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Business Overview Presentation

August 2020

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Company Overview

Pioneer and Leading Provider of GaN Power Conversion Devices

At a Glance

- **OTCQB:** TGAN
- **Founded:** 2007; headquartered Goleta, CA
- **Employees:** 87
  (18 PhDs >300 years of GaN expertise)
- **Patents:** Best-in-class technology backed by >1,000 patents
- **Full Production Capabilities:** high-volume wafer fab in Japan
- **World-wide** base with U.S., Japan strength
- **Total Revenue:** $11.9 million in 2019

Strategic Investors

KKR nexperia YASKAWA MARELLI

End Market Applications

- **Power Adapters / Compute**

- **Data Center / Comm Infrastructure**

- **Broad Industrial**

- **Automotive EV and Charging**

Products

- Leader in high voltage (650V and above) GaN
- Comprehensive portfolio with multiple generations; <1 failure per billion hours in field
- First JEDEC and AEC-Q101 qualified 650V devices available in the market

Highly Experienced Leadership

Executive Management Team

Mario Rivas
- CEO, Board Member
- 30+ years experience
- CEO of ANADIGICS

Primit Parikh, Ph.D.
- Co-founder, COO, Board Member of Transphorm Japan
- 20+ years experience

Umesh Mishra, Ph.D.
- Co-founder
- CTO, Board Member
- 30+ years experience

Cameron McAulay
- CFO
- 15+ years experience

Philip Zuk
- VP Technical Marketing
- 20+ years experience

Yifeng Wu, Ph.D.
- SVP Engineering
- 20+ years experience

Select Non-Employee Board Members

David Kerko
- Global Foundries, Director and TE Connectivity, Director
- KKR (20+ years)

Eiji Yatagawa
- KKR Japan

History of Milestone Achievements

transphorm founded

1st 600V GaN-on-Si

IP & manufacturing partnership

$70M Investment

1st AEC-Q101 qualified high-voltage GaN

2nd AEC-Q101 qualified high-voltage GaN (175°C)

Gen 3 Family release

transphorm Public Company Feb, 2020

$21.5M Raise

Technology Development (2007 – 2012)

Product Development and Manufacturing (2013 – 1H 2018)

Commercialization and Market Ramp (2H 2018 and Beyond)

1st qualified high-voltage GaN

Gen 1 Family release

Gen 2 Family release

GaN in Production

Gen 4 SuperGaN™ Released

Power Adapters/ Fast Chargers

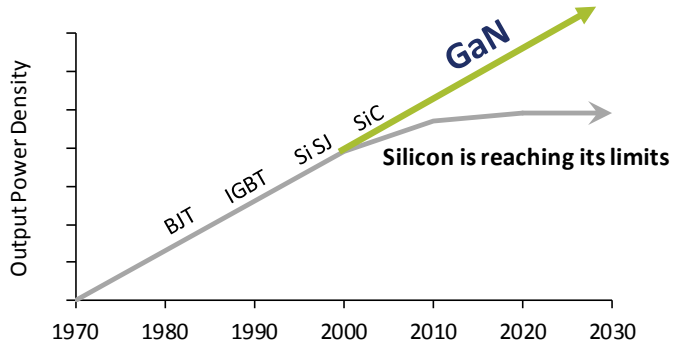
Blue Chip Partnerships

YASKAWA	Funding and development agreement for customized versions of GaN devices for use high-efficiency servo motor drives in robotics applications
FUJITSU	6-inch wafer fab in Aizu, Japan with manufacturing and IP partnership to supply GaN power conversion devices
nexperia	Second source for GaN products in automotive market, includes funding, development, IP licensing and foundry transfer
	$18.5M three-year contract with U.S. Navy to establish source of advanced GaN epiwafer materials for the Department of Defense
MICROCHIP	Joint reference designs to integrate Transphorm's Gen IV GaN FET devices with Microchip's dsPIC Digital Signal Controllers (DSCs)
MARELLI	Partner customer and joint development agreement on GaN products for automotive applications

GaN is the Future of Power Semiconductors

"Moore's Law" for Power Electronics

GaN Provides the Path to Continue to Scale Power Densities



GaN versus Silicon & Silicon Carbide

Intrinsic Performance Advantages

- GaN offers higher efficiencies with lowest losses in power conversion at any Voltage range
- GaN can operate at much higher frequency

Relative Cost Advantages

- GaN on Silicon less expensive than Silicon Carbide
- GaN offers lower system cost than Silicon
- Roadmap for GaN to approach cost parity with Silicon at device-level

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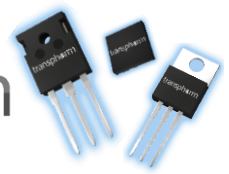


99% Efficiency

40% Higher Power Density

20% Lower System Cost

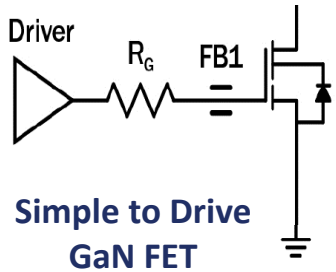
Smaller, Lighter, and Cooler Power Systems Drives Increased Functional Value

Transphorm GaN Advantage

Delivering High Performance with High Reliability

Standard Gate Driver Examples:

- Silicon Labs
- ON Semiconductor
- Texas Instruments



Simple to Drive GaN FET

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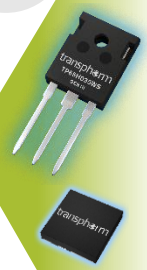
Chip-on-Chip GaN FET

LV Silicon FET (low voltage)

HV GaN HEMT (high voltage)



- **Best-in-Class Gate Robustness**
- **High Noise Immunity**
- **Easy to Drive**
- **Best-in-Class Performance**
- **Qualification JEDEC, Q101**

Quality and Reliability On the Market

- 3rd generation product family in the market and ramping, 4th generation released
- Several billion device operating field hours
- < 1 failures per billion hours of field operation

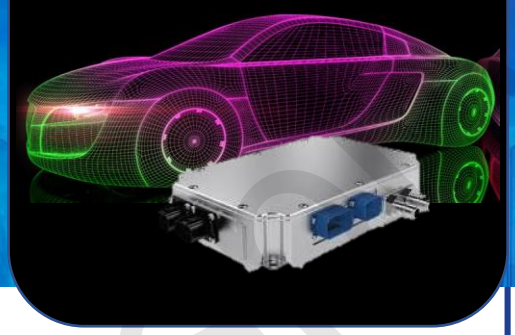
Market Trends Driving Growth for GaN

500M+ 5G handsets in 2021[1]

5G – Power Devices

- Smartphones
- Laptops/Tablets
- Gaming Consoles

12M+ Electric Vehicles in 2025[2]



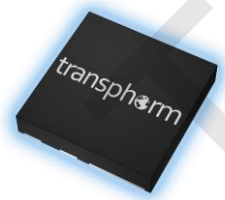
EV – Power Devices

- On-board Chargers
- Power Converters
- Power Inverters

$1B+ GaN RF Market in 2022[3]

5G – RF Devices

- Infrastructure
- High-Frequency Broadband
- DoD



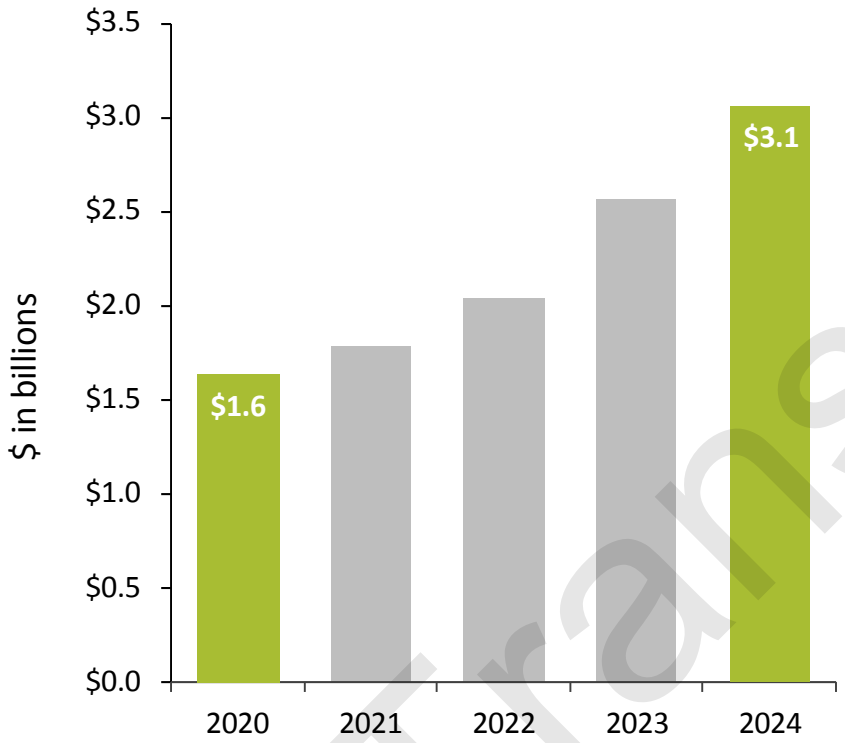
GaN Power FET

Epiwafer

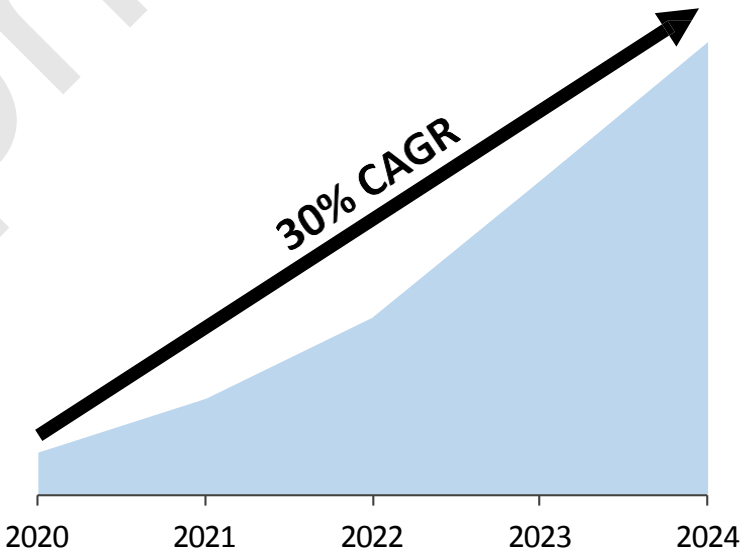
Notes:
1) BofA Global Research
2) ReportsnReports: Global and China Electric Vehicle (BEV, PHEV) Industry Report, 2019-2025
3) Strategy Analytics: RF GaN Market Forecast: 2018 - 2023

Large Market Opportunity for GaN

Total Addressable Market for GaN[1]



GaN Adoption Curve[2]



Upside to TAM Expected From Electric Vehicle Powertrain Starting in 2024

Notes:
1) Sources: IDC (Data Center / Comm Infrastructure); Statista (Power Adapters / Compute); Yole, IHS (Broad Industrial); Forbes, Frost and Sullivan, IEA, InsideEVs, Statista, Robotics & Automation (Automotive). TAM values are then calculated based on available technology, competition and value add to market.
2) IHS Markit: Power Semiconductor Intelligence Service – PCIM Europe 2019.

Targeting $3B Market Opportunity

Near Term

Long Term

End Market Applications and GaN Benefits

GaN TAM(1)

Power Adapters / Compute

- Lower thermals
- Improved power density
- Smaller form factors
- Lower system cost

2020 $562M → 2024 $616M

Data Center / Comm Infrastructure

- Ability to double available power in standardized server and 5G telecom form factors

2020 $637M → 2024 $794M

Broad Industrial

- Reduces size/weight of systems
- More efficient charging for battery and/or battery-powered equipment and vehicles

2020 $219M → 2024 $733M

Automotive EV and Charging

- Reduces size/weight
- Resulting in longer distance per charge

2020 $170M → 2024 $916M

(Excludes EV powertrain)

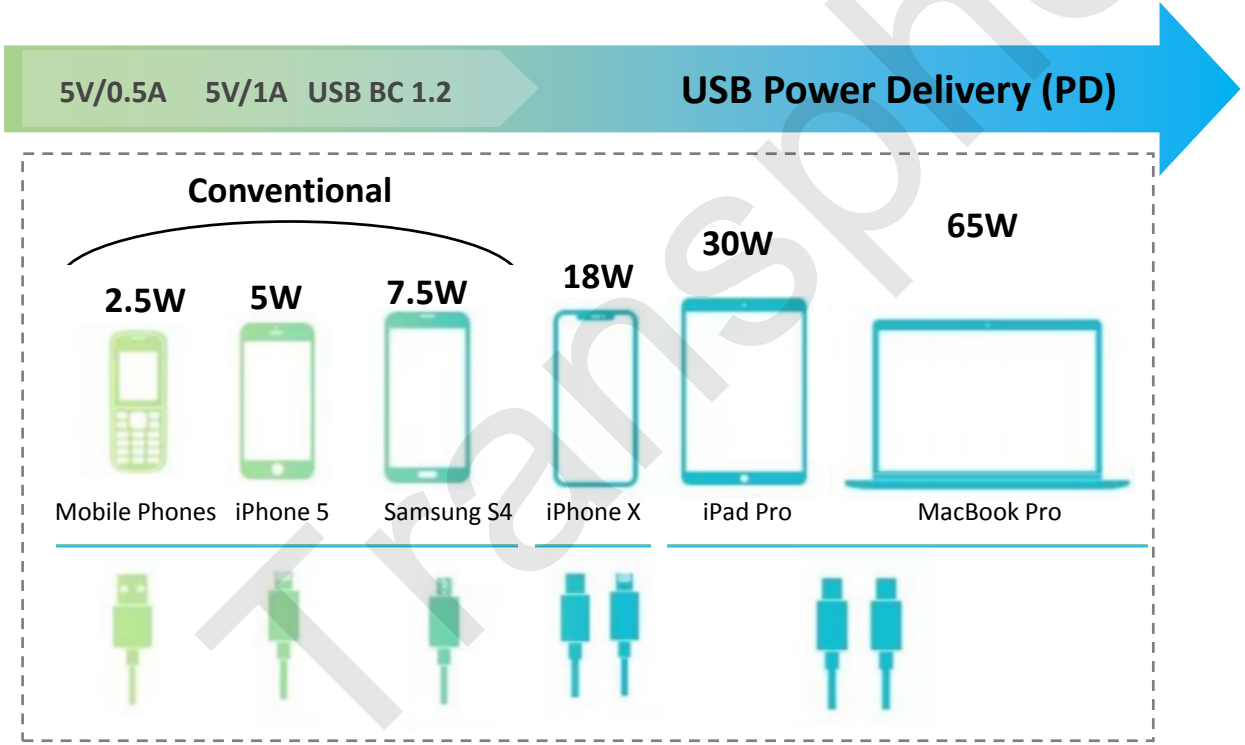
Notes:

1) Sources: IDC (Data Center / Comm Infrastructure); Statista (Power Adapters / Compute); Yole, IHS (Broad Industrial); Forbes, Frost and Sullivan, IEA, InsideEVs, Statista, Robotics & Automation (Automotive). TAM values are then calculated based on available technology, competition and value add to market.

Fast Chargers: Changing the Adapter Landscape

One Power Adapter for Multiple Portable Devices

- Fast Chargers can adapt power level for different products with same charger
- Future phones / 5G smart phones require and utilize 65 Watts for fast charging
- GaN enables a smaller form factor and higher efficiency



Fast Charger Adapter (65W)

56cc Ultra slim

Commercially Available

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High-Volume Market With Potential for Accelerated Ramp

Data Center / Comms Infrastructure

GaN Offers Substantial Systems Cost Savings within Data Centers

- 40% of total operational costs come from energy to power and cool server racks
- GaN enables **~2x increase in power density**, **98%+ efficiency**

"Titanium" Server Power Supply
(1.5 kW to 3 kW)

Smaller

Lighter

Cooler

AC Line (208 Vac) to 400 Vdc to 48 Vdc

- **$103K** saved/year*
- **397 tons** reduced carbon footprint**

Global Server/Power Supply Shipments(1)

Global Server Units
(Existing Install Base)
10.3M

2019
10.3M

5.4% CAGR

2025
14.1M

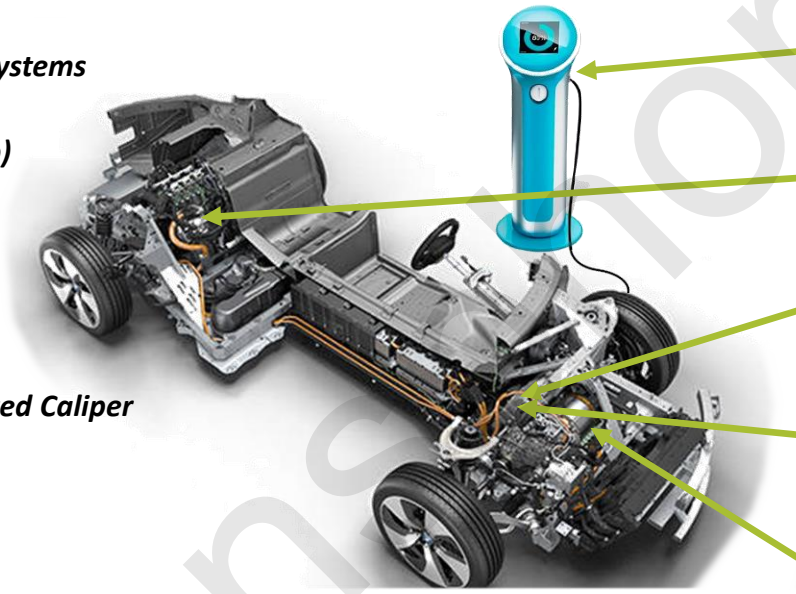
Notes:
1) IDC: Worldwide Quarterly Server Tracker | June 2020
2) Grand View Research: Server Market Size, Share, Industry Growth Report, 2019-2025
3) Gartner: Forecast: Servers, All Countries, 2018-2024, 2Q20 Update

* Based on 5MW Class Data Center
** Based on existing rectifiers with 92% efficiency | Source: EPA estimated one kWh produces 1.52 pounds of carbon dioxide (excl. line-losses)

Automotive: Large Market Opportunity

GaN Applications for Electric Vehicles

- ***High Power Drive By Wire Systems***
- ***Climate Control (Heat Pump)***
- ***Air conditioning (AC Motor)***
- ***12 V battery charging***
- ***Parking brakes using actuated Caliper***
- ***Suspension Control***



AC Charging Pole (Level I & II)

DC-AC Auxiliary Inverter (1.5 kW – 2 kW)

DC-DC Aux. Power Module (APM) (1 kW – 7 kW)

AC-DC On Board Charger (OBC) (3.3 kW- 11 kW)

EV Powertrain 50kW-250kW
SiC and Si IGBT (today)
Larger GaN die (future)

Electric Vehicle (EV) Unit Outlook(1)

2020 **3.1M** → **23% CAGR** → 2030 **25.9M**

GaN TAM In Automotive(2)

2025 **$2.4B** → **20% CAGR** → 2030 **$6.0B** *(Including EV Powertrain)*

Notes:
1) Global EV outlook. Source: Forbes, June 2018, contributor: Neil Winton.
2) IEA, InsideEVs, Statista, Robotics & Automation, PntPower.com. Includes OBC, DC – DC, Inverter content, and EV charging poles. Based on GaN technology available and Transphorm management's projections.

Well Positioned on Automotive Opportunities

Leading global independent supplier to the automotive sector with 60,000 employees, 170 facilities and R&D centers across Asia, Americas, Europe and Africa. Headquartered in Japan with annual revenue of $15 billion in 2019.

- Preferred customer and joint development agreement executed in Feb 2020
- Top 10 shareholder of Transphorm, with long-term commitment
- Roadmap and technical collaboration on new GaN products for auto applications

Global company and leading expert in high-volume production of reliable and essential semiconductor components that meet the stringent standards required by the automotive industry.

- Cooperation agreement, investment and licensing agreement closed in April 2018
- $50 million for Transphorm, in return for equity, IP licensing, foundry transfer and Automotive market access
- Allows for better Automotive market penetration and creates a 2nd source for GaN

Comprehensive GaN Product Portfolio

Wide breadth of 600V to 900V and JEDEC through AEC-Q101

Technology	On Resistance (mΩ)	Current Capability (A)
Gen III 650V	150/70/50/35	5 to 47
Gen IV 650V	480/300/50/35	2.6 to 47
Gen V* 650V	15	95
Gen III 900V	50	34

Power Level (*logarithmic*)

100 kW

10 kW

1 kW

100 W

10 W

Wall Plug Adapter

Fast/Other Charger Adapter

Servo Motor Drive

Consumer/ Computing PSU (gaming)

Server/ Telecom PSU UPS

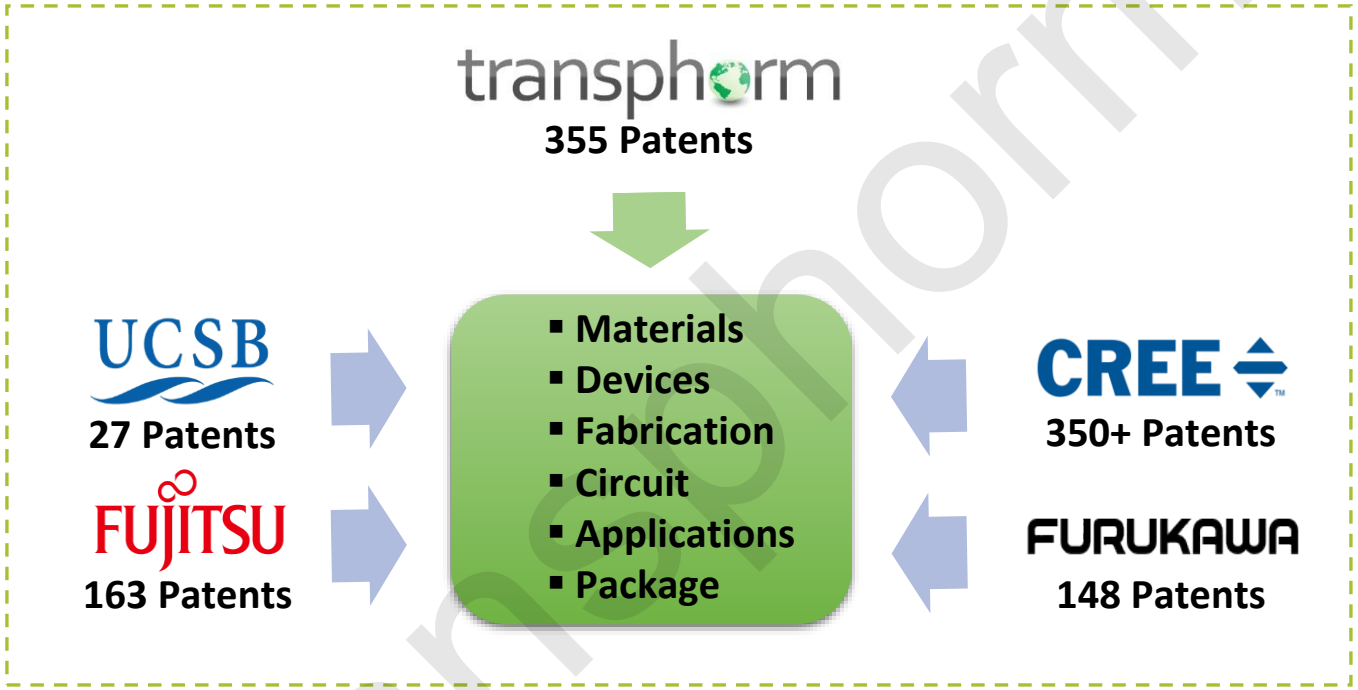
Auto DC-DC On-board Charger

Drivetrain Inverter

* In development, Gen V to be released in 2021

Industry's Strongest GaN IP Position

1,000+ Worldwide Owned and Licensed Patents



- *Patent portfolio valued in excess of $225 million (owned + exclusive licensed)[1]*

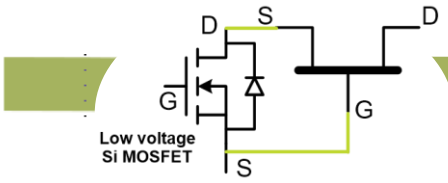
KnowMade — IP REPORT

- *KnowMade: "Transphorm today has the dream patent portfolio for all those who want to benefit from strategic advantages in GaN power electronics market"*

[1]2020 Patsnap valuation based on 40+ independent criteria. Transphorm's GaN portfolio value included only owned or exclusively licensed patents.

In-House Capabilities Span Complete Value Chain

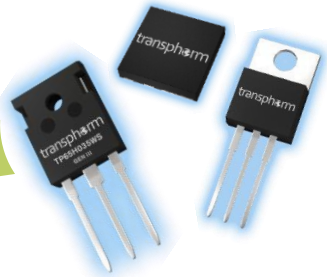
1. GaN FET design



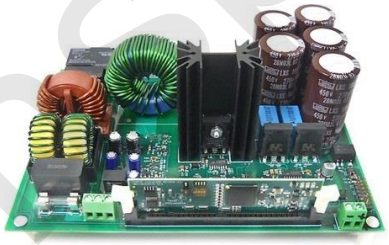
2. Epi technology and manufacturing

3. Wafer fab

4. Packaging



5. Applications-driven resources



6. End market/application

End-to-End Process Drives Innovation and Leadership in GaN Technology

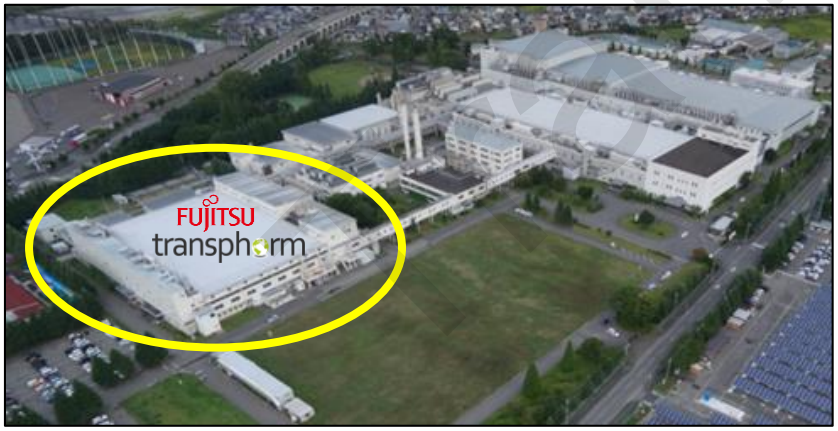
Full Production Capabilities

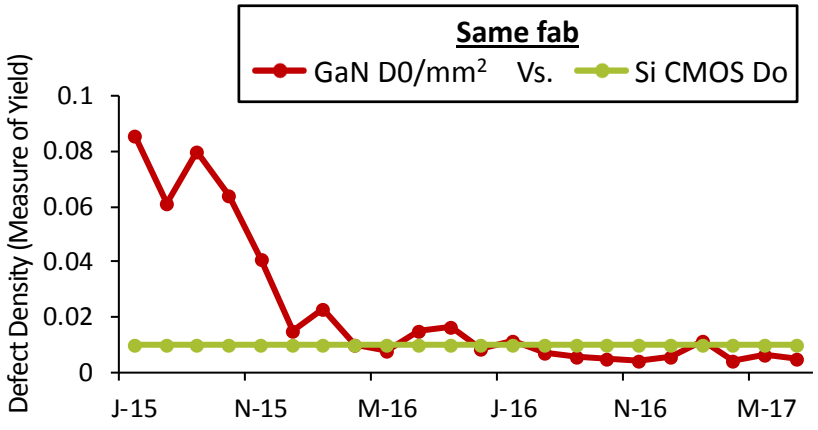
In-House Material Growth Capability (MOCVD and Epi Wafer)

- Multiple epi production reactors in Goleta-CA and Aizu-Japan with plans to expand
- $18.5M contract with U.S. Navy, establishing Transphorm as one-stop domestic supplier of GaN Epi for RF – DoD/Commercial 5G

High-Volume Wafer Fab In Japan With Fujitsu (Joint Venture)

- Capacity to handle tens of millions GaN parts / year, scalable on demand
- High volume 6-inch manufacturing
- Several million GaN die manufactured in last two years
- Defect densities same as Silicon CMOS wafers
- Fully qualified GaN on Silicon under comprehensive SPC control





Key Product and Partnership Priorities
Backed by Strong Value Proposition

Secured multiple Adapter design wins, sampling Gen 4 to industrial and server customers, sampling/releasing new products and reference designs

- 2nd half products and building for 2021 revenues

Build and execute on key strategic partnerships and automotive EV focus

- Nexperia (licensing, 2nd source), Yaskawa (NRE, Servo drive & Motion control) and Marelli (long-term Automotive)
- Gen 5 product development execution for automotive/EV opportunities

Execution on Government programs and securing RF Epi sales

- Navy program revenues and 2-3 RF GaN epi orders

Production with Multiple Customers

Best-in-Class Q+R, < 1 FIT JEDEC, AEC

1,000+ Patent Portfolio

Strong Products & Roadmap

High-Volume Wafer Mfg. in Place

Financials

Financial Summary

Income Statement

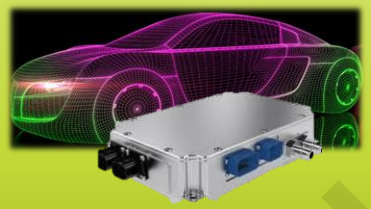
	12 Months to 12/31/18	12 months to 12/31/19	3 months to 3/31/20	3 months to 6/30/20	6 months to 6/30/20
Revenue	1.4	11.9	1.1	6.3	7.4
Cost of Goods Sold	4.6	6.5	1.5	1.2	2.7
Gross Profit/(Loss)	**(3.2)**	**5.4**	**(0.4)**	**5.1**	**4.7**
Operating Expenses	**18.6**	**17.4**	**5.1**	**4.1**	**9.2**
Other Income/Expense	3.9	3.4	(1.2)	3.2	1.9
Operating Profit	**(25.8)**	**(15.3)**	**(4.2)**	**(2.27)**	**(6.4)**

Balance Sheet

Numbers in $m's	As at 12/31/18	As at 12/31/19	As at 3/31/20	As at 6/30/20
Cash and cash equivalents	3.1	2.9	14.6	9.4
Current assets	2.0	2.3	3.9	3.9
Fixed & Intangible assets	5.4	5.1	4.6	4.4
Total assets	**10.5**	**10.3**	**23.2**	**17.7**
Short-term debt	3.3	25.5	25.6	21.0
Current liabities	3.2	5.2	4.8	4.5
Long-term debt	25.9	16.2	13.9	15.6
Total Liabilities	**32.4**	**46.9**	**44.3**	**41.1**
Shareholders deficit	**(21.9)**	**(36.6)**	**(21.2)**	**(23.4)**
Liabilities and stockholders equity	**10.5**	**10.3**	**23.2**	**17.7**

Phases of Revenue Growth

5G Market Adoption



Electric Vehicle (EV) Market Adoption

Adoption — 2019-2020

- Licensing revenue
- Secured Govt. contract
- Gen 3 revenue, Automotive qualified
- Gen 4 release, design wins
- Initial Power Adapter/ Charger revenue
- Auto partner/customer

Execution — 2020-2021

- Licensing revenue
- Add Govt. contracts
- High-vol. Adapter ramp
- Growth in servers, industrial
- Growth in RF Epi Sales
- 900V Gen 3
- Gen 5 release

Inflection Point — 2022-2023

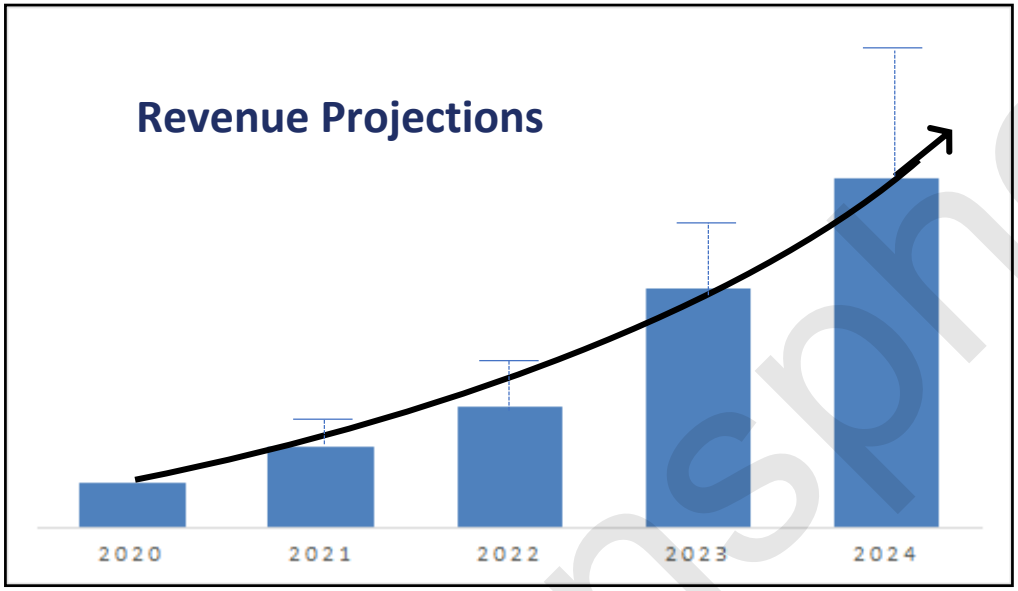
- Broad market growth, including 5G Penetration
- Automotive programs reaching production
- Gen 5 revenue ramp
- 1200V release
- New Govt. contracts
- Target profitability

Accelerated Growth — 2024+

- Continued broad market expansion
- Automotive adoption growth, revenue ramp
- Leader in EV, Consumer and RF Epi segments
- Positive cash generation
- Increase internal investment in growth

Long-term Growth

Building a High-Growth, Cash Generating Business



Target Model:

5 year CAGR range:	**50-80%**
Gross Margin:	**40%+**
Operating Margin:	**20%+**
Free Cash Flow:	**10%+**

Operating Guidelines

- Accelerating top-line growth and GaN adoption across all target end markets
- OpEx for continued development of best-in-class products and IP portfolio
- CAPEX investment for increased scale

Highlights and Investment Rationale

Transphorm is a Pioneer and Leading Provider of GaN Power Conversion Devices

- **Disruptive Technology** – GaN Enables Next Generation Power Conversion Solutions
- **Commercially Ramping** – Technology and Product Development Completed
- **Large Markets Across Diverse Applications** – Power Adapters, Auto EVs, Data Centers…
- **Best-In-Class GaN Technology** and Industry's **Strongest IP Position (>1,000 patents)**
- Validation From **Blue Chip Partners,** Customers & **the U.S. Department of Defense (Navy)**
- Talented Team Led by **World-Renowned GaN Experts (>300 Years of GaN Expertise)**

Thank You