Navitas

ELECTRIFY OUR WORLD™

Corporate Update Nov. ’24

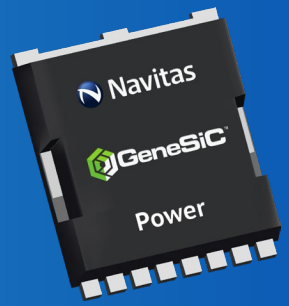
ir@navitassemi.com

GaNFast™

World’s First GaN Power IC

GeneSiC™

World’s Only Trench-Assisted Planar SiC Technology



DATA CENTER

MOBILE

ELECTRIC VEHICLES

Rev 11-19-24 for Roth New York

10 YEARS

2014
- Navitas Founded

2016
- World's First GaN Power IC Prototype
- "Breaking Speed Limits with GaN Power ICs" APEC Keynote

2018
- Mass Production of GaNFast Chips

2019
- VDD Tech Acquisition Digital Isolators
- Best Practices Award

2021
- $1B+ IPO
- World's First 20-Year Warranty
- World's First GaN Sustainability Report
- World's First 100,000 tons CO_2 Saved

2022
- World's First Autonomous GaN Power IC
- GeneSiC Acquisition Leading-Edge SiC
- Fastest 75 Revenue Growth
- World's First Semi Company

2023
- World's First 100,000,000 GaN Shipments
- Elevation Acquisition High-speed Silicon Controllers
- Fastest 75 Revenue Growth
- World's Most Protected GaN Power
- Top 50 Most Successful Small Company
- HQ Opening Torrance, CA

2024
- 10 YEARS

The Fossil Fuel Challenge

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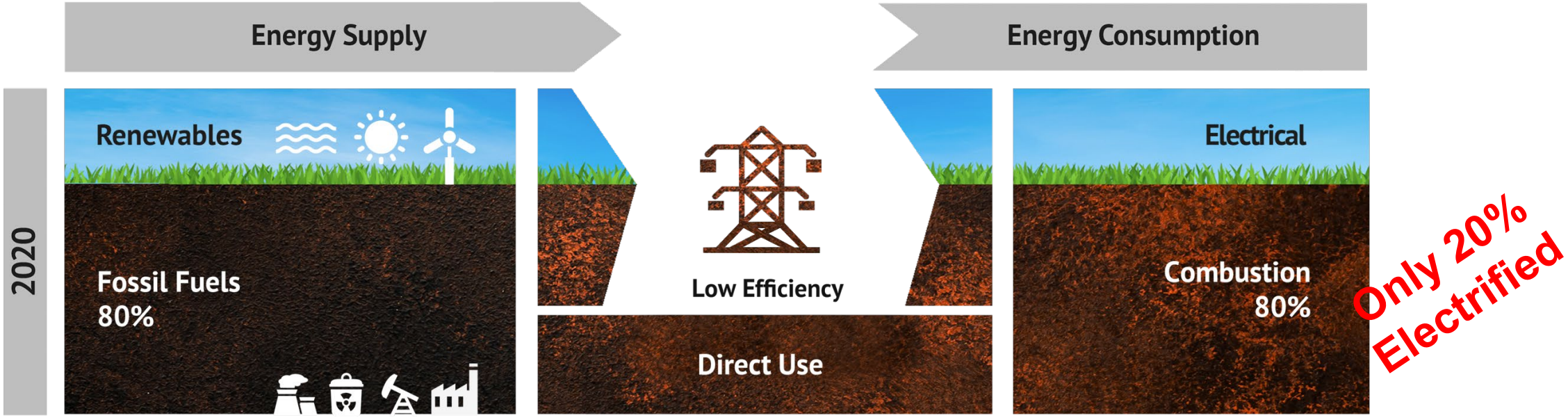

The Electrified World

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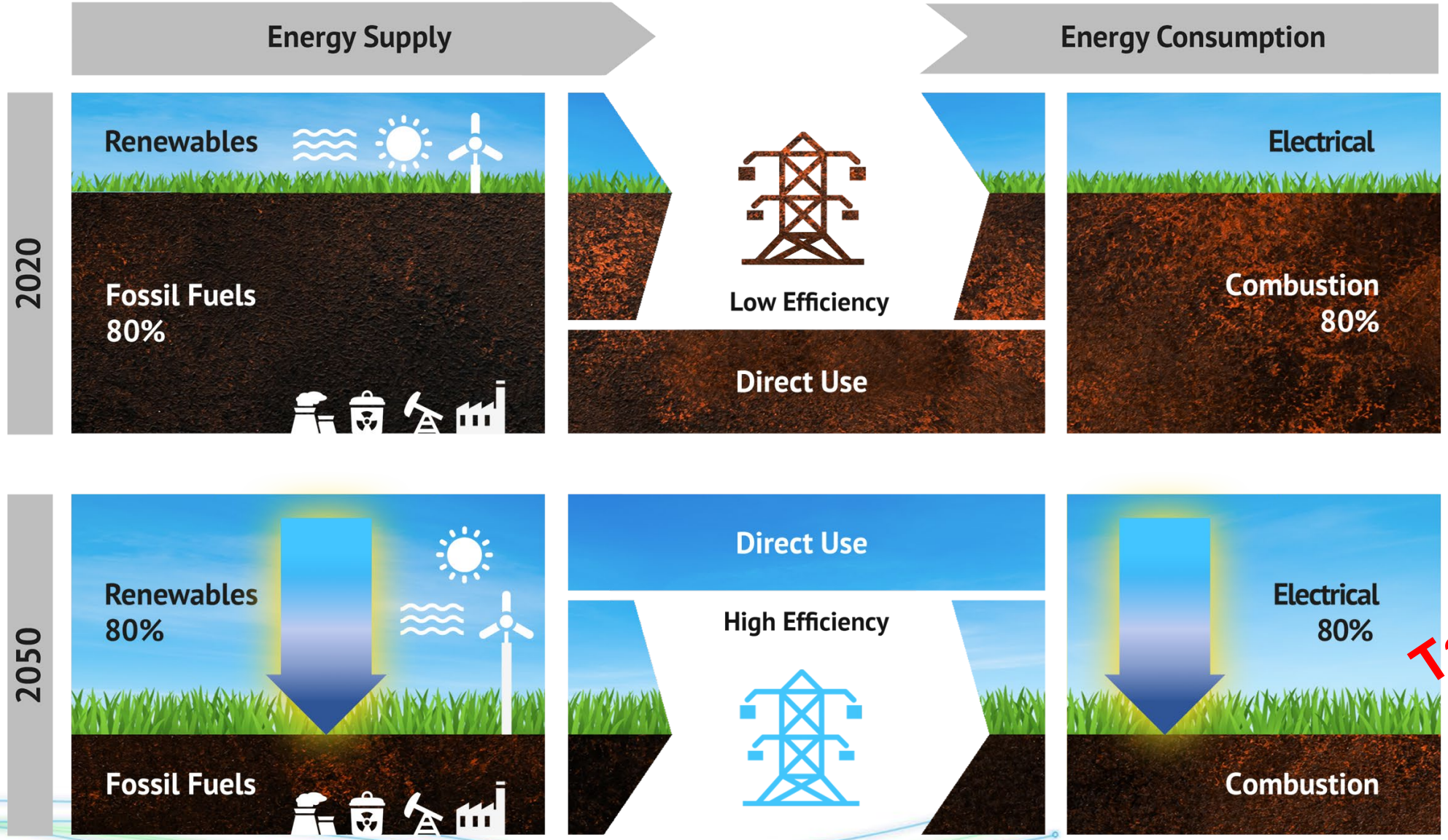

Pure-Play, Next-Gen Power Semiconductors

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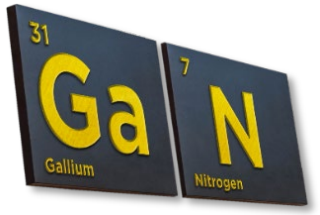
GaNFast™



GeneSiC™

Up to 20x	Up to 3x	Up to 40%	Up to 3x	Up to 3x	Up to 25%
Faster Switching(1)	Smaller & Lighter(1)	Energy Savings(1)	Higher Power Density(1)	Faster Charging(1)	Lower System Cost(2)

GaN and SiC replacing Si in next-generation power applications

1. Statistical data is based on Navitas estimates of GaN-based systems compared to Si-based estimates in the 2024-2025 timeframe. Based on Navitas measurements of select GaN-based mobile wall chargers compared to Si-based chargers with similar output power, incl. 2019 study of 65W fast chargers, 2022 customer statement re 2.7 kW data center AC-DC
2. Navitas estimates based on customer feedback as the expected system cost saving overtime as of April 2023

$22B+ GaN & SiC 'Pure-Play' Opportunity[1]

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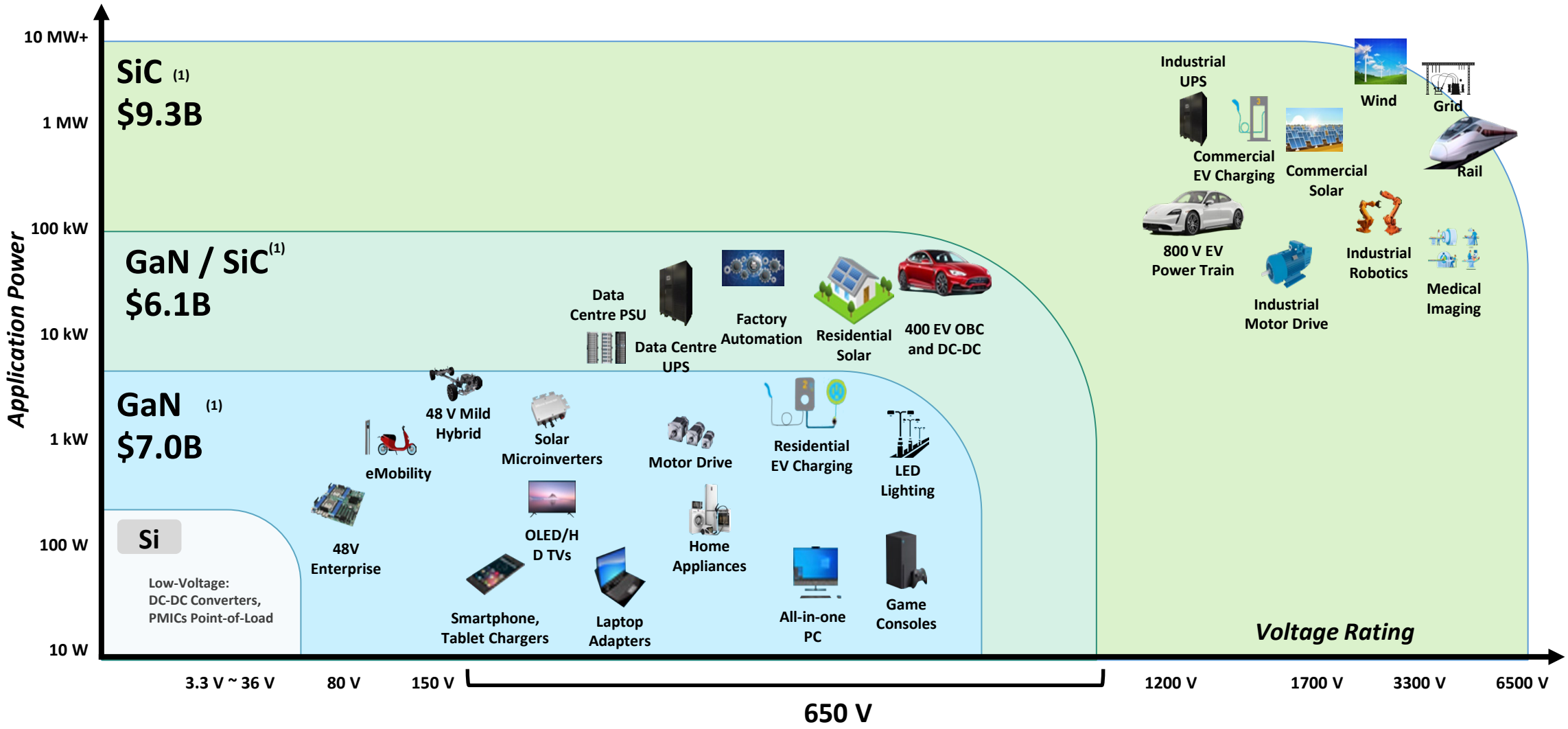

Notes: Axes not to scale

1. Based on internal company estimates, Navitas believes that the potential market opportunity in 2026 is $22B+ for GaN and SiC, replacing certain of the silicon market share
2. Per Yole Developpment, 2024-2024 estimated market revenue

Sustainable, Competitive Advantage

Key Patents in GaN and SiC

300+ Patents issued or pending encompassing key aspects of GaN power circuitry, analog and digital integration, and SiC device design and fabrication(1)

Proprietary Design & Process

Led by pioneers in SiC and GaN, the Navitas team has a proprietary in-house Process Design Kit (PDK)

Rate of Innovation

Rapid design process and rate of commercialization create customer value and outpace competitors

New generation released every ~18 months

(1) Issued or pending

Faster Time-to-Market: Unique System Design Centers

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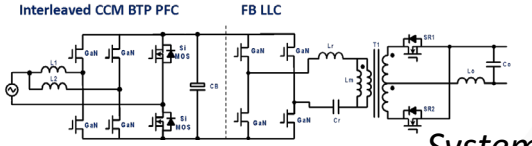
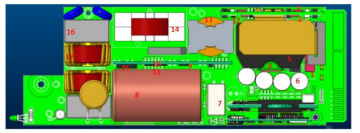
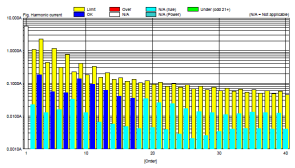
Power System *Platform* Design

High Frequency, High Efficiency, High Density, High Integration

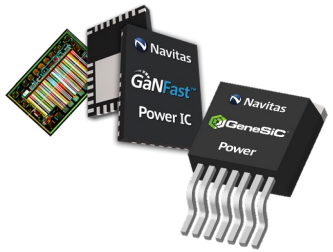






System design evaluation & feedback

Electrical, thermal, mechanical, EMI, BOM cost, manufacturing and yields

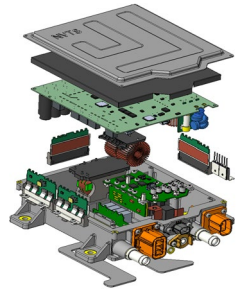


Semi Design

Application-specific GaN / SiC

Customer Co-Development

Joint Labs / Joint Development

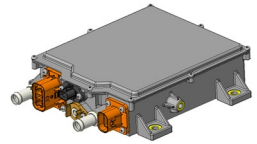


System know-how drives innovation

Close customer co-op for qualification, certifications, production readiness

Mass Production

Fast time to market



GaNFast Integration Drives Performance

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Discrete Silicon

- Old
- Slow
- Low efficiency

Discrete GaN

- Vulnerable input
- Difficult to use
- Sensitive to layout

GaNFast™

- ✓ Robust input
- ✓ Easy to use
- ✓ Proven reliability

GaNSense™

GaNFast plus:

- ✓ Autonomous protection
- ✓ Loss-less current sensing
- ✓ EMI reduction/speed control

GaNSense Half-Bridge

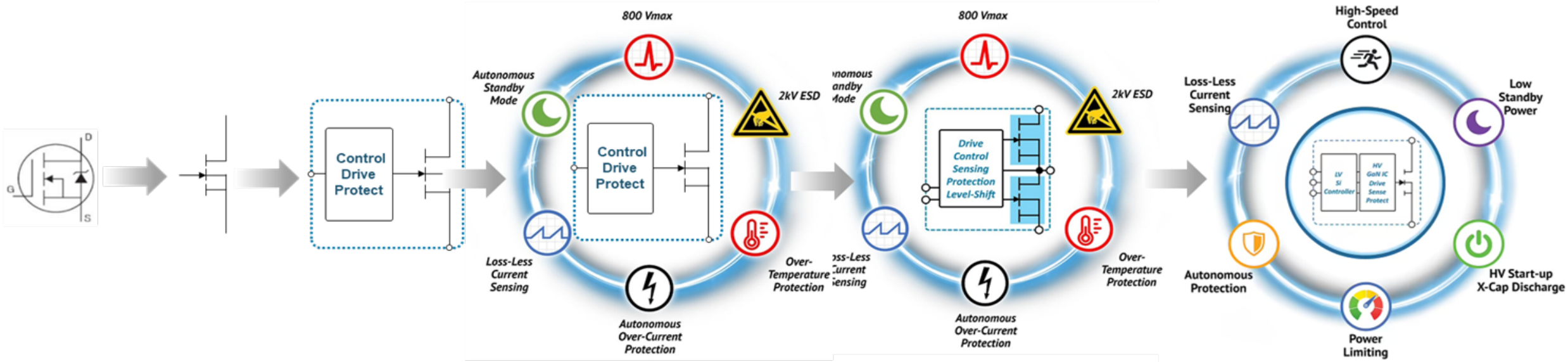
GaNSense plus:

- ✓ Integrated HS, LS, level-shifted drive
- ✓ Bootstrap power for high side
- ✓ Complete protection

GaNSense Control

GaNSense plus:

- ✓ Integrated system controller
- ✓ Fewest components
- ✓ Highest density and efficiency



Reliability

Efficiency

Integration

Speed/Power Density

GaNSafe™

The World's Safest GaN

High-Speed
Short-Circuit Protection

2 kV ESD

800 V
max

Control
Drive
Protect

Easy EMI

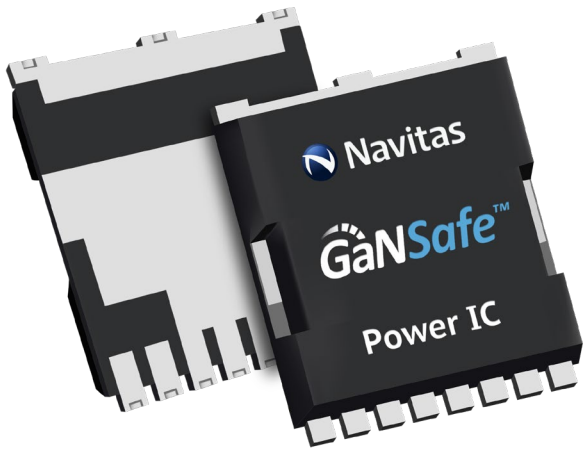
Robust
Operation

Easy Cooling

Navitas

Industry's Only 20-Year Warranty

Navitas

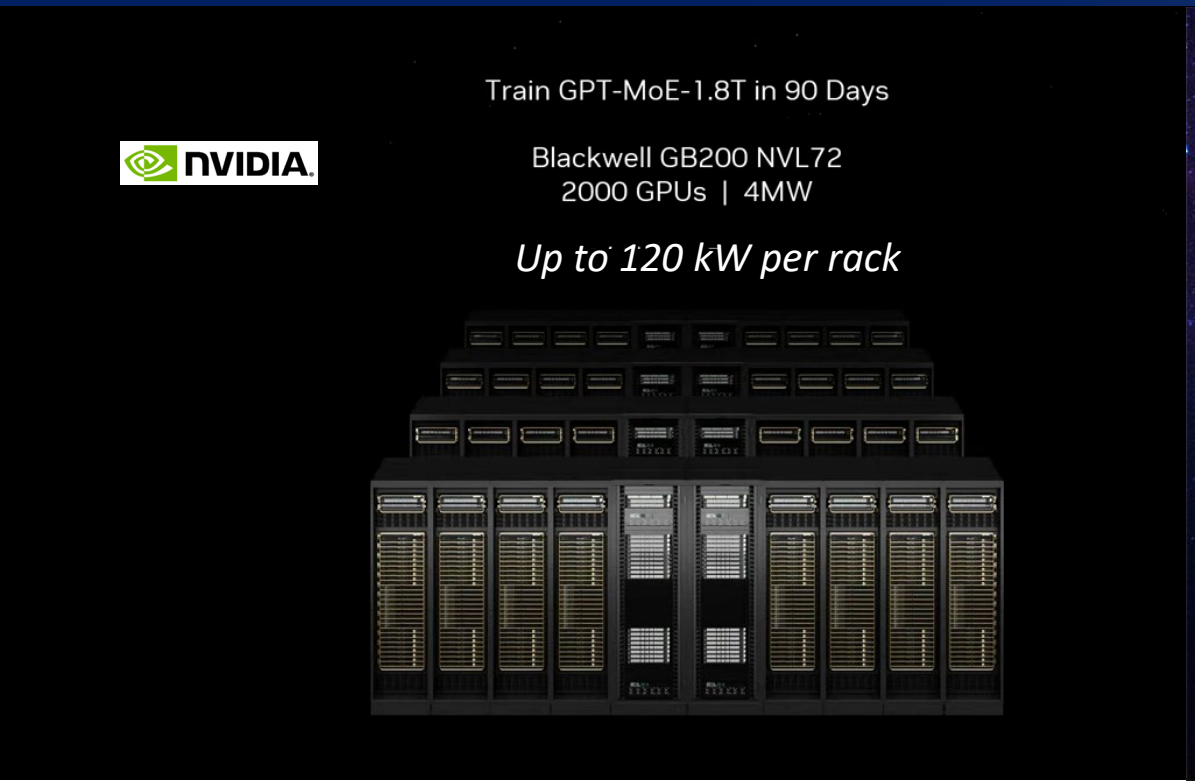


TOLL

TOLT

AI: Navitas Delivers The Power

Navitas



- Power roadmap for ***Hopper-Blackwell-Rubin*** AI GPUs
- Power per-rack increasing from 30 to 480 kW
- Revenue ramping from Q3 2024
- 60 active customer developments

End Customer Targets

aws Azure Tencent Alibaba Google Baidu 百度

AI: Navitas Delivers Innovation & Performance

Navitas

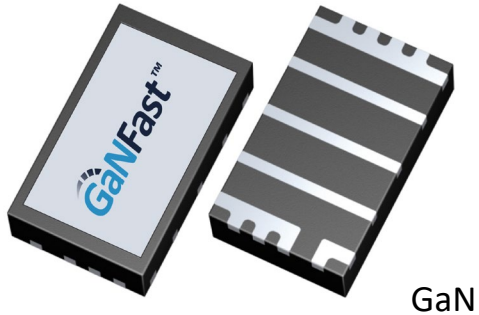
- Intelliweave PFC digital control (patented)
  - Precision current-sharing, ultra-fast dynamic response and minimal phase error
  - Up to 30% energy savings (PFC): highest efficiency across load range, with 99.3% peak PFC efficiency
- Benchmark 8.5 kW, 3-phase AC-54V OCP & ORv3-compliant power
  - Optimized Gen-3 ‘Fast’ SiC and GaNSafe™, 98% peak efficiency

OCP = Open Compute Project, ORv3 = Open Rack v3 industry standards

New MV *GaNFast™* expands TAM by $1B+

Navitas

- Medium-voltage (MV) GaNFast™ range
  - 80-200V for 48V applications, 100s to 1,000s Watts
  - Samples expected Q4'24Q1'25, mass production target Q4'25
- Dual-sourcing arrangement with Infineon Technologies
  - Reciprocal access (cross-licensing) to GaN patent portfolios without concern for litigation
  - Trade secrets, 'know-how', innovations, 'go-to-market' and pricing strategies are independent
  - Expected to accelerate GaN adoption in mainstream applications by delivering reliable, advanced technology via reliable, parallel supply chains



GaNFast 80-200V
Dual-cool
3x5 mm QFN

- New applications ($1B+ per year additional available market)
  - AI data centers
    - Secondary-side rectification in AC-48V 'silver-box' power supplies
    - Primary-side input to 48V-to-1.xV down-conversion to GPU/CPU/memory on the server board, via VRM/VRD

  - EV
    - eScooters, eBikes, short-range city cars, etc.
    - Passenger and commercial upgrades (from 12/24V to 48V)

  - AI-robotics
    - Land-based (vehicular, humanoid), and drones

GeneSiC™

Patented Trench-Assisted Planar SiC MOSFETs

Navitas

Up to 6.5 kV

Largest range of SiC FETs & diodes
(650 V to 6.5 kV)

Fast Switching

Highest efficiency hard-switch, soft-switch
(Lowest E_{ON}, E_{OFF}, E_{ZVS} losses)

Cool Operation

Lowest $R_{DS(ON)}$ at high temperature
(25% lower than industry typical)

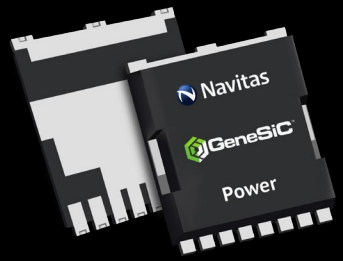
Cool.
Fast.
Rugged.

100%-Tested Robust Avalanche

Highest published capability to handle excess energy in fault condition

Long Short-Circuit Withstand Time

World-class survival duration in fault condition



High-Power Paralleling

Matching currents
(Stable V_{TH})

Based on Navitas testing of 1200V SiC MOSFETs vs. competitor products

Best of Both: Trench-Assisted Planar Gate

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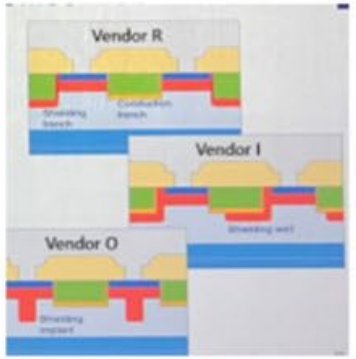
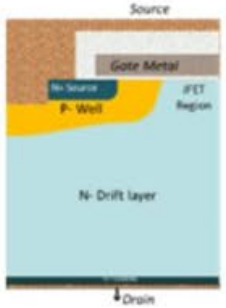
	SiC Planar	SiC Trench	GeneSiC
			
Manufacturability	• Repeatable • High Yield • Low Cost	• Complex manufacturing • Lower Yield • High Cost	• Repeatable • High Yield • Low Cost
Performance	• Higher On-Resistance/area Slow switching • High On-Resistance increase with temp	• Lower On-Resistance / area than Planar • Faster switching • Very High On-Resistance increase with temp	• Lowest On-Resistance / area • Fastest switching • Lowest On-Resistance increase with temp
Reliability	• Rugged due to Planar gate	• Lower gate reliability due to defective trench sidewall in SiC	• Rugged due to Planar gate • Highest 100% tested avalanche ratings

High-Speed, Cool Running: AI Enabling

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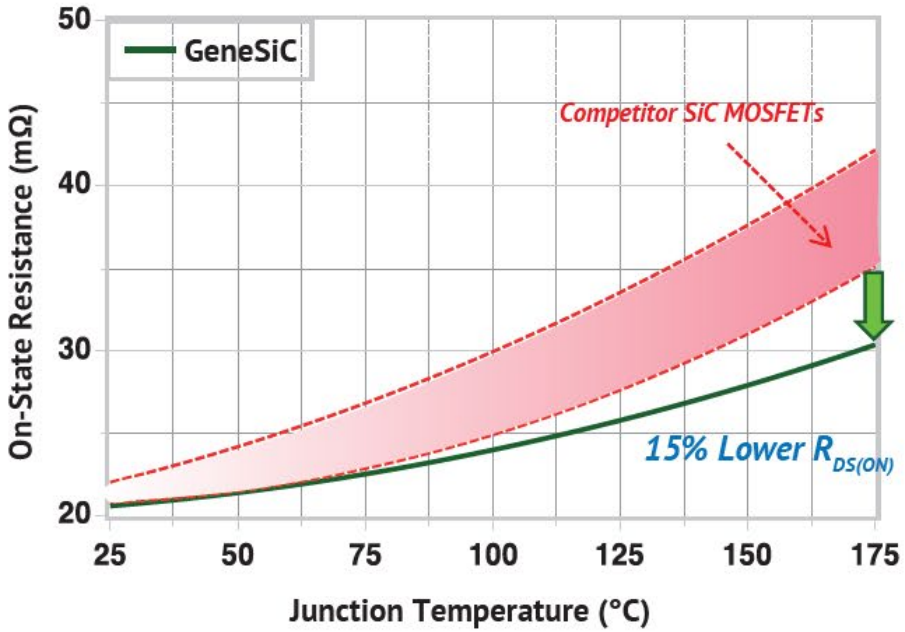
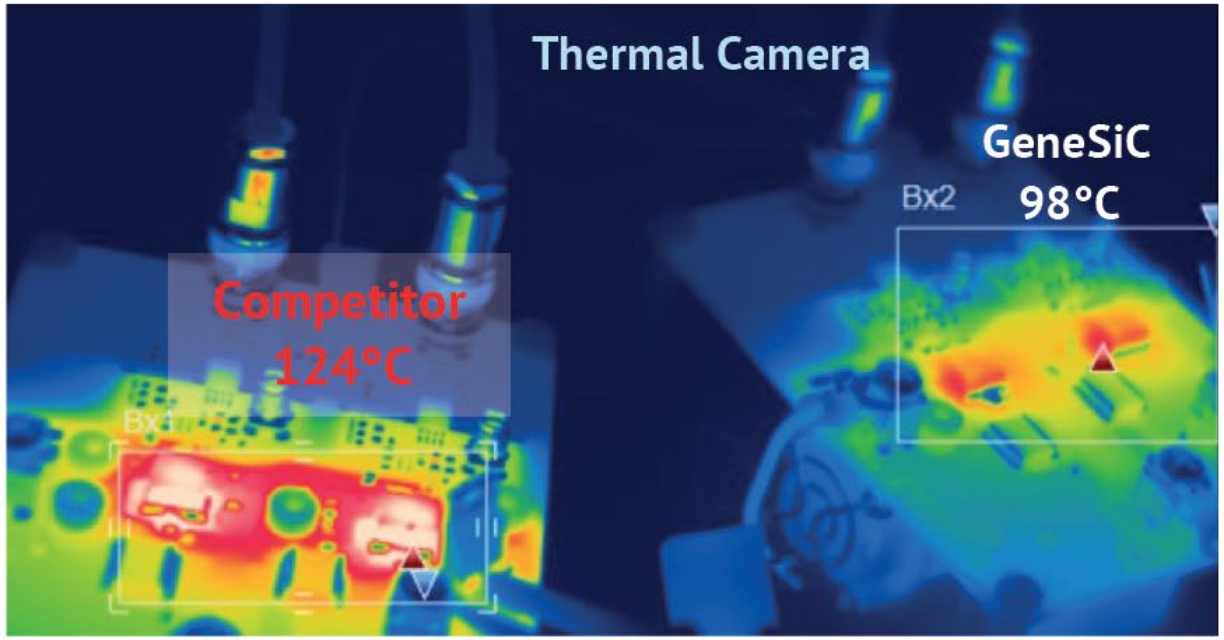
$R_{DS(ON)}$ vs T_j



In-Circuit, High-Speed Test



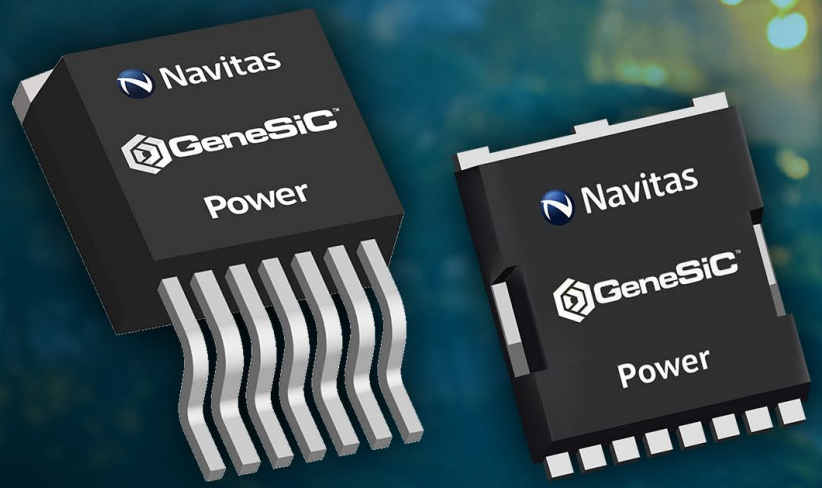
- **GeneSiC vs. competitor SiC FET**
  - » 1200 V, 20 mΩ, TO-247-4L
  - » Higher drain current
  - » Lower conduction losses
  - » Cooler operation

- **GeneSiC vs. competitor SiC FET**
  - » 1200 V, 40 mΩ, D2pak in half-bridge
  - » 150 kHz switching = ~10x faster than Si IGBT
  - » 30% lower FET loss vs. other SiC
  - » 25°C cooler operation = 3x longer lifetime

Gen-3 'Fast' SiC MOSFETs

Automotive Qualified

AEC-Q101



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EV: Customer Pipeline +25% to 200+ Projects

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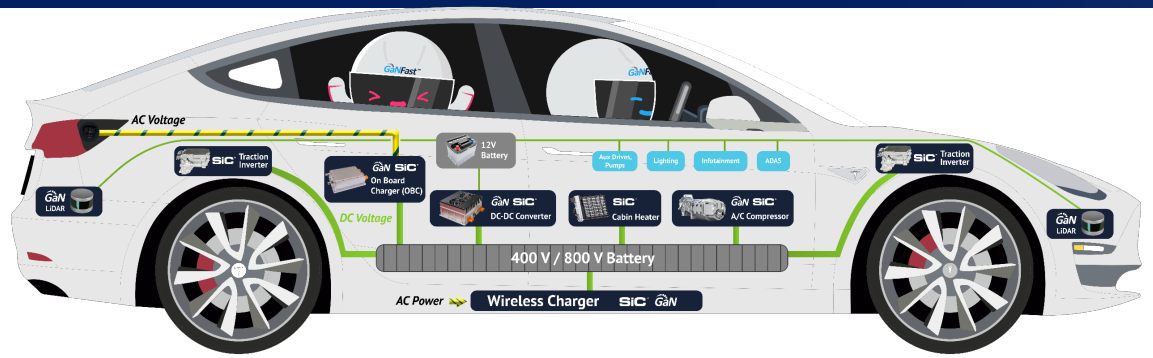
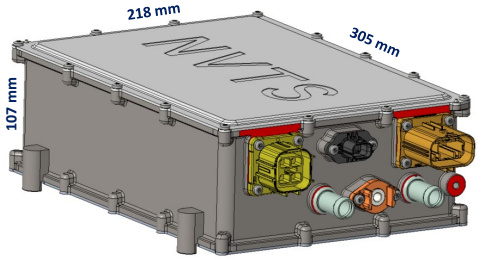
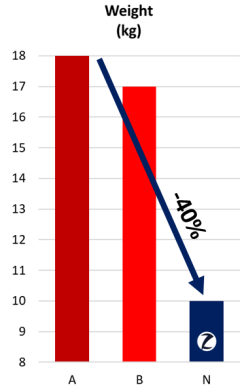
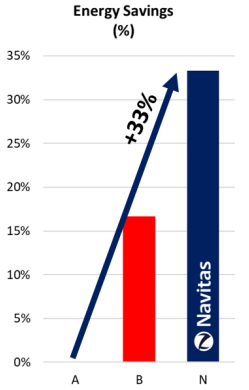
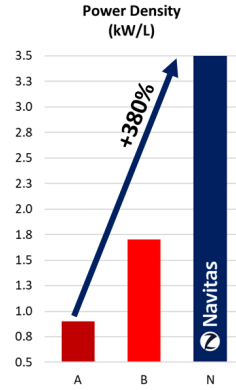


22 kW, OBC 3-in-1









- 400V and 800V battery solutions; GaN + SiC
- Up to 3x smaller, 40% lighter, 30% energy savings
- 200+ customer projects in development
- 6 new design wins in Q3

BYD · AccoPower · BorgWarner · DG MATRIX Clean Secure Reliable Power · ZEEKR · vitesco TECHNOLOGIES · HYUNDAI MOBIS · SHINRY 欧锐科技 · chargepoint · ABB · SK signet · INOVANCE Automotive · LG-MAGNA · BRUSA · HYUNDAI KIA

GaNSlim™

Simple
Fast
Integrated

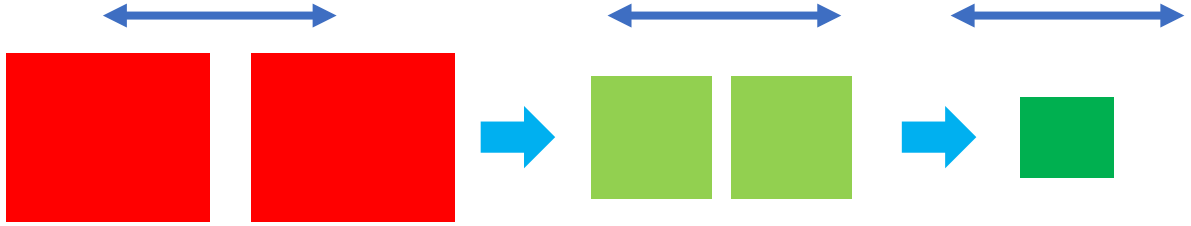
Navitas
Electrify Our World™

Mobile: GaN Goes Mainstream

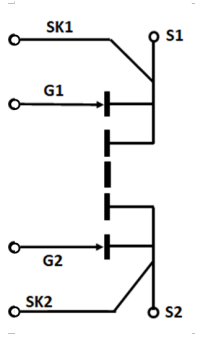
- Xiaomi, OPPO “30% GaN in 2024”; Samsung expand from Galaxy S to Galaxy A, +Fold, + Flip
- Three new Tier-1 OEM wins start ramp Q2 ‘25
- GaNSlim with 26 new wins in Q3

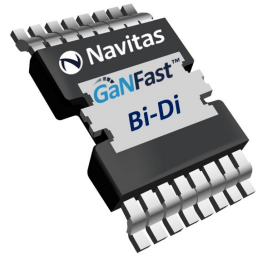
World's First Bi-Directional GaN Power IC

Navitas

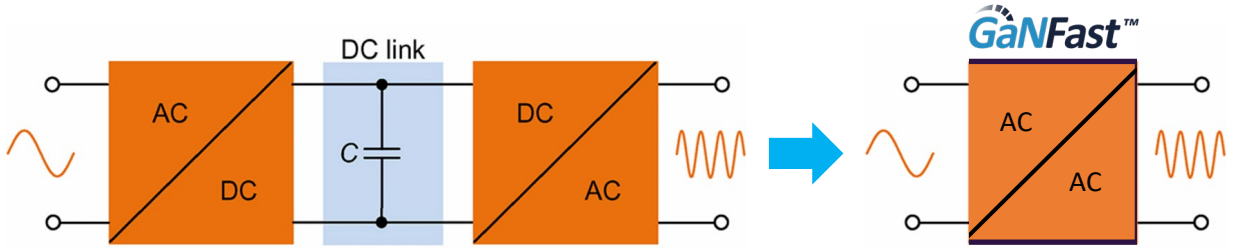


Up to 9x smaller die





- For bi-directional operation, traditional power semis need many, large devices
- Proprietary, 'bi-directional' GaNFast power ICs:
  - Smallest, most efficient, lowest system cost solution
  - Optimized for fast switching, AC voltage applications
  - Enable 'previously-impractical' topologies
  - Integrated circuitry ensures reliability
- Applications:
  - High-power industrial, solar, energy storage, motor drives
- Topologies:
  - Heric Inverter, Vienna Converter, T-type NPC Inverter, Matrix AC/AC Converter



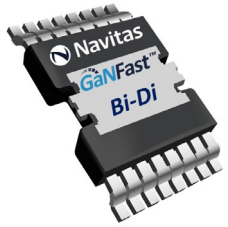
Direct power conversion with bi-directional GaNFast means simple, small, efficient, low system-cost AC-AC conversion

GaNFast™ ***Vienna Rectifier***

Solar / Storage: First GaN Micro-inverters

Navitas

- 100+ customer projects in development
  - GaN for residential micro-inverters
  - SiC for higher-power, higher-voltage string inverters
  - SiC for energy storage systems
- Majority of top-10 string inverter OEMs engaged or in production
- Major US GaN micro-inverter mid ‘25
- 10 new customers wins in Q3 ‘24
- Best-in-class SiC, GaN, new bi-directional GaN
- Smaller, lighter, lower system cost



APsystems ALTENERGY POWER

ENPHASE

solaredge

GROWATT

Q CELLS a Hanwha company

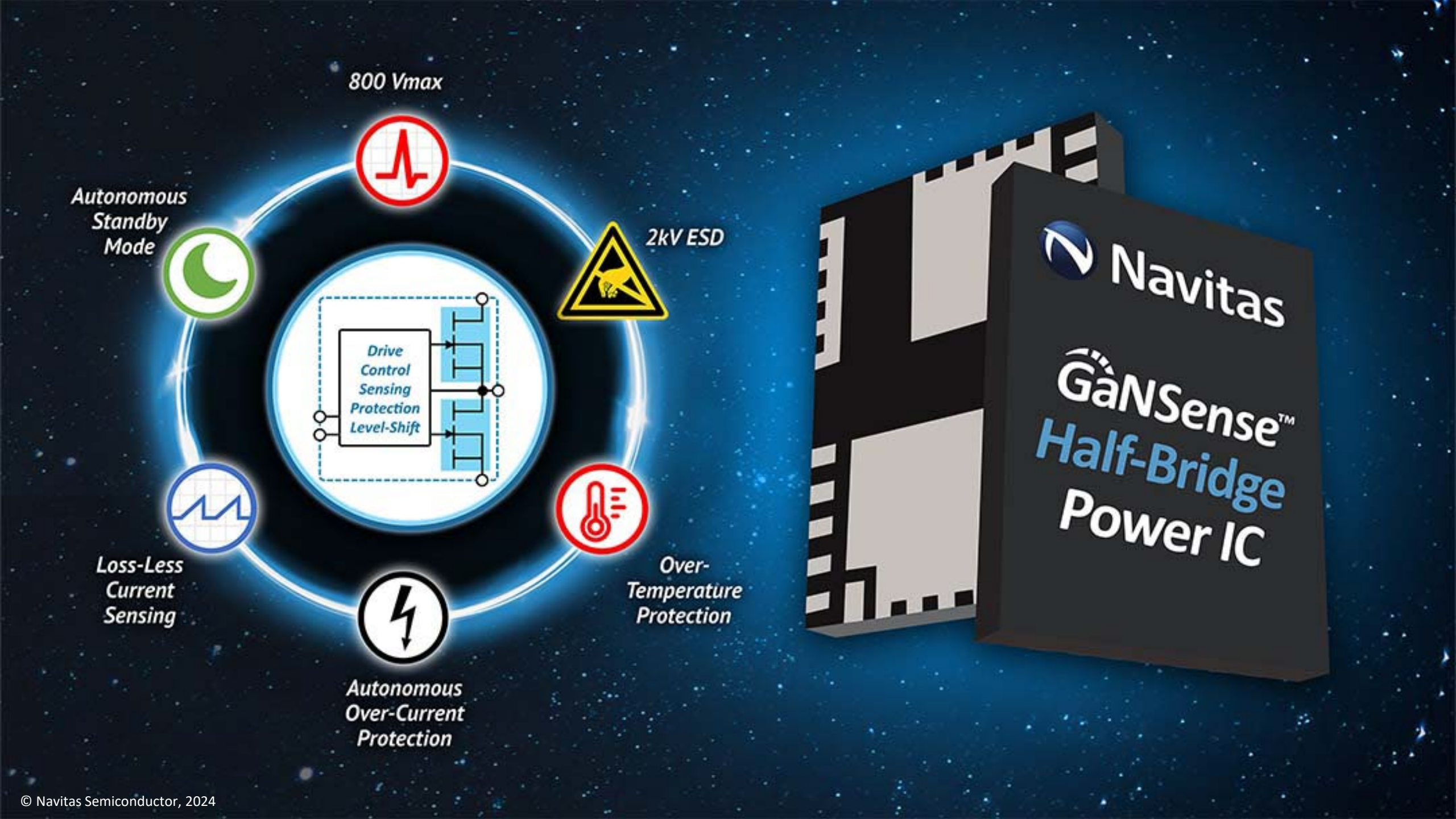
steca A KATEK Brand

CHINT

GOODWE

CATL

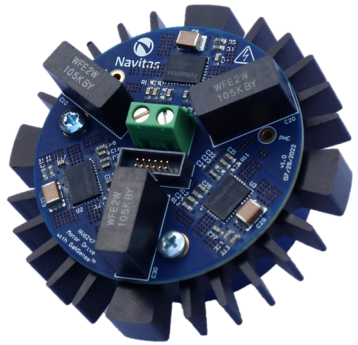
SOFAR SOLAR



Appliance & Industrial: Growing Pipeline for 2025-26 Ramp

- Diverse GaN & SiC portfolio for a diverse market
- Diverse customers, regions, applications:
  - 7 / top 10 appliance leaders
  - Motors, pumps, air-con, heat pumps, compressors, chargers, fans, conveyors, robots, auxiliary supplies…
- 25 new projects wins expected to ramp production in 2025/26

- 300 W, 3-phase motor drive
- 3x NV6247 GaNSense Half-bridges
- 100 kHz, high density, strong protection
- Peak temp only **52°C, with *No Heatsink***



Accelerating Sustainability

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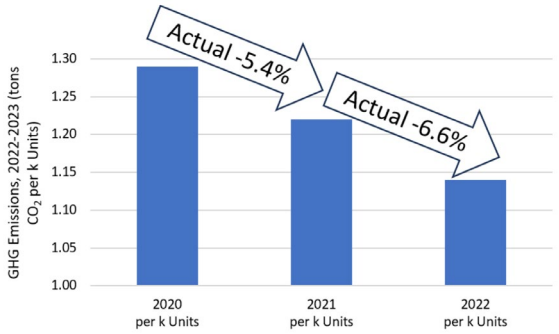
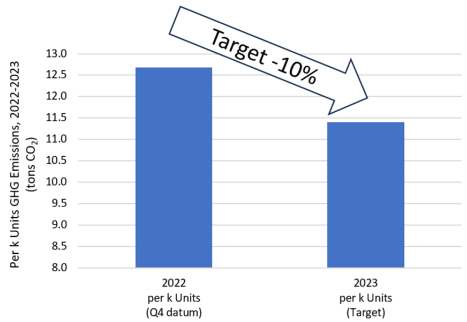
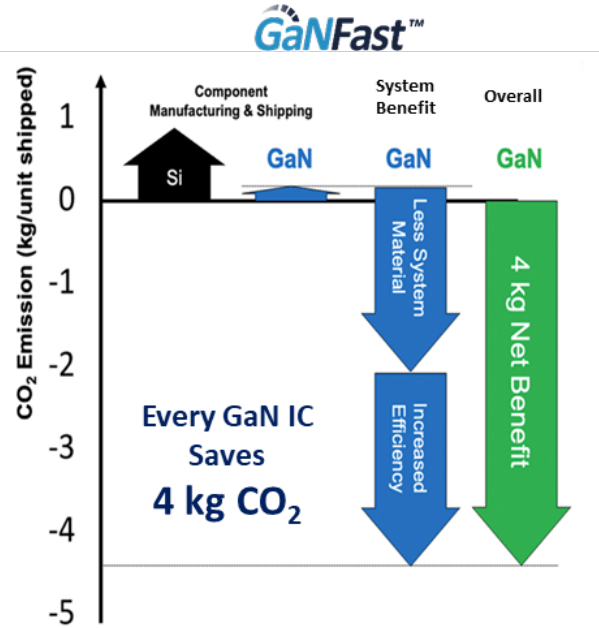
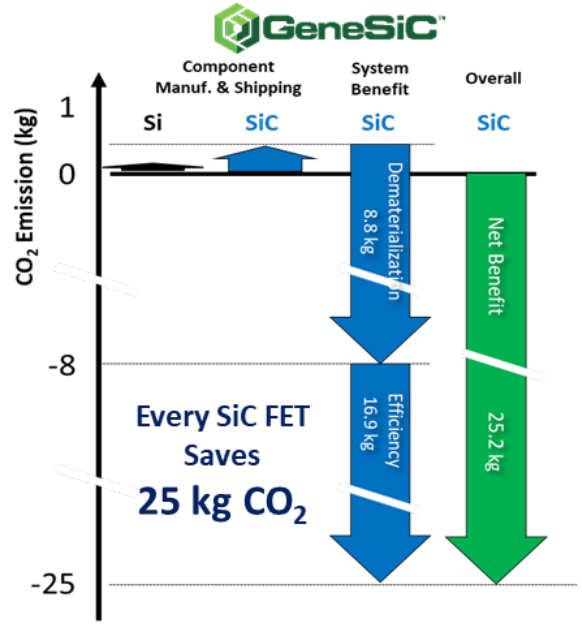
Navitas Corporate GHG Scope 2, 3 (GaN only)



Navitas Corporate GHG Scope 2, 3 (GaN + SiC)







Feb '22 World's first GaN Sustainability Report

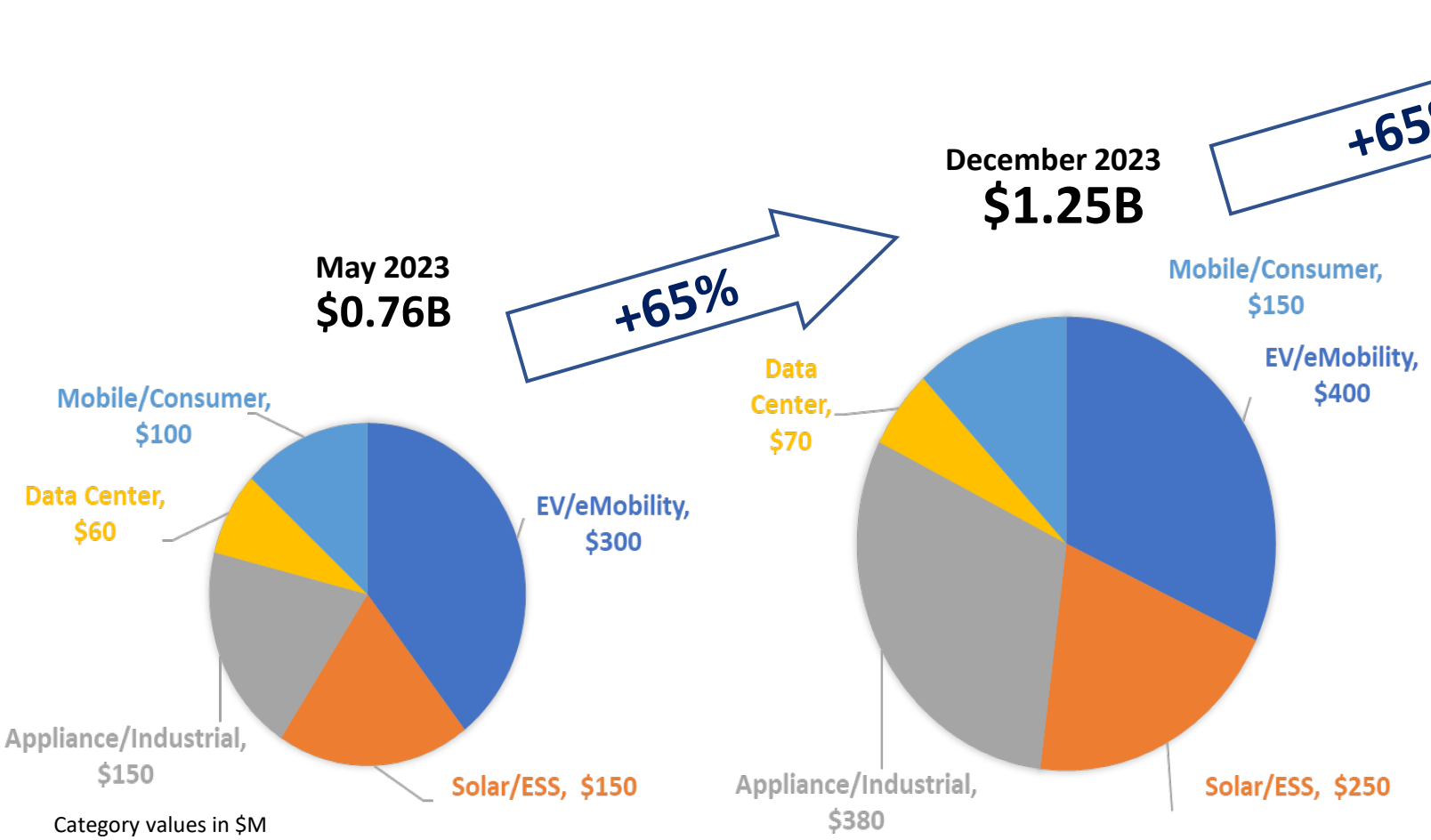
May '22 World's first semiconductor Company certified CarbonNeutral®

Aug '22 First 100,000 tons CO_2 saved [Nov'23 over 200,000 tons]

Oct '22 Recognized as Industry-Leading Sustainability Company

Nov '23 Consolidated GaN + SiC Sustainability Report

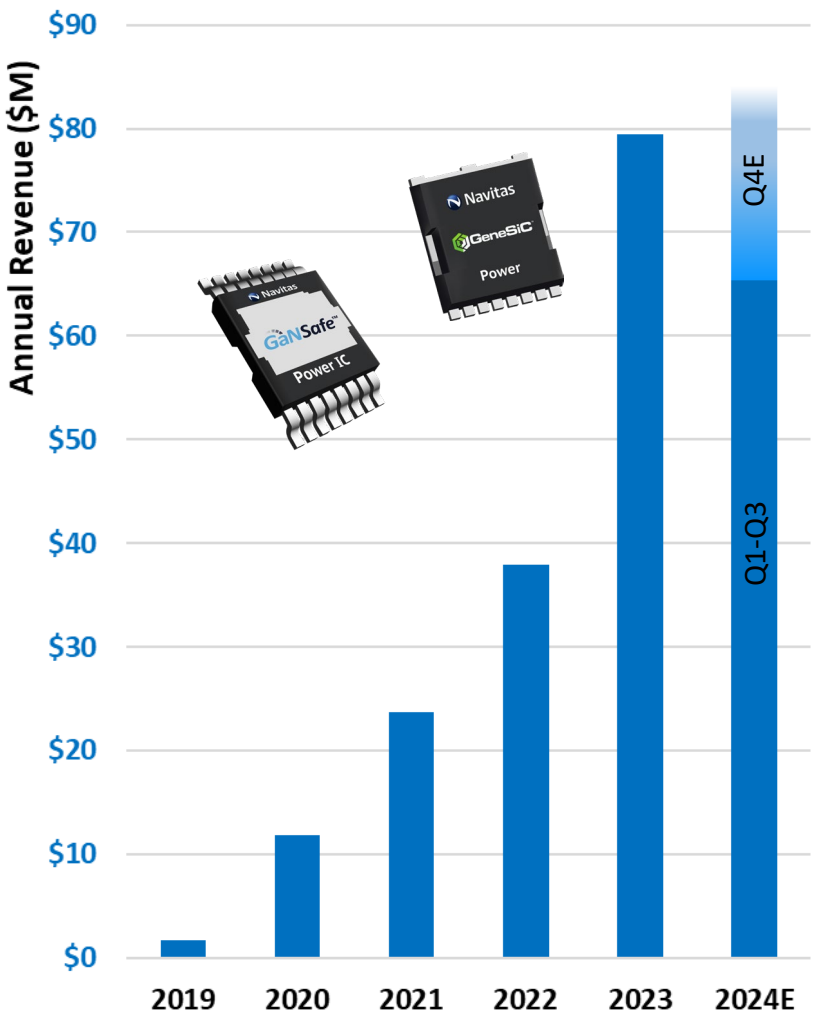
Customer Pipeline[1] Over $1.6B



- **Data Center** (GaNSafe, Gen-3 'Fast SiC)
  - 60+ customer projects in development
  - New LV-GaN platform to ramp Q4'25
- **EV** (GaNSafe, Gen-3 'Fast SiC)
  - 50%+ pipeline growth vs. $400M in Dec'24
- **Mobile/Consumer** (GaNSlim, GaNSense)
  - GaNSlim: strong acceptance, 26 design wins in Q3'24, $20M+ added to pipeline
- **Appliance/Industrial** (GaNSense H-B, GaNSafe, Gen-3 'Fast' SiC)
  - Half-bridge pipeline $100M+
  - GaNSafe/Gen-3 SiC pipeline $150M+
  - Significant pipeline growth vs $380M in Dec'24
- **Solar/ESS** (GaN, Bi-di GaN, SiC)
  - Major OEM micro-inverter mid '25
  - 10 design wins in Q3'25
  - Significant pipeline growth vs. $250M in Dec'24
  - Bi-directional GaN launch H1'25

(1) Committed production programs, lifetime revenue, verified technical fit, value proposition and high interest in Navitas solution. Existing mass-production wins excluded. Start dates 'near-term' per market, life-cycle per market, second sourcing accounted for as appropriate.

Navitas: Growing Faster than the Market



- Q3 2024 Financial Report *(November 5th, 2024)*
  - Q3'24 Revenue $21.7M (up 22% YTD vs '23)
  - Cash ~$100M, no debt
  - ~187M shares outstanding
  - Customer pipeline >>$1.6B
  - Good position to scale to long-term growth and profitability

"Our leading-edge technology is fueling robust customer pipeline growth in each end market, led by AI data centers with multiple customers ramping production with our GaN *and* SiC-based power systems."

- Gene Sheridan, CEO and co-founder.

Navitas

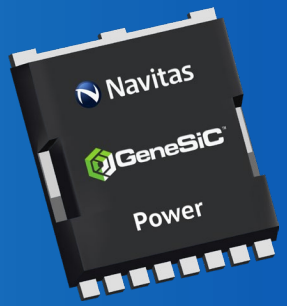
ELECTRIFY OUR WORLD™

GaNFast™

World's First GaN Power IC

GeneSiC™

World's Only Trench-Assisted Planar SiC Technology



DATA CENTER

MOBILE

ELECTRIC VEHICLES