Transphorm Overview Investor Presentation

Primit Parikh, President & CEO, Co-founder Cameron McAulay, Chief Financial Officer January 2024

transphorm

Highest Performance, Highest Reliability GaN

Safe Harbor Statement

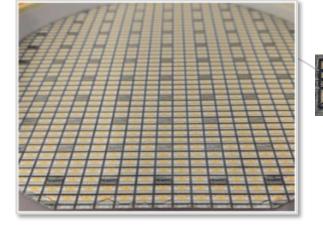
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completeness.

Key Highlights

Robust GaN Power Semiconductor Pioneer and Leader, addressing multi-billion GaN TAM and ramped in both high power and low power GaN market



\$8B SAM

by 2028 ⁽¹⁾ Server/AI/Infrastructure Industrial, Renewable EV Auto – 2/3/4 Wheeler Consumer – Fast Chargers Comprehensive IP Portfolio of 1,000+ Patents From materials to device/process to package to applications

Proprietary Process Technology

With Own Epi and Wafer Fab Capacity

Robust GaN Leader

Only Pure-Play Vertically Integrated Publicly Traded GaN Company



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Covers Entire Power Spectrum Across Low (<300W), Mid (300-1500W) and High

Power (>1500W)

140+ Employees Including 18 PhDs

Combining 300+ Years of GaN Experience

>60% 5-Year Forward Revenue CAGR and >\$475M Power Products

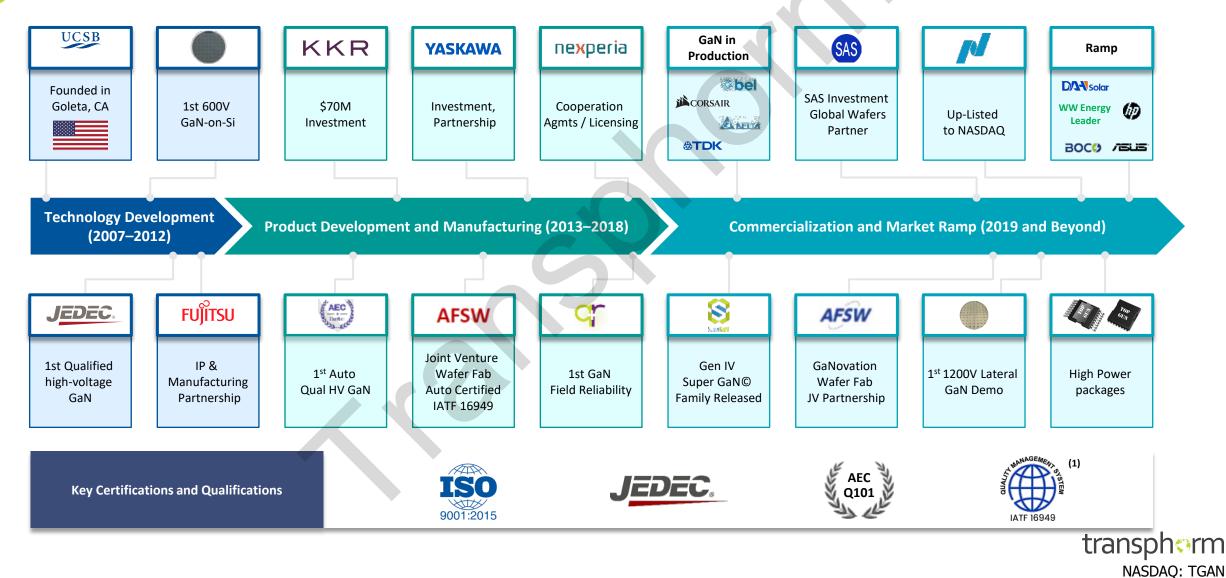
5-year Design-Win

Highest Field Reliability – 200 Billion+ Hours Devices Shipped in Both Low and High Power ⁽²⁾

transphorm NASDAQ: TGAN

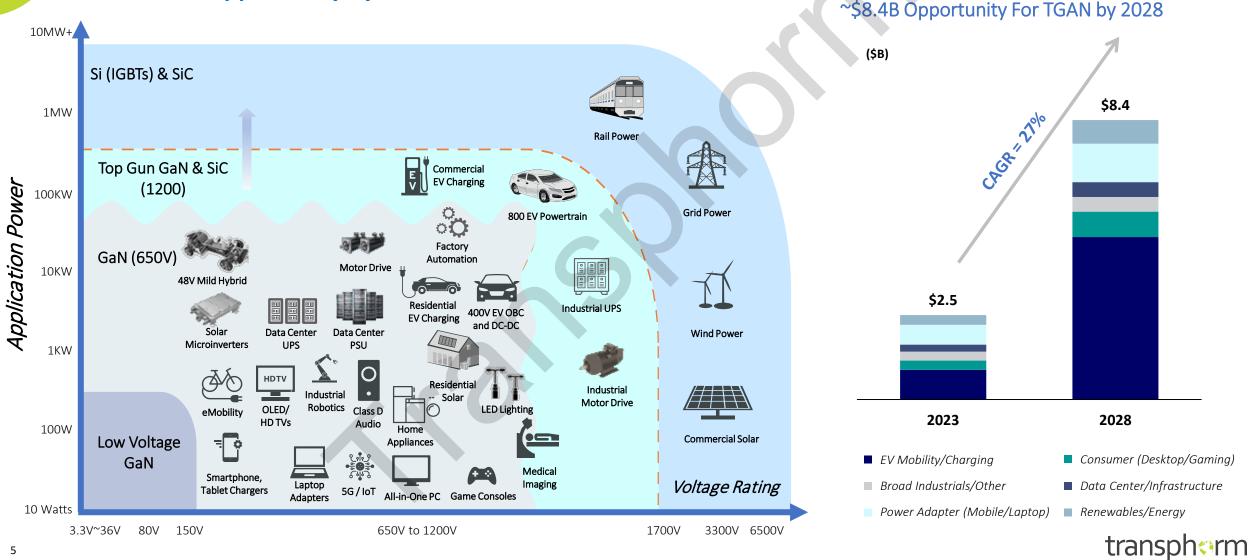
Transphorm's Growth and Commercialization History

GaN Power Semiconductor Pioneer and Leader – Top US Co., Ramped in the market today



Foundational Technology That Supports a Broad Spectrum of Applications

\$8.4 Billion opportunity by 2028 across various end markets



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1) Wall Street Research, Company Estimates, TAM based on current and estimated, future product offerings. Does not include the adoption of GaN technology or Transphorm's adoption rate.

Key Highlights

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GaN Power Semiconductor Pioneer and Leader, Addressing Multi-billion TAM

1	Disruptive Technology	Transphorm GaN enables power conversion solutions in rapidly growing, attractive markets and provides a wide range of benefits over traditional materials			
2	Massive Market Opportunity ⁽¹⁾	Large and growing GaN Power Market opportunity forecasted to reach \$8.4B in 2028, representing a 5-year CAGR of 27% with an overall Power Market TAM of \$34B			
3	Vertically Integrated With Strong Manufacturing Base	Owns core GaN material manufacturing and substantially increasing manufacturing capacity to fully control its production supply chain			
4	Blue Chip Partners and Auto/Industrial Customer Base	Multiple strategic shareholders, customers, and solutions partners including numerous marquee companies and U.S. Dept. of Defense			
5	Best-in-Class IP Position	Access to 1,000+ patents worldwide covering a comprehensive range of critical technologies required for next generation GaN power conversion solutions			
6	Attractive Financials with Strong Growth Potential	Customer validations driving attractive financials: ~\$475M+ 5-year power products design-win pipeline, forecasting a 5-year forward revenue CAGR of >60%			
7	Proven Team with Deep Domain Expertise	Led by world-renowned GaN experts including 18 PhDs and combined industry experience of over 300 years			
	1) TAM based on current and estimated, future device offerings with operations to support shipments. Does not include the adoption of GaN technology or Transphorm's yearly adoption rate.				

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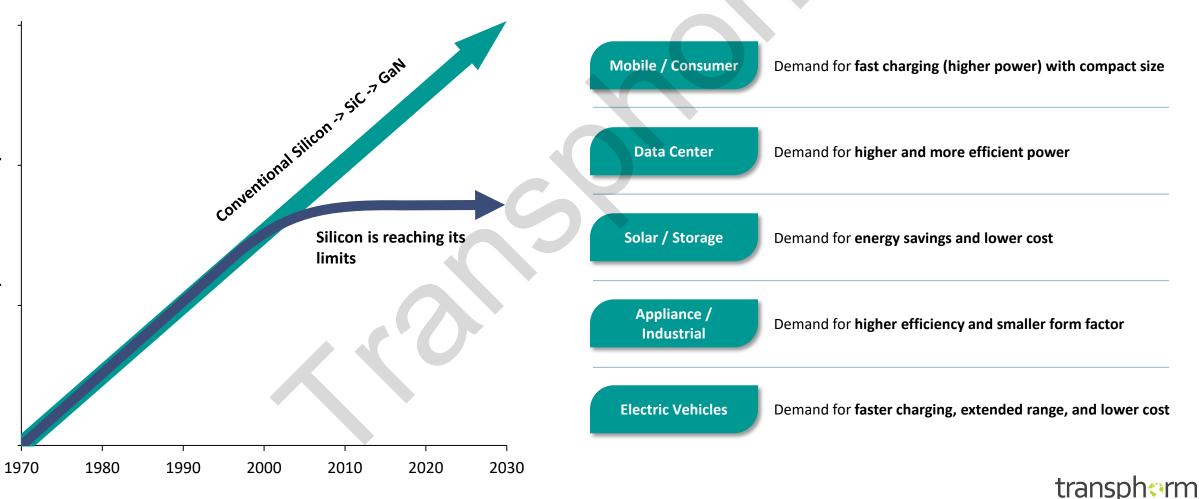
Silicon is Getting Stretched to Its Limits. Especially in Power. GaN Enables the Future

GaN has the highest figure of merit (i.e. lowest losses / highest efficiency) vs. Silicon or Silicon Carbide

Silicon Solution Pain Points in Power

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"Moore's Law for Power"



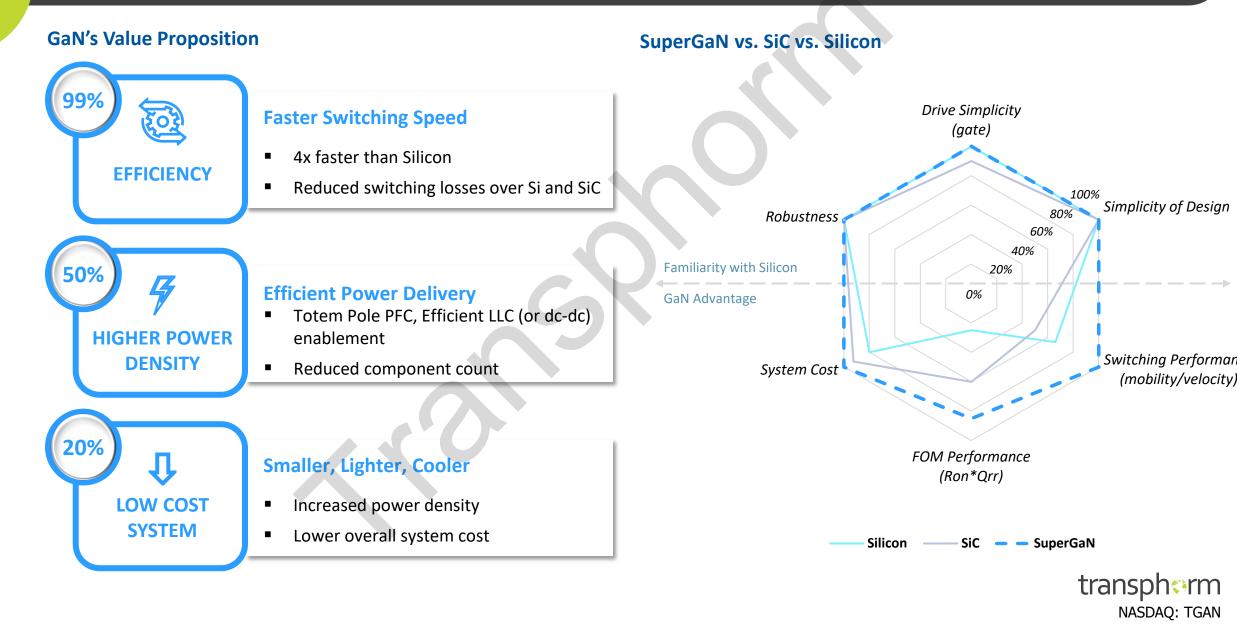
1) Measured TGAN >99% efficient power stages, commercial implementations.

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Density

Output Power

GaN Outperforms Silicon and SiC on Key Parameters



Transphorm Delivers Highly Differentiated GaN Solutions

Early Mover Advantage Capitalizing on the Accelerating Adoption of GaN

Why Transphorm Wins SiC Transphorm Silicon Other GaN GaN FET MOSFET **Key Factors** MOSFET (e-mode) Product / Package Offerings and Power Levels Ease of Use Size and Speed / Frequency Performance (Efficiency) ⁽¹⁾ Cost / Added BoM (Cost) ⁽¹⁾ Reliability and Robustness ⁽²⁾ Design / Application Support Λ G (Direct & Partners) Medium Weak Strong

- Proven Technology with 200+ Billion Hours in the Field from Products Shipping to Multiple Blue-chip OEMs
- Disruptive Proprietary Process
 - Superior performance vs. <u>other GaN</u>, SiC and Si
 - ~25% better for same die spec vs. "TSMC GaN"
 - 25 35% lower loss vs. SiC (for high-power)
 - Easy to design, use with std. gate drivers, most robust interface and proven reliability in low to high power
- Depth of Manufacturing Integration with Vertically Integrated Wafer Supply Chain
- Strong GaN IP Portfolio with Access to 1,000+ patents



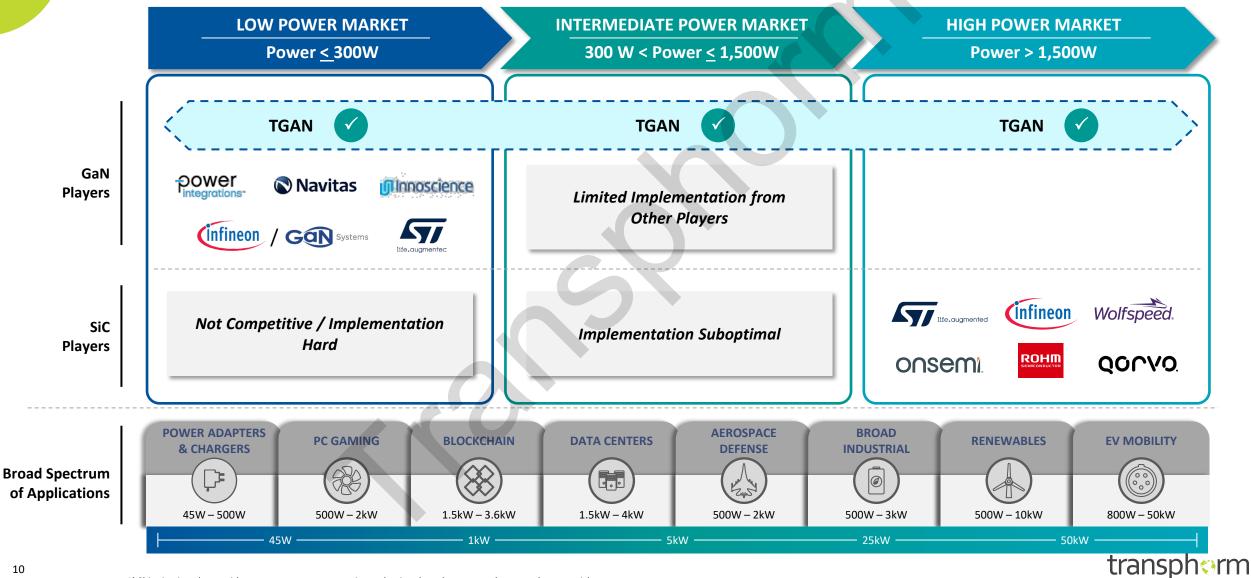
Source: Company estimates.

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Public and internal reference designs.

(2) Impact of OFF-state Gate Bias on Dynamic Ron of p-GaN Gate HEMT (33rd ISPSD, 2021), and Top Gun internal testing.

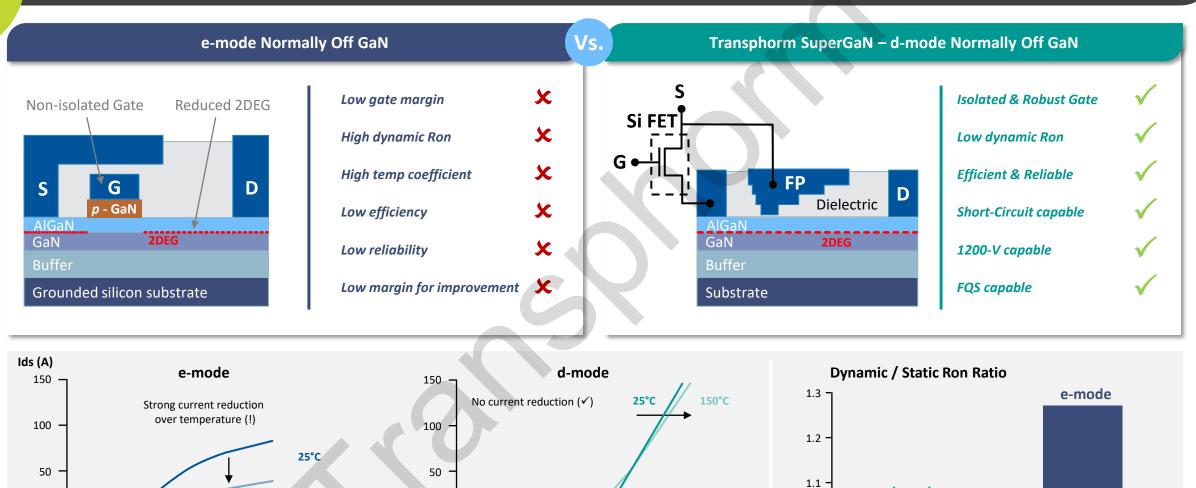
Only Player with Broad Commercial Success Across the Power Spectrum



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1) Shipping in volume with customer power systems in production, based on press releases and news articles. 2) SiC Companies can offer products at mid-power but circuit implantation is typically not optimal.

Transphorm GaN Wins Due to Fundamentally Better Physics



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d-mode

Vdd = 480 V; Toff = 60 s; Ton = $2 \mu s$

1 +

Source: Company data

2

4

Vg (V)

0

0

150°C

8

6

0

0

2

Δ

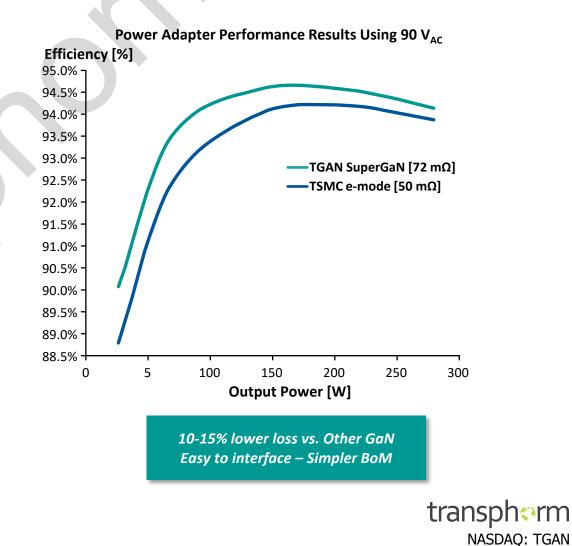
Vg (V)

Super Gan FETs Win Against e-mode from TSMC and Other Competitors

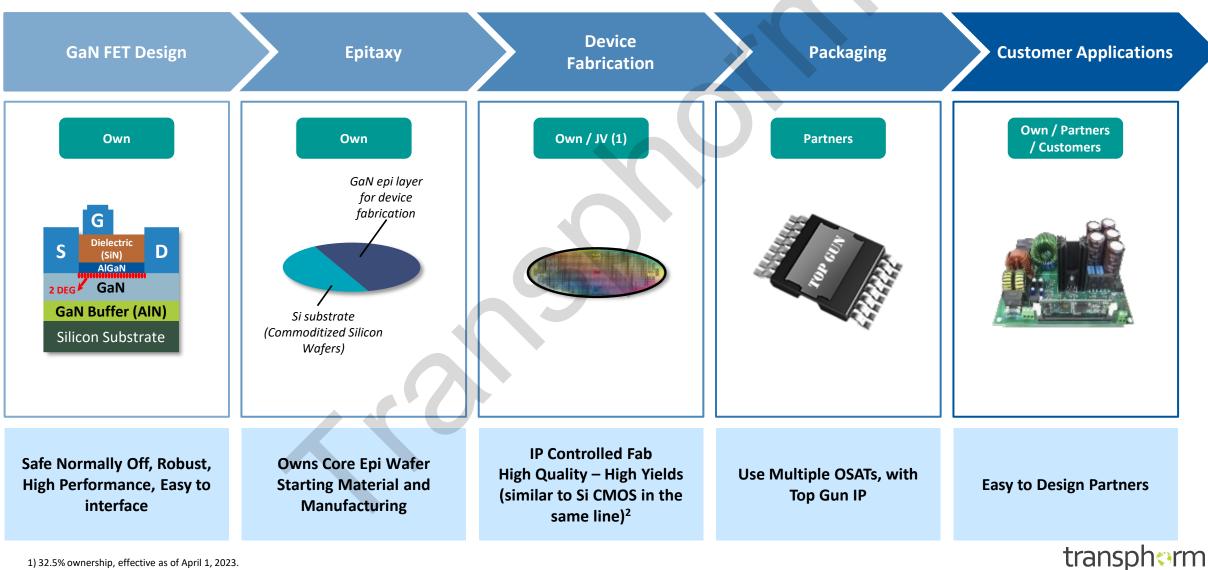
In Production 280 W Razer Gaming Power Supply With Drop-In Device Comparison



Transphorm GaN High On Resistance Device Has Higher Performance With Smaller Parts than e-mode



Transphorm Owns its GaN Wafer Production Supply Chain



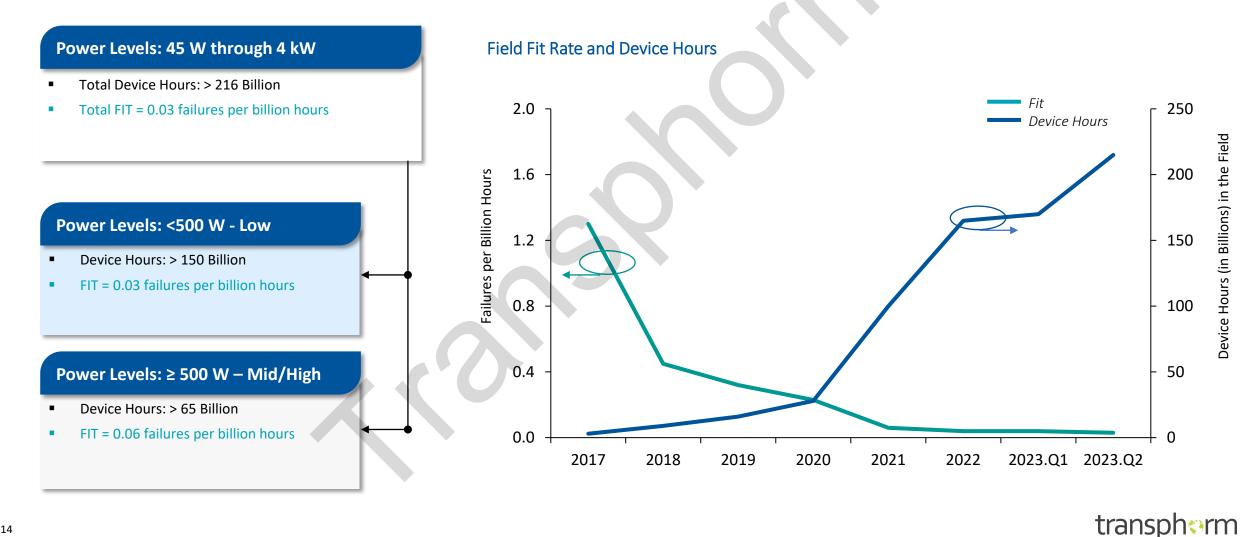
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13 1) 32.5% ownership, effective as of April 1, 2023.

> 2) P. Parikh et. al., GaN Power Commercialization with Highest Quality-Highest Reliability 650V HEMTs- Requirements, Successes and Challenges, 2018 IEEE International Electron Devices Meeting (IEDM), Dec 2018. Source: https://ieeexplore.ieee.org/document/8614579.

Excellent Field Reliability – "as good" as Silicon: 200 Billion+ Hour in Field

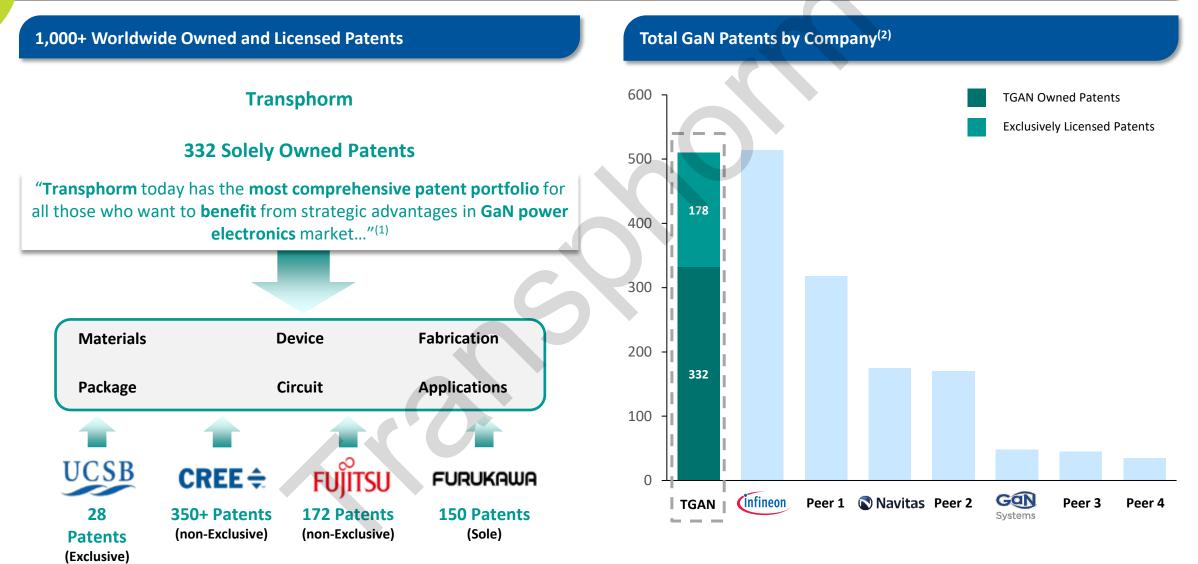
Only company to report field reliability that includes both low power and high power



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Robust GaN IP Position

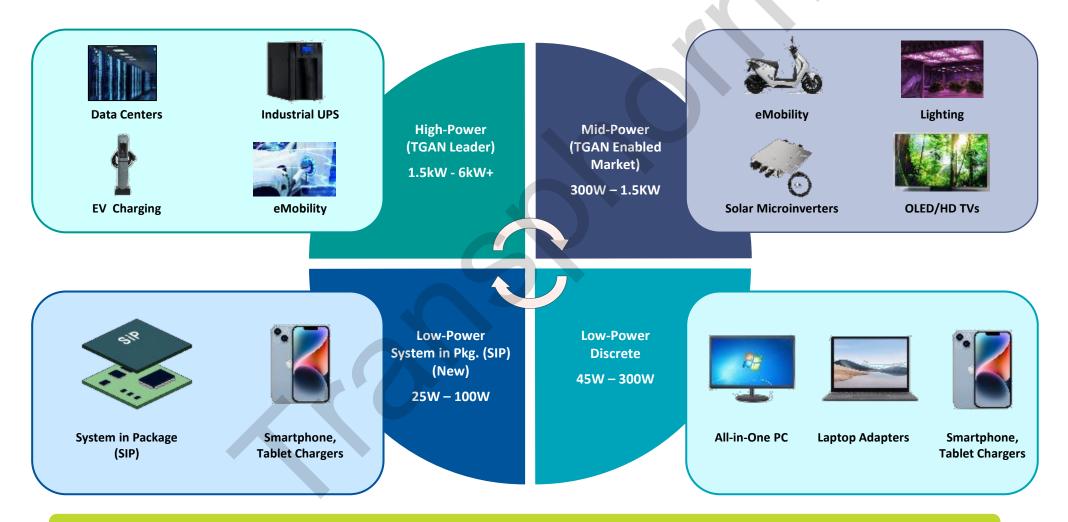
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1) KnowMade Patent and Technology intelligence report, "Power GaN intellectual property (IP): high-voltage power semiconductor leaders, a core set of strong IP players and numerous newcomers." 2) Source: Patsnap Inc., Company's subscription to Patsnap Service. transphorm NASDAQ: TGAN

Overview of End Markets and Products

TGAN Business Strategy: Dominate High-Power and Mid-Power, Grow Low-Power



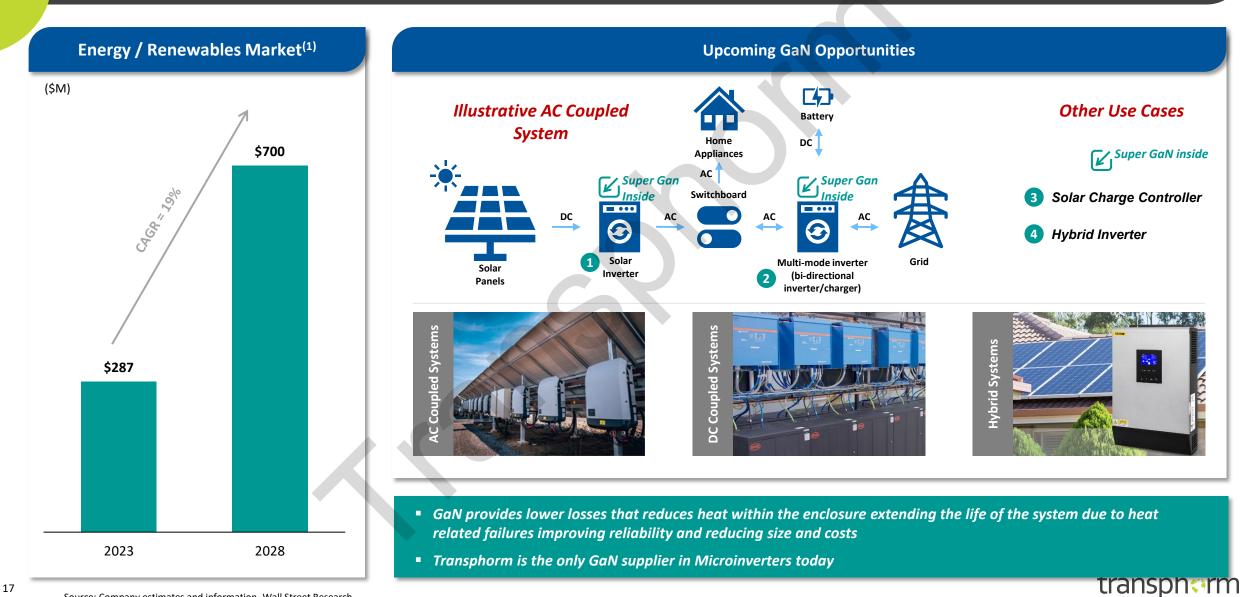
Transphorm is the Only GaN Company with Commercial Success in Low- through High-Power Segments of the Market

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Energy / Renewables End Market Opportunity



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Source: Company estimates and information, Wall Street Research. String and Microinverters under 10KW. (1)

Broad Industrials End Market Opportunity

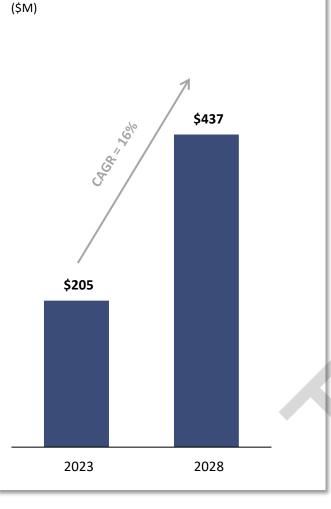


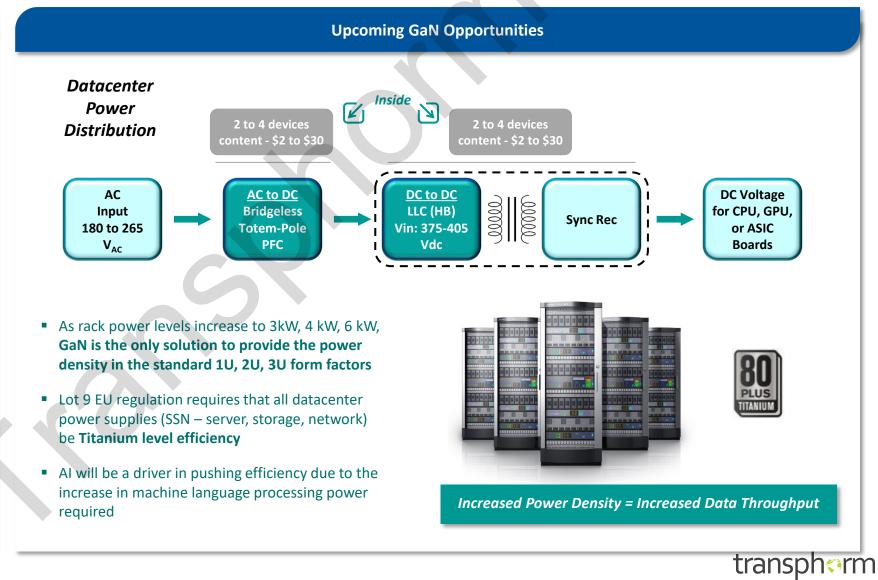
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Source: Company estimates and information, Wall Street Research. (1) Includes only up to 5KVA.

Data Centers End Market Opportunity

Data Center / Infrastructure Market⁽¹⁾





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Source: Company estimates and information, Wall Street Research. (1) Rack and server mounted datacenter supplies.

Building Momentum in High-Power (100+ Design-ins)

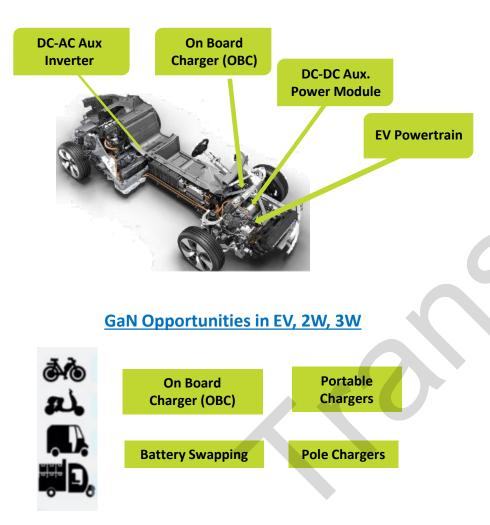
Efficient, Reliable, High Performing, Ease of Drivability and Designability

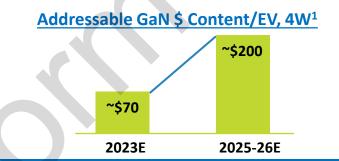




Accelerating Opportunity for GaN Enabled Power in EV

GaN Opportunities in EV, 4W





- Well-positioned for automotive opportunity with leading products, strategic partners
- 25 35% lower loss vs. SiC with Transphorm SuperGan FET
- 1200V GaN (in R&D), could be game-changer in EV OBC, DC-DC, Traction Inverter in cost/size/performance vs. SiC
- EV Adoption expected to increase to 32 million (44 million hyper adoption) vehicles by 2030²

EV 2W, 3W Market

- Transphorm FET already proven in battery-swapping
- Potential to address 75 Million 2W/3W WW (Asia dominated)³, \$8-10/vehicle

Transphorm GaN AEC-Q101 (Auto) Qualified NOW

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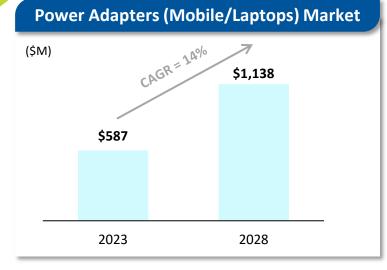
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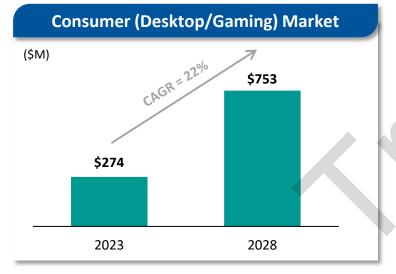
1) Transphorm company internal estimates, 2022 includes OBC/DCBC, 2025 includes inverter (100kw).

IHS and Goldman Sachs Global Investment Research.

3) 30m E-bikes in China, 30m motorcycles in Asian market potential to be EVs (Motocycledata.com, Statista).

Consumer End Market Opportunity





Upcoming GaN Opportunities

- Consumer End Market has been the primary driver of GaN device market thus far with strong adoption of GaN-based fast charging in mobiles and PCs – Transphorm in 115+ Design-ins across Adapters and Chargers
- End customers want a single adapter to charge there phone and laptop and to be small and light
- Competitive forces at play where suppliers know they will get left behind if they do not jump on board with GaN – Major OEMs will be all GaN by 2025-2026
- Ease of design / compatibility top of mind for suppliers



The European Union has set December 2024 deadline to make USB-C the common charging standard in the EU for all consumer electronics





Audio Amplifiers



Super Gan

Wireless Charging

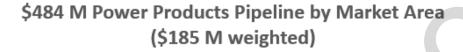


Gaming Accessories



Large Growing Pipeline of New Business Opportunities

5%+ growth from last quarter, now exceeding \$475Million for Power Products

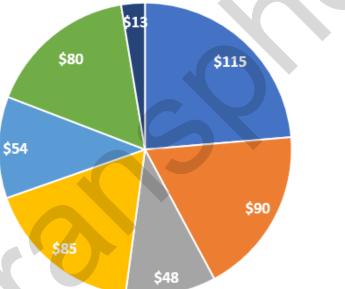


- Broad Industrial
- Power Adapters (Mobile/Laptops)
- Datacenters (Server/Telecom/Blockchain)
- Renewable

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- EV Mobility/Charging
- Consumer(Computing/Gaming)
- Other (Lighting, Telecom, Medical, Misc)

90% of power products pipeline is for 5 years (FY24-28).



- Power products pipeline over \$475 million¹
 - 70% high power (over 300 Watts)
- Wafer and Government pipeline additional
- Growing eco-system partnerships (ICs – drivers/controllers and channels) to fulfil the rapidly increasing demand

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Executing on Key Metrics to Fuel Growth of \$475M+ Product Pipeline

1) High Power Leadership & Low Power Share, 2) Capacity & Supply Chain 3) Product/Tech Leadership

Key focus areas	Achieved
1. Revenue/Products, FQ1-24	 ✓ \$5.0M, \$3.6M Product (18% over prior Q), \$1.4M Government revenue ✓ High Power Revenue > 70%
2. Low Power: Adapters/Chargers: (25W – 300W), Till date	 ✓ Design-Ins: 115+ (10+ new), a 15% sequential increase in design-ins ✓ In Production: 30+ (3 new) ✓ System-in-package solutions: 2 released, 5 in design-in (Multiple IC Partners)
3. High power: (300W –7.5kW), Till date	 ✓ Design-Ins: 100+ (25 new), a >30% sequential increase in design-ins ✓ In Production: 35+ (3 new) ✓ Ramped in Computing (Server, Blockchain, Gaming), Microinverters, UPS, Industrial ✓ Expanding sockets to 7.5 kW – within same customers, proliferation
4. Product SKUs and Reliability	 ✓ Total: 28 products (production/sampling, Auto qualified: 3) – Comprehensive portfolio ✓ Robust high-power surface mount: 3 new TOLL, 1 new TOLT top-cooled, sampling TO-247-4, drop in with SiC MOSFET and realized 25% lower loss vs. Industry leading SiC MOSFETs ✓ Proven dynamic (actual switching) reliability superiority over e-mode from leading foundry ✓ 1200 V preliminary datasheet with model, Short Circuit up to 5 µ—sec
5. Capacity Proof Points	 Record Epi-wafer output from Japan reactors, both reactors ramped Established new high volume packaging sub-contractors for high/low power Low Power product dual source/cost down for packaging on track

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Key Financial Highlights

	Q2 FY24	Q1 FY24	Commentary
Revenue	\$5.0M (~70% Product)	\$5.9M (~50% Product)	 Overall revenue increase of 36% Y/Y Product revenue growth 18% Q/Q, Pipeline of customers remains strong
Gross Margin	23%	36%	 Margin decrease mix driven – solid production margins remain Y/Y margin improved from 12% to 23%
OPEX (non-GAAP)	\$6.7M	\$6.8M	 Spend largely stable in the quarter Y/Y increase driven by larger sales/apps teams and R&D investment
EPS (non-GAAP)	(\$0.08)	(\$0.08)	 Revenue mix impacted EPS Consistent OPEX and Product margins
Stockholders Equity	\$23.7M	\$22.8M	 Reduced cash burn in quarter Company debt free \$8m rights offering and completed and funded FQ1'24 Supplementary non-dilutive debt in progress



GaN Helps Address the Net Zero Challenge

34 BILLION TONS OF CO₂ ARE PRODUCED EACH YEAR

9 YEAR PROJECTION

WITH ONLY 13% OF OUR CO2 REMAINING, CURRENT EMISSION RATES HAVE NINE YEARS **BEFORE EXCEEDING THE 1.5 DEGREE GLOBAL** WARMING ALLOCATION.

18 YEAR PROJECTION

WITH ONLY 23% OF OUR CO2 REMAINING, CURRENT EMISSION RATES HAVE EIGHTEEN YEARS BEFORE EXCEEDING THE 1.7 DEGREE GLOBAL WARMING ALLOCATION.

30 YEAR PROJECTION

WITH ONLY 33% OF OUR CO2 REMAINING, CURRENT EMISSION RATES HAVE THIRTY YEARS **BEFORE EXCEEDING THE 2.0 DEGREE GLOBAL** WARMING ALLOCATION.

Gt CO₂ REMAINING CONSUMED

Savings of Over 50K Metric Tons of CO₂ in 2023 Alone and Over 500 Terawatt Hours of Electricity and 2.3 Gigatons of CO₂ Over the Next Two Decades

2

Sources: World Nuclear Association (October 2022), Global Carbon Projects 2022 Release Company Estimates for GaN Device based on Efficiency Savings in High Power Applications and Long Term Market Penetration Estimates

POWER ADAPTERS AND CHARGERS RENEWABLES AEROSPACE DEFENSE **EV MOBILITY DATA CENTERS** BLOCKCHAIN PC GAMING BROAD **INDUSTRIAL** SAVES 50kg OF CO₂ OUTPUT **PER GaN DEVICE**

INCREASING EFFICIENCY BY JUST 1% IN HIGH POWER APPLICATIONS...

Transphorm at Glance

Overview

- Founded in 2007, Transphorm is a market and technology leader in the development of robust gallium nitride (GaN) products for high-voltage power conversion applications
- Delivers high performing and reliable GaN FET products, while ٠ providing easy to use, GaN FET solutions to a growing customer base
- The Company's technology is built on its robust IP portfolio with ٠ access to more than 1,000 patents covering core areas of the GaN process – materials through circuits
- Transphorm's team consists of 100+ employees with 15+ PhDs and has 300+ combined years of GaN expertise
- · Vertically Integrated, Headquartered in Goleta, CA, with additional offices in San Jose, CA; Aizu, Japan (manufacturing); Shin Yokohama, Japan; Taipei City, Taiwan (sales); Shenzhen, China (sales) and the Philippines (production control)

Key Financial Metrics

Weighted

2023 GaN TAM³

FY23 (through Mar'23) Revenue 5-Year Pipeline²

Estimated 4-Year Forward Revenue CAGR

Key End Markets













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Automotive

Broad Industrial

Infrastructure & IT Consumer

Select Customers



27 1) Total Addressable Market (TAM) based on current and estimated, future device offerings with operations to support shipments. Does not include the adoption of GaN technology or Transphorm's yearly adoption rate. 2) 98% of weighted pipeline is for 5 years (FY24-28).

Additional Materials

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Highest Performance, Highest Reliability GaN

Contains attorney-client privileged information

transphorm **Highly Experienced Leadership Team**

120+ Employees with Over 300 Years of GaN & Power Electronics Experience

Executive Management Team



Primit Parikh, Ph.D.

- Co-founder, President & CEO
- Board Member
- 25+ years experience



Umesh Mishra, Ph.D.

- Co-founder, CTO
- Board Member, Chair
- 35+ years experience



Cameron McAulay

- CFO
- 20+ years experience



Katharina McFarland Eiji Yatagawa

- SAIC, Board Member
- Asst. Sec. of Defense, Acquisition





Julian Humphreys

- Former SVP & GM MOSFET Business, Nexperia
- 30+ yrs Power Semi leader



Sal Barlett

 SVP Operations • 25+ years experience •





Philip Zuk • SVP Technical Marketing 25+ years experience



Likun Shen

• VP Engineering • 20+ years

emiconductor

KLA Tencor

VISHAY.



Tushar Dhayagude

- VP WW Sales, FAE
- 25+ years experience

🕥 Microsemi.

UCSB

Proprietary and confidential



Kelly Smales

- KnuEdge, former CFO
- 30 years finance, CPA
- AMD, Global Foundries





Mario Rivas

- Advisor
- 35+ years experience
- Former CEO, ANADIGICS



Board Members and Advisors



• Care.com, GC

30+ years experience

Cindi Moreland





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Additional Information and Where to Find It

Transphorm, Inc. ("Transphorm"), its directors and certain executive officers are participants in the solicitation of proxies from stockholders in connection with the pending acquisition of Transphorm (the "Transaction"). Transphorm plans to file a proxy statement (the "Transaction Proxy Statement") with the Securities and Exchange Commission (the "SEC") in connection with the solicitation of proxies to approve the Transaction.

Primit Parikh, Julian Humphreys, Katharina McFarland, Umesh Mishra, Cynthia (Cindi) Moreland, Kelly Smales, and Eiji Yatagawa, all of whom are member of Transphorm's Board of Directors, and Cameron McAulay, Transphorm's Chief Financial Officer, are participants in Transphorm's solicitation. The beneficial ownership of each such person, as of the date specified, appears in the table below. Additional information regarding such participants, including their direct or indirect interests, by security holdings or otherwise, will be included in the Transaction Proxy Statement and other relevant documents to be filed with the SEC in connection with the Transaction. The Transaction Proxy Statement will also include information on any payments that may be owed to Transphorm's named executive officers in a change of control of Transphorm.

Promptly after filing the definitive Transaction Proxy Statement with the SEC, Transphorm will mail the definitive Transaction Proxy Statement and a WHITE proxy card to each stockholder entitled to vote at the special meeting to consider the Transaction. STOCKHOLDERS ARE URGED TO READ THE TRANSACTION PROXY STATEMENT (INCLUDING ANY AMENDMENTS OR SUPPLEMENTS THERETO) AND ANY OTHER RELEVANT DOCUMENTS THAT TRANSPHORM WILL FILE WITH THE SEC WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION. Stockholders may obtain, free of charge, the preliminary and definitive versions of the Transaction Proxy Statement, any amendments or supplements thereto, and any other relevant documents filed by Transphorm with the SEC in connection with the Transaction Proxy Statement, any amendments or supplements definitive Transaction will also be available, free of charge, at the "Investors" section of Transphorm's website (https://ir.transphormusa.com/), or by writing to Transphorm, Inc., Attention: Corporate Secretary, 75 Castilian Drive, Goleta, CA 93117.

Beneficial Ownership	
as of January 5, 2024	
Individual	Shares Beneficially Owned (#)
Primit Parikh	563,933
Julian Humphreys	103,524
Katharina McFarland	95,877
Umesh Mishra	610,626
Cynthia (Cindi) Moreland	72,197
Kelly Smales	75,099
Eiji Yatagawa	Nil
Cameron McAulay	223,754

The amounts specified above are determined in accordance with the rules of the SEC and include securities that may be acquired within 60 days of January 5, 2024. Mr. Yatagawa is a member of the Board of Directors and serves as an executive of one or more affiliates of Kohlberg Kravis Roberts & Co. L.P. (together with its affiliates, "KKR"). KKR beneficially owns 24,724,468 shares of Transphorm's common stock (which includes warrants exercisable for 312,500 shares of Transphorm's common stock); Mr. Yatagawa is not deemed to beneficially own such shares.