Ideal Power

Nasdaq: IPWR

Global Leader in Ultra-Low-Loss Bidirectional Power Semiconductors

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Investor Presentation

March 2026

Safe Harbor

All statements in this presentation that are not based on historical fact are "forward looking statements." While management has based any forward-looking statements included in this presentation on its current expectations, the information on which such expectations were based may change.

These forward-looking statements rely on a number of assumptions concerning future events and are subject to a number of risks, uncertainties and other factors, many of which are outside of our control, that could cause actual results to materially differ from such statements.

Such risks, uncertainties, and other factors include, but are not limited to, whether the patents for our technology provide adequate protection and whether we can be successful in maintaining, enforcing and defending our patents, whether demand for our products, which we believe are disruptive, will develop and whether we can compete successfully with other manufacturers and suppliers of power semiconductor products, both now and in the future, as new products are developed and marketed.

Furthermore, we operate in a highly competitive and rapidly changing environment where new and unanticipated risks may arise. Accordingly, investors should not place any reliance on forward looking statements as a prediction of actual results. We disclaim any intention to, and undertake no obligation to, update or revise forward looking statements.

Ideal Power Management Team

~100 Years Combined Semiconductor Industry Experience

David Somo
Chief Executive Officer

PRECISELEY Microtechnology Corp. onsemi AMD

Tim Burns
Chief Financial Officer

Ideal Power Rainmaker systems. Deloitte.

Mark Russell
Chief Commercial Officer

SEMTECH infineon Microsemi

Clay Beltran
Chief Operating Officer

iDEAL semiconductor SEMTECH DIODES INCORPORATED

IPWR

Nasdaq Listed

Headquarters:	**Austin, TX**
Shares Outstanding[1]:	**12,089,389**
Options/Warrants[1]:	**3,724,995**
Cash Balance[2]:	**$6.1 Million**
Est. Net Proceeds[3]:	**$12.6 Million**
Debt Balance[2]:	**$0.0 Million**
Year-End:	**December 31**

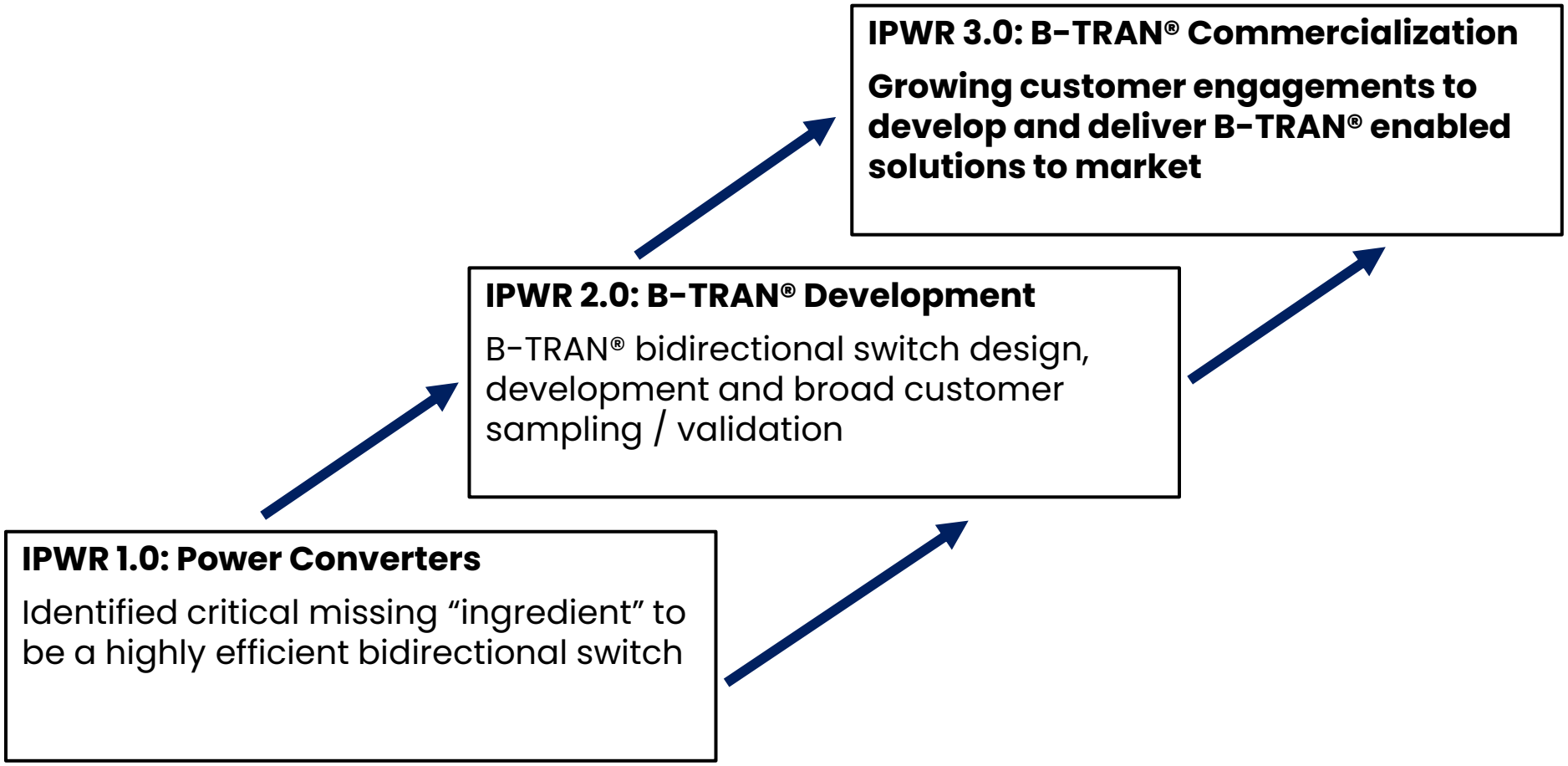
1) As of February 25, 2026
2) As of December 31, 2025
3) Public offering / private placement closed on February 25, 2026

Investment Highlights

Technology & Products	• B-TRAN® is a disruptive bidirectional power semiconductor switch with compelling advantages vs conventional solutions • 100 patents issued and 82 patents pending
Markets	• Addressing high growth secular power applications in AI data centers, smart grid, energy storage systems and EVs • ~$3.7B SAM growing to ~$14.2B in 2030*
Customers	• Increasing customer momentum with nearly $200M of opportunities in the sales funnel and growing • In discussions with potential strategic investors
Operating Model	• Asset light, fabless business model leveraging existing silicon processing infrastructure • Strong leverage in operating model with low capital intensity

*Sources: Mordor Intelligence, Grand View Research, Transparency MR, IEA Global EV Outlook 2024, Markets and Markets, company estimates.

IPWR 3.0 – Powering the Future of Sustainable Energy



B-TRAN® is a key enabling technology for secular high growth bidirectional power applications

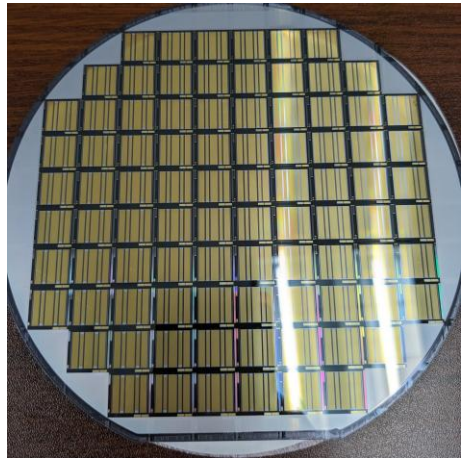
What is B-TRAN®?

B-TRAN® is a proprietary semiconductor power switch

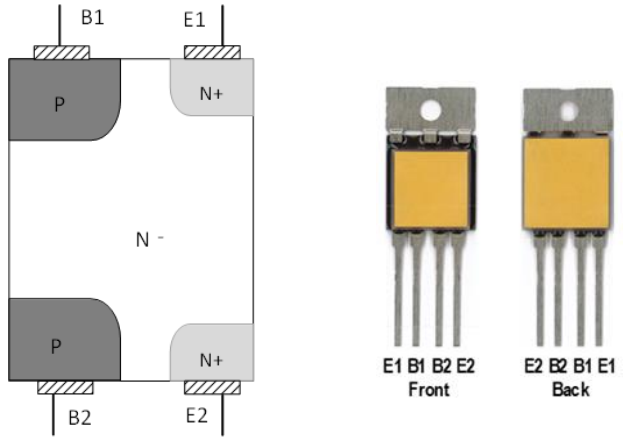
- New, disruptive design (architecture)
- Fabrication on both sides of wafers
- Leverage same B-TRAN® die across many applications

B-TRAN® architecture has 3 compelling advantages

- Bidirectional switching supports new intelligent power distribution and control systems
- Lower conduction losses result in improved power efficiency that translates to lower end-user costs
- Enables smaller, lower cost system solutions



B-TRAN© prototype silicon die

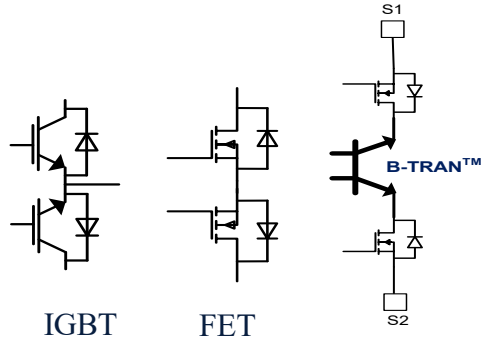


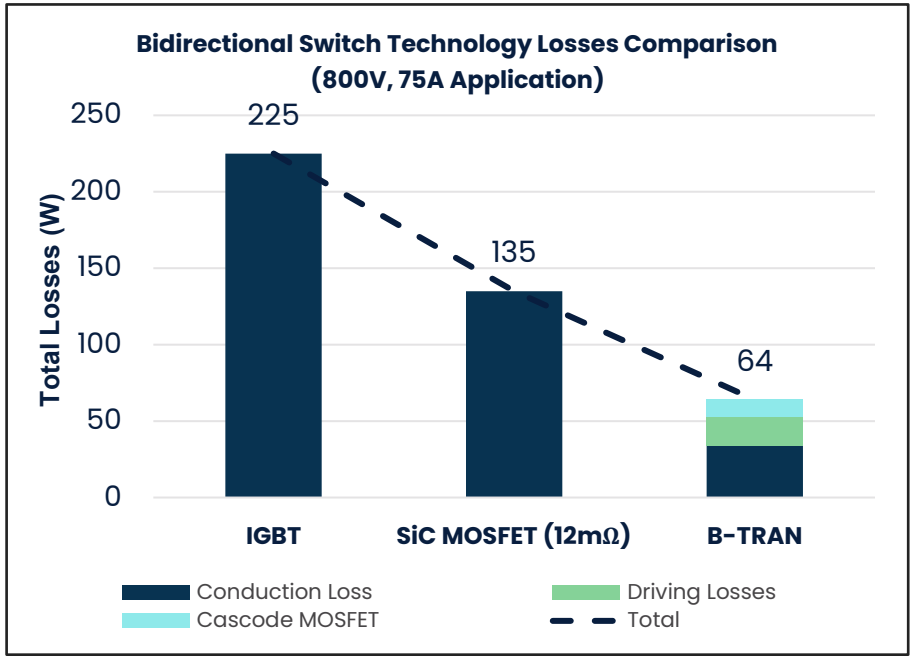
B-TRAN® architecture in silicon with symmetrical structure

B-TRAN® uniquely addresses bidirectional power switching requirements in large secular growth applications

B-TRAN® Competitive Advantage in Bidirectional Power

- B-TRAN® replaces 4 conventional power devices in a bidirectional switch
- B-TRAN® can reduce total losses by more than 2x compared to a SiC MOSFET solution while reducing the system cost by up to 4x





Source: Product data sheets and Company estimates / calculations.

Evaluation Metric	B-TRAN®	SiC MOSFET	SiC JFET	IGBT
Steady-state conduction loss	Excellent	Good	Very good	Fair
Intrinsic bidirectional blocking and conduction	Yes	No	No	No
Device count for bidirectional operation	1	4	4	≥4
Gate-drive and control complexity	Moderate	Moderate	Moderate	Low
Short circuit protection	Excellent	Good	Good	Good
Packaging and thermal simplicity	Good	Moderate	Moderate	Moderate
System-level semiconductor cost	Low	Moderate	High	Low

Source: Company review of product data sheets and publicly available pricing data.

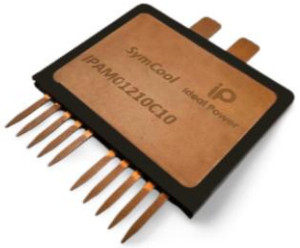
Commercial Products + Patent Estate

B-TRAN® Discrete

- TO-264 packaged device rated at 1200V/75A
- Single die with double-sided cooling package
- Tested up to 150A

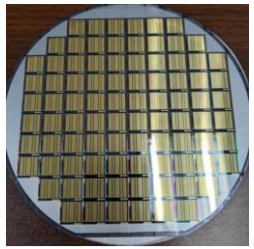
SymCool®

- Multi-die module rated at 1200V/200A
- Simplifies system design where multiple B-TRANs are used
- Tested up to 430A



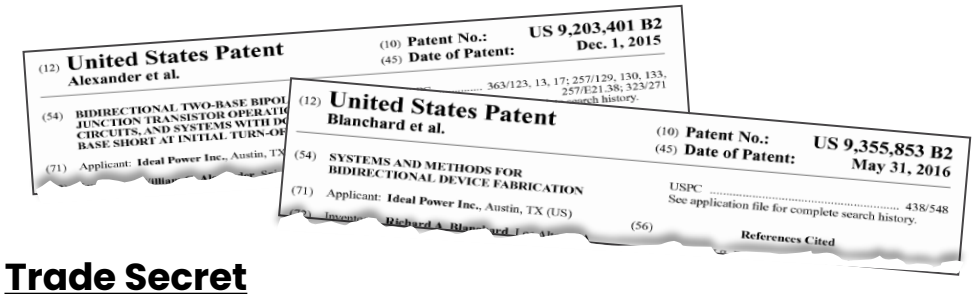
B-TRAN® Die

- Known Good Die (KGD)
- Designed for power module makers and OEM custom packaging
- Rated at 1200V/75A, tested up to 150A



Patent Coverage

- B-TRAN® device architecture and packaging
- Control methodologies and techniques
- Double-sided device manufacturing techniques
- Applications specific uses of B-TRAN®



Trade Secret

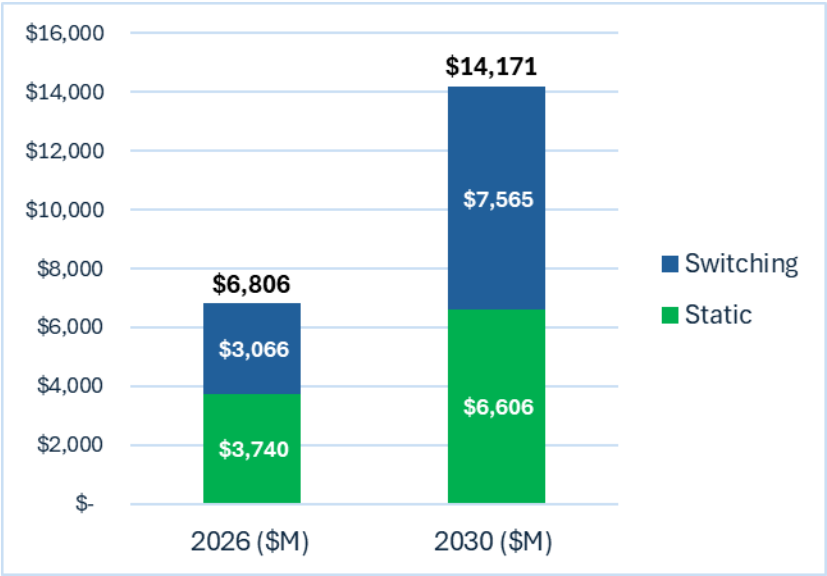
- Proprietary process flow for B-TRAN® fabrication

Region	Issued Patents	Pending Patents
United States	52	17
Foreign	48	65
TOTAL	**100**	**82**

B-TRAN® Market Opportunity

TAM/SAM Forecast by Application ($M)			
Application	**2026 ($M)**	**2030 ($M)**	**Type**
SSCB	$ 540	$ 756	Static
EV (Contactor + BDU)	$ 1,800	$ 2,430	Static
EV Charging	$ 600	$ 2,460	Static
Static Transfer Switch (STS)	$ 800	$ 960	Static
Solid-State Transformer (SST)	$ 114	$ 342	Switching
Inverters	$ 2,376	$ 6,518	Switching
Motor Drive	$ 577	$ 705	Switching
Total:	**$ 6,806**	**$ 14,171**	

BDU = Battery Disconnect Unit



- **Today** - Static (SAM) = Continuous conducting (non-switching) or low frequency on/off switching applications (<10KHz)
- **Future** - Switching (TAM) = Medium frequency on/off switching applications (10KHz ~ 30KHz)

$3.7B SAM for current products (static applications) growing to $14.2B SAM by 2030

Sources: Mordor Intelligence, Grand View Research, Transparency MR, IEA Global EV Outlook 2024, Markets and Markets, company estimates.

The AI Data Center Dilemma

The exploding AI data center buildout is resulting in surging energy demand, while antiquated power grids struggle to keep up with the growth

Global Consumption: Data centers worldwide are estimated to consume approximately **415 terawatt-hours (TWh)** of electricity as of 2024.

Energy Costs: Large-scale data center operators typically pay commercial or industrial rates, which average around **$0.08 per kilowatt-hour (kWh)**.

Estimated Savings Breakdown (2024-2025)

Scope	Total Annual Energy (TWh)	1% Savings (Dollars)	2% Savings (Dollars)
Global Data Centers	415 TWh	**$332 Million**	**$664 Million**
U.S. Data Centers	183 TWh	**$146 Million**	**$292 Million**

Key Considerations

Operational Impact: For a typical **100-megawatt (MW)** data center, a 1% reduction in power consumption equals roughly **8,760,000 kWh** in annual savings, worth approximately **$700,000** at a rate of $0.08/kWh.

Growth Projections: Global data center energy demand is projected to reach **945 TWh by 2030** due to AI expansion. At that level, a 1%–2% reduction would represent between **$750 million and $1.5 billion** in annual savings.

Source: IEA – International Energy Agency, US Energy Information Administration

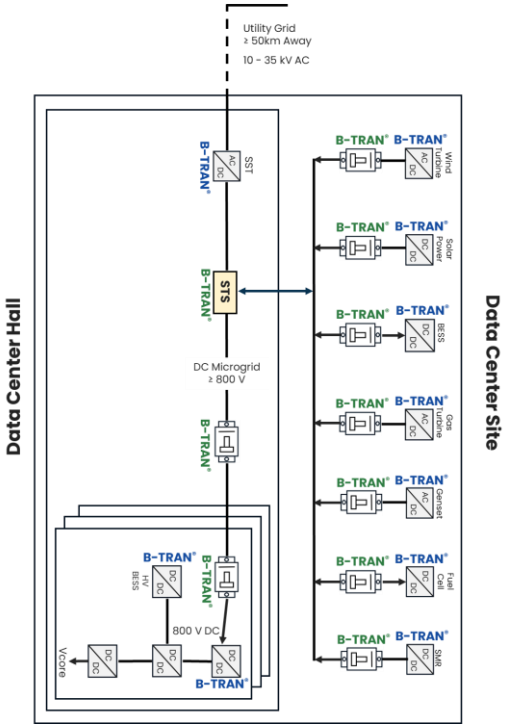
- A 1% to 2% improvement in data center power efficiency can generate substantial savings and reduce the strain on the grid
- B-TRAN® ultra-low conduction losses in SSCB, STS and BDU deliver improved power efficiency and contribute to a reduction in energy use and cost savings in data centers

B-TRAN® Solutions

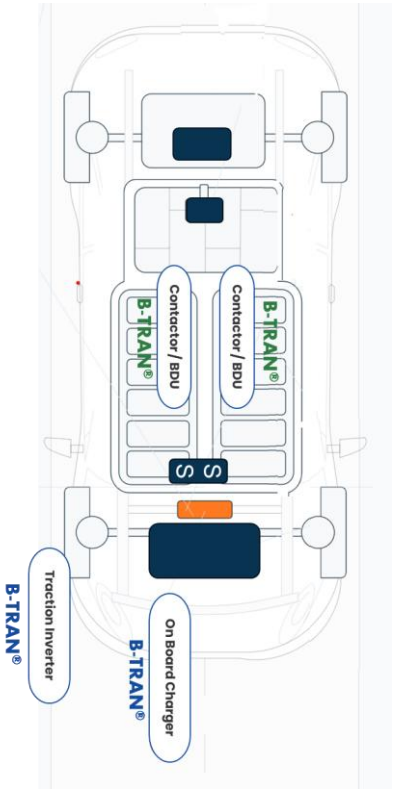
B-TRAN®: Today

B-TRAN®: Future

DATA CENTERS



ELECTRIC VEHICLES (EVs)



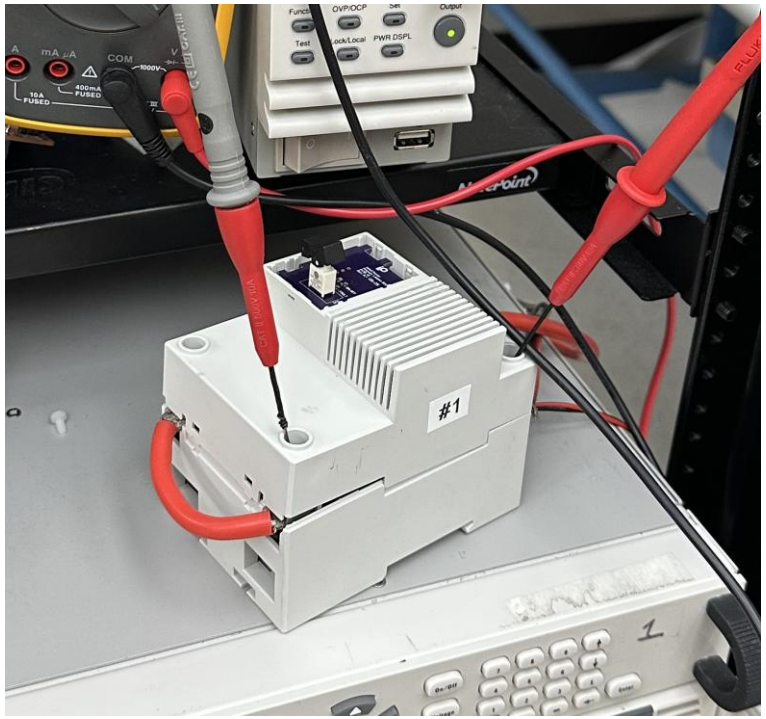
EV CHARGING

	DATA CENTERS		ELECTRIC VEHICLES (EVs)		EV CHARGING	
	2026	2030	2026	2030	2026	2030
B-TRAN $ PER UNIT	$180	$182	$90	$90	$50	$60
UNITS (M)	5 Racks	6 Racks	20 Cars	27 Cars	12 Chargers	41 Chargers
SAM ($M)	$900	$1,092	$1,800	$2,430	$600	$2,460

Case Study

- A market leader in the circuit breaker industry provided a SSCB implemented with SiC MOSFET technology. It was rated at 400V, 20A and operated only unidirectionally
- **Ideal Power modified the design using the same physical form factor with B-TRAN®. The result was a SSCB rated at up to 800V / 80A which operates bidirectionally**

IPWR SSCB Reference Design



Customer SSCB

Strategic Partnerships & Customer Validation

Stellantis Custom Development Program

- Received purchase order from Stellantis for custom development and packaged B-TRAN® devices targeting multiple EV applications
- Recently completed first of five deliverables under this PO
- Remaining deliverables expected to be completed by mid-2026
- Engaged with Stellantis on potential development program for EV contactors

2023 Stellantis Venture Awards Finalist

LAZZEN

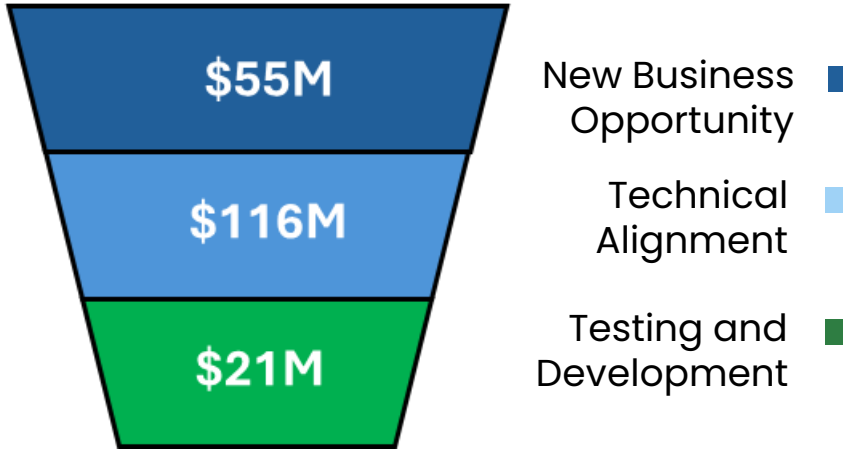
Lazzen Strategic Cooperation Agreement

- Lazzen is a leading circuit protection solutions provider and systems integrator in Asia
- Serving the data center, renewable energy, energy storage, EV and other industrial markets
- Lazzen and Ideal Power signed a multi-year strategic cooperation agreement for the design, development and worldwide sales of circuit protection solutions including SSCBs and BDU / EV Contactors featuring B-TRAN®

Customer Engagement & Product Development

- Sales funnel includes:
  - **New: Lazzen Strategic Collaboration**
  - **New: LOI with Asia power module maker**
  - Stellantis and another top 10 global automotive OEM
  - Three Forbes Global 500 diverse power management market leaders
  - Three global Tier 1 automotive suppliers
  - Four circuit protection market leaders
  - Three inverter / energy storage market leaders

$192M Sales Funnel and Growing



Represents 3-year cumulative potential revenue from start of production

- In addition to the sales funnel, ongoing discussions with multiple other global automotive OEMs, Tier 1 automotive suppliers and other data center and industrial customers for our target applications

Strategic Priorities

- Continue adding new opportunities to the sales funnel
- Drive initial revenue ramp by converting sales opportunities in the funnel to design-ins and custom development agreements
- Secure production order(s) with Lazzen for its first SSCB products and expand solutions to address additional markets and applications
- Complete remaining deliverables under Stellantis purchase order and continue to advance opportunities for EV contactors / BDUs with global automakers
- Continue to explore strategic investment opportunities with global market leaders

Ideal Power

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Global Leader in Ultra-Low-Loss
Bidirectional Power Semiconductors

Thank you.

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