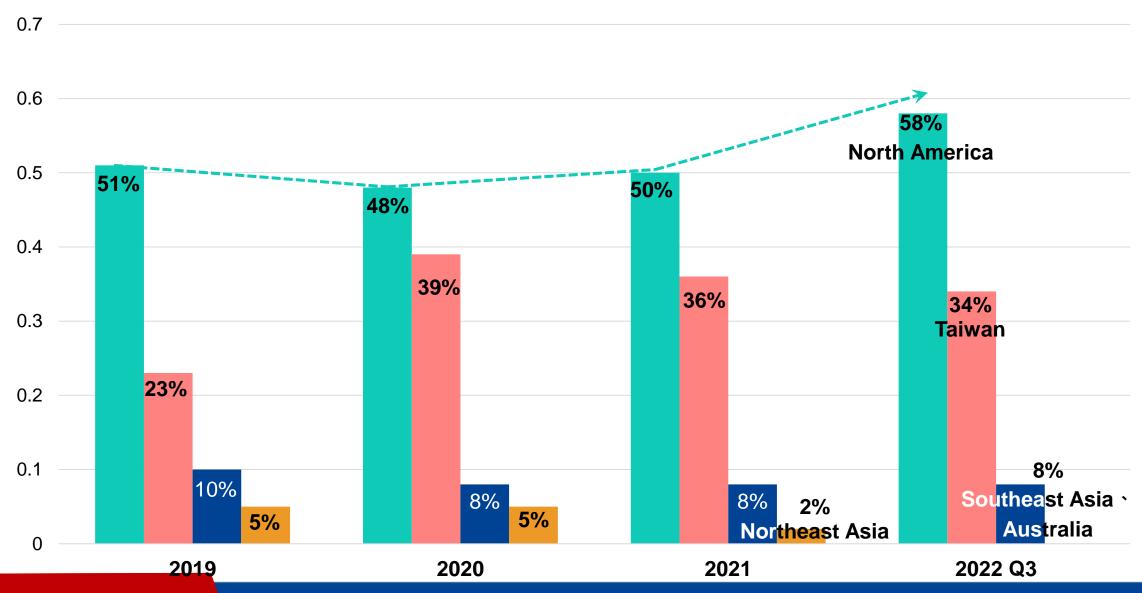
CONFIDENTIAL 5 / 20

LED Chips & Sensor Chips Product sales Breakdown by Area





System Products Product sales Breakdown by Area TASC





Business Strategies and Trends

• Business strategies, market trends, product portfolio

CONFIDENTIAL 8 / 20

Investment Structure



台亞半導體股份有限公司

Taiwan-Asia Semiconductor Corporation

積亞半導體股份有限公司

ProAsia Semiconductor Corporation
(SiC)

光磊先進顯示科技股份有限公司

OPTO TECH CORPORATION

(System Products)

TASC Business Operation Strategy



Product Quality and Customer Satisfaction is Our First Priority

Expedite New Product Development and Diverse Customer Base

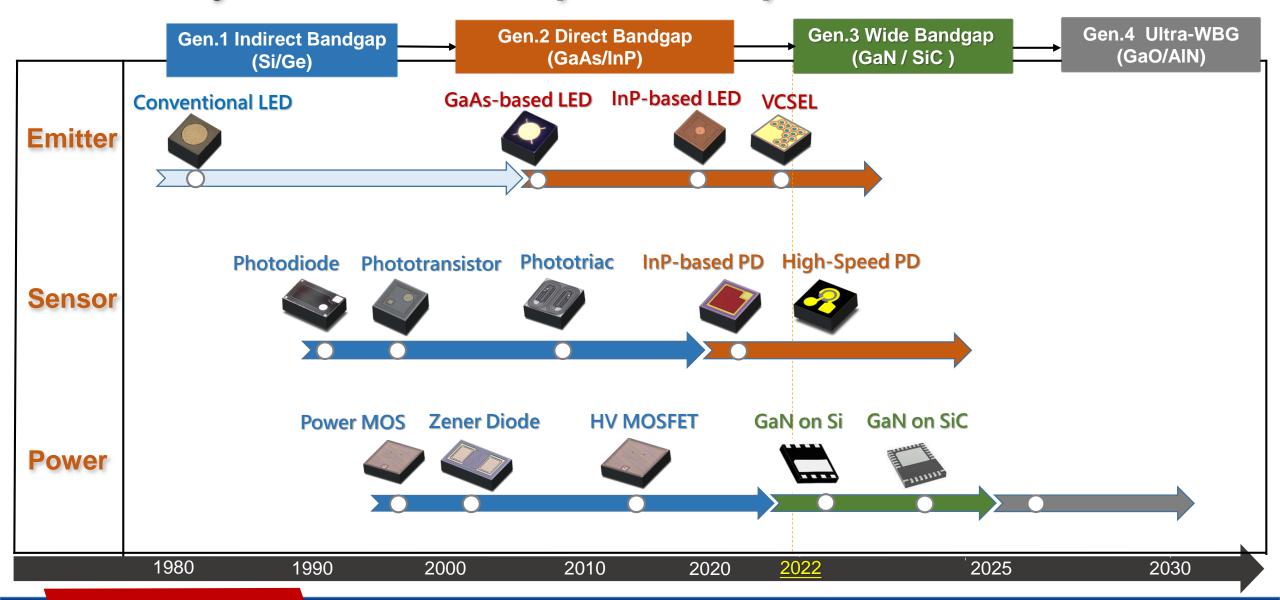
Continue to Optimize Manufacturing Efficiency and Improve Profit Margin

Invest in Wide-Band-Gap Compound Semiconductor for Power Devices

Research in Next Generation Substrate and Epitaxial Process for Cost Reduction Bottleneck

CONFIDENTIAL 10 / 20

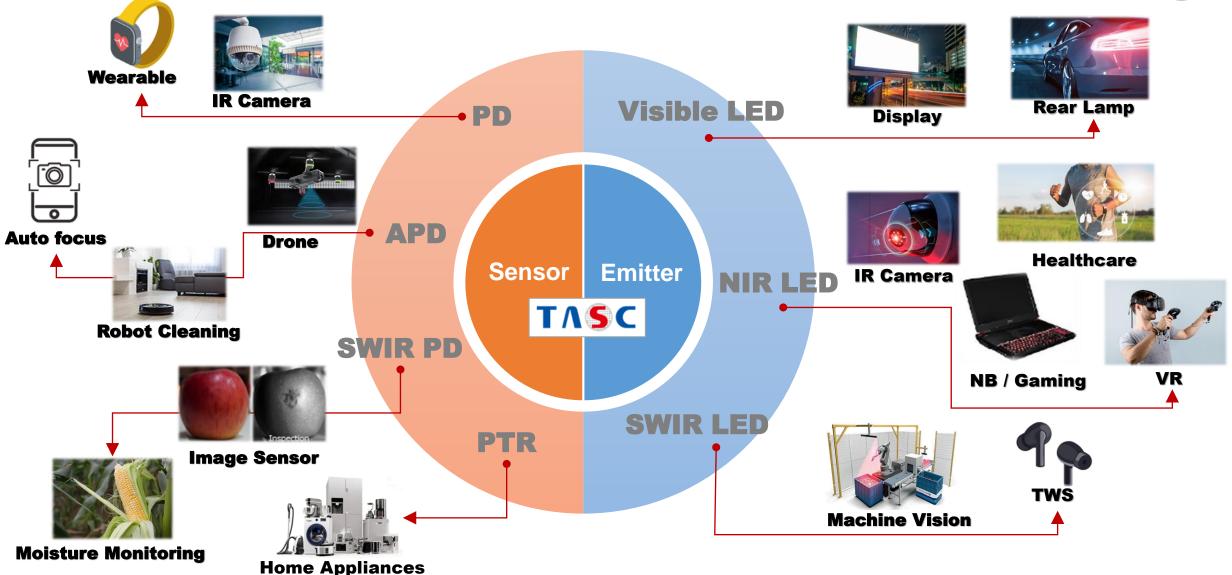
Three Major Product Group Roadmap



CONFIDENTIAL 11 / 20

Sensor and Emitter Product Applications

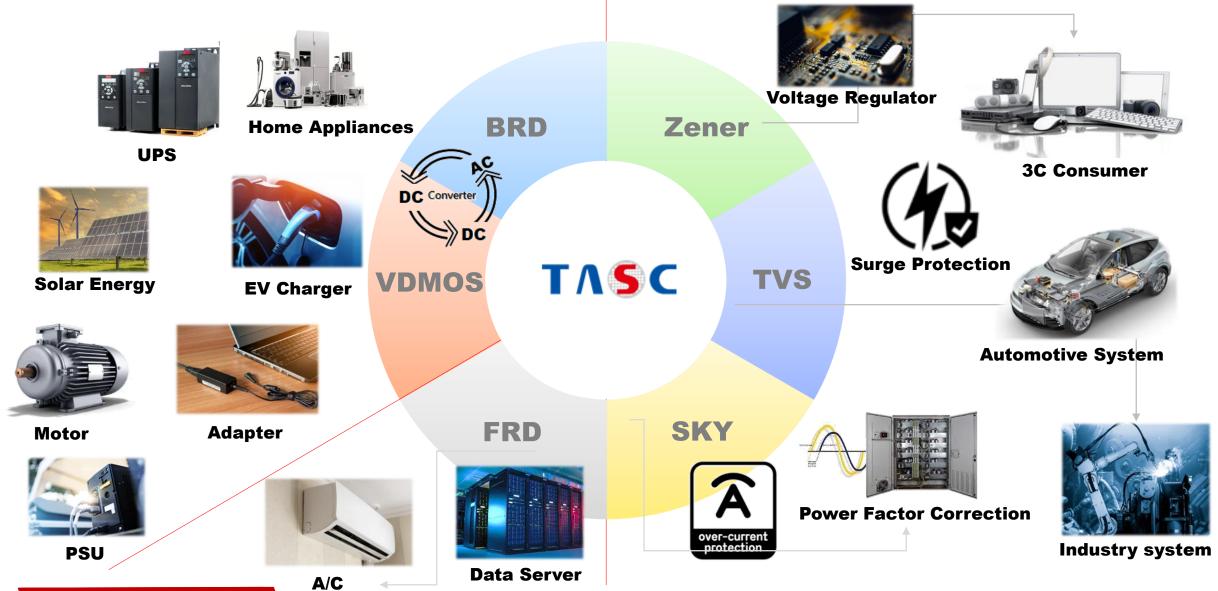




CONFIDENTIAL 12 / 20

Si Power Device Product Applications





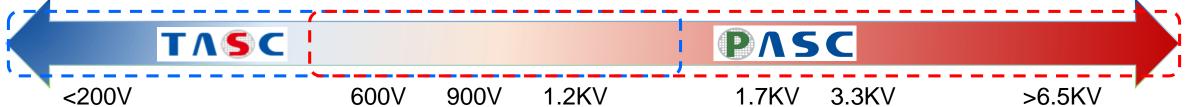
GaN-on-Si and SiC Product Applications











GaN

SiC

CONFIDENTIAL 14 / 20

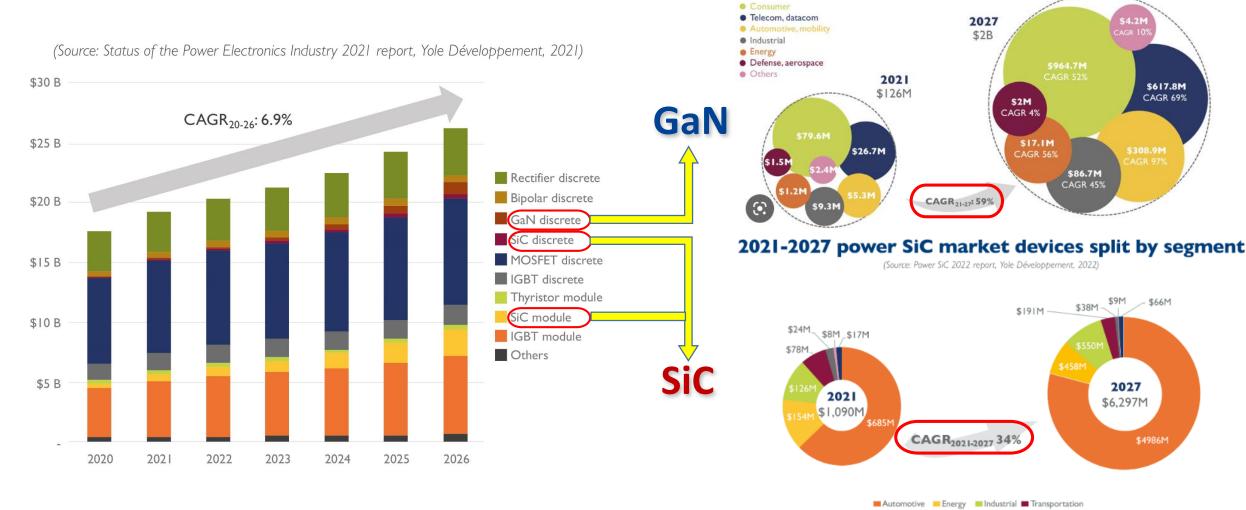
Analysis of Power Device Market



2021-2027 power GaN device market revenue

(Source: Power GaN 2022 report, Yole Développement, 2022)

■ Telecom & Infrastructure ■ Consumer ■ Others



CONFIDENTIAL 15 / 20

GaN/SiC Product Development Milestones



900V D-mode qualified **5K WOPM Production** 400V E-mode qualified 650V D-mode Qualified GaN **2K WOPM Production** Break-even point reached **EPI Process Development** Packaging Process Development Break-2025 2023 2024 **Even** SBD product qualified Trench MOSFET Sample

New Fab will be built as market demands

2026

SiC

- Clean Room Complete
- Phase I 3K Tool moved In
- Pilot Run start

- Planar MOSFET Sample Delivery
- 1K WOPM Production

- Trench MOSFET Sample Delivery
- 3K WOPM Production
- Phase II 2K tool moved In
- Break-even point reached

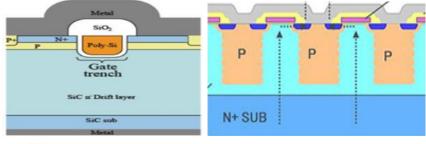
5K WOPM

CONFIDENTIAL

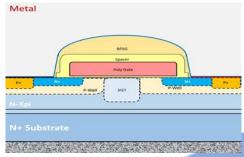
PASC SiC Technology Roadmap



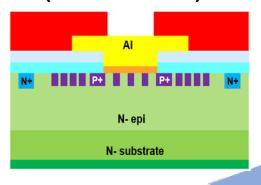




SiC-MOSFET (Planar Power MOSFET)



SiC-Diodes (SBD/JBS/MPS)



2024 Q4

2025 Q4

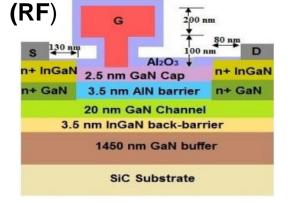
2026 Q4

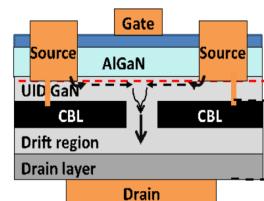


TASC GaN-on-Si Technology Roadmap

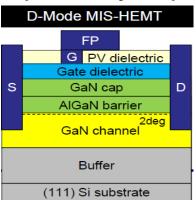


(Vertical GaN)





(Normally On)



p-GaN E-Mode JFET

FP

G
PV dielectric
p-GaN
PV dielectric
2deg
GaN channel

Buffer

(111) Si substrate

(Normally Off)

2023 Q4

2024 Q4

2025 Q4

CONFIDENTIAL

Summary

- TASC will continue to provide more competitive products in the existing sensor and emitter markets.
- In response to market and customer demands, TASC Group will increase invest especially on GaN and SiC power devices, to diversify product portfolio and gain more market share in power electronics.
- The synergy between existing sensors and GaN/SiC power devices will create a variety of new products, maximize the revenue and profit margin with existing manufacturing capacity.

CONFIDENTIAL 19 / 20



Q&A

CONFIDENTIAL 20 / 20