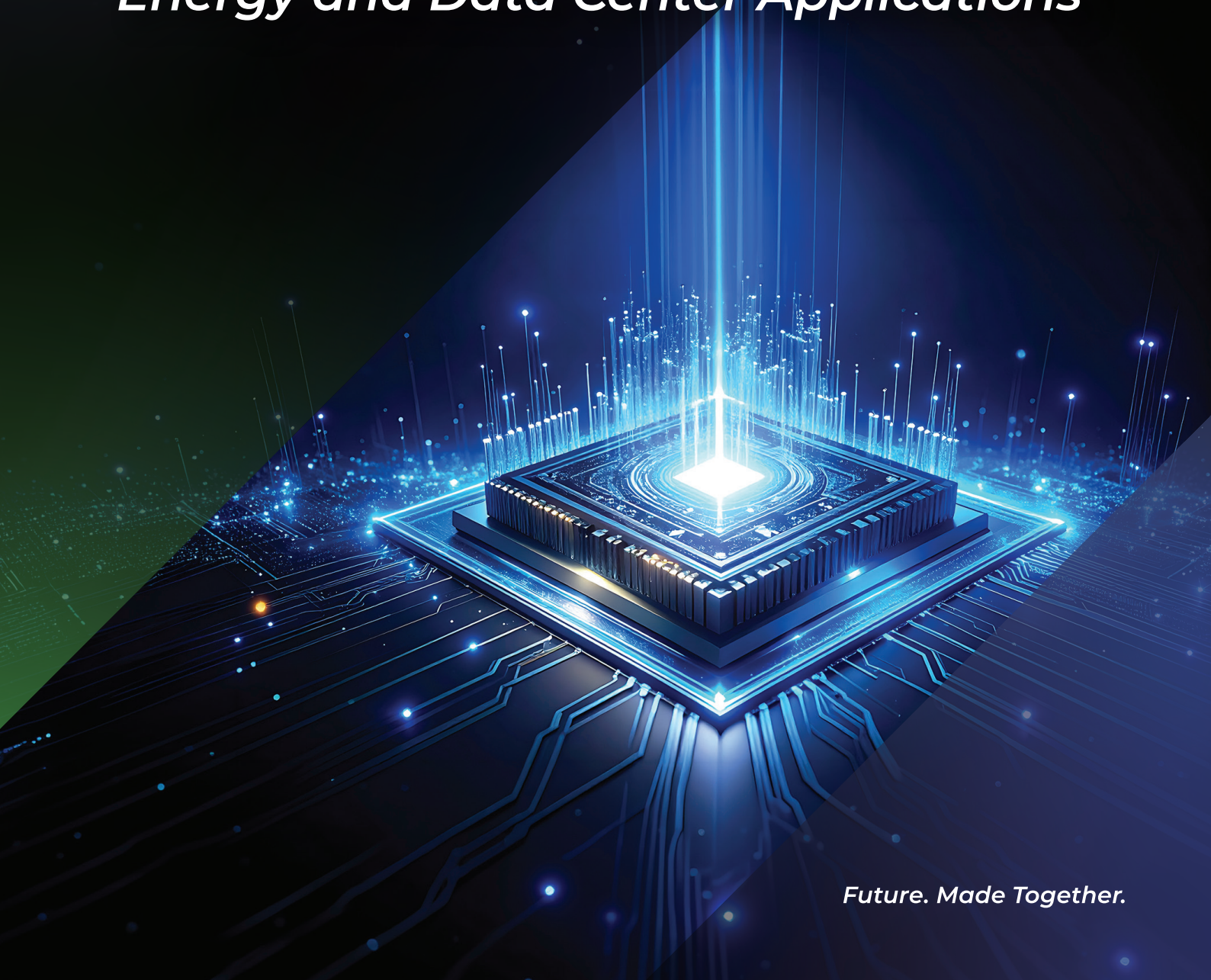
L&T SEMICONDUCTOR TECHNOLOGIES LIMITED

Comprehensive Power Module and Discrete Solutions for Industrial, Energy and Data Center Applications



Future. Made Together.

LTSCT at a Glance

L&T Semiconductor Technologies (LTSCT) combines world-class semiconductor innovation with advanced power module engineering to deliver next-generation solutions for intelligent electrification. Backed by Larsen & Toubro's engineering legacy and strengthened by Japanese power module design expertise, LTSCT develops high-performance semiconductor solutions that enable customers to build more efficient, reliable, and sustainable power systems.

Company Highlights

India's
Leading Fabless Semiconductor Product Company

400+
Engineering, Product Development and Technology Professionals

Global Engineering & Customer Support across **5 Strategic Locations**

90+
Patents and a Growing Intellectual Property Portfolio



LARSEN & TOUBRO

Backed by Larsen & Toubro one of India's most respected engineering and technology enterprises with over eight decades of innovation and execution excellence

Why Customers Choose LTSCT

» **Japanese Power Module Engineering Excellence**
Leveraging decades of Japanese expertise in power module design, advanced packaging, thermal optimization, and high-reliability manufacturing to deliver world-class industrial power solutions.

» **Complete Power Semiconductor Portfolio**
A comprehensive portfolio of IGBT, Silicon Carbide (SiC), Intelligent Power Modules (IPMs), Gate Drivers, Isolated Power Supplies, and future digital power solutions for industrial and energy applications.

» **System-Centric Engineering**
From semiconductor devices to complete power module solutions, LTSCT optimizes electrical, thermal, mechanical, and manufacturing performance to simplify system design and accelerate time-to-market.

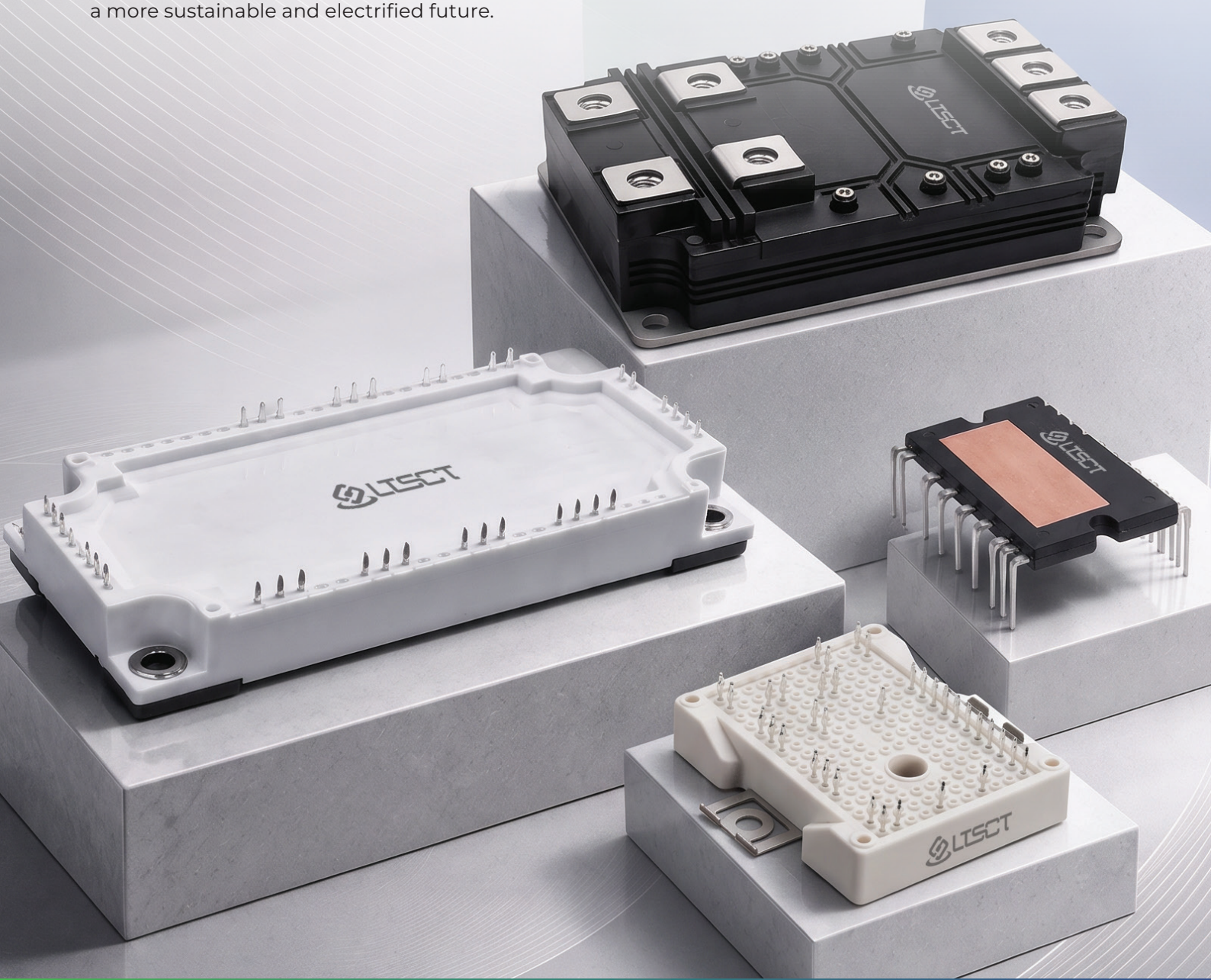
Building the Future of Intelligent Power Conversion

The rapid adoption of electrification, renewable energy, industrial automation, and AI-driven infrastructure is redefining the demands placed on power conversion systems. Designers today require solutions that deliver higher efficiency, increased power density, superior thermal performance, and uncompromising reliability, while reducing development time and overall system complexity.

L&T Semiconductor Technologies (LTSCT) is developing a comprehensive portfolio of IGBT, Silicon Carbide (SiC), and Intelligent Power Modules (IPMs) engineered to power the next generation of industrial and energy applications. Our solutions combine advanced semiconductor technologies, innovative packaging architectures, and optimized thermal and electrical performance to enable compact, efficient, and highly reliable power conversion systems.

Leveraging Japanese power module design expertise together with L&T's engineering excellence, LTSCT integrates deep capabilities in package architecture, thermal management, low-parasitic layout optimization, and high-reliability design. This holistic approach enables customers to accelerate product development while achieving superior efficiency, power density, and long-term operational reliability.

Whether powering industrial motor drives, renewable energy systems, energy storage, HVAC, robotics, AI data centers, EV charging infrastructure, or smart power distribution, LTSCT's power modules are designed to simplify system integration, maximize energy efficiency, and support the transition toward a more sustainable and electrified future.



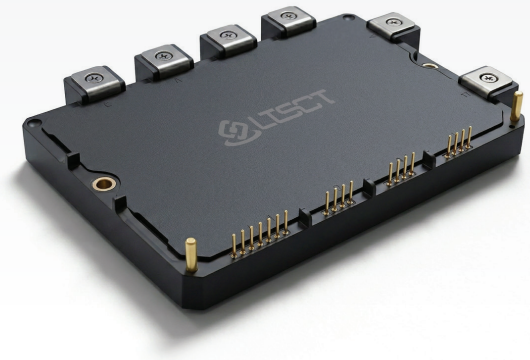
Product Portfolio

Insulated Gate Bipolar Transistor Modules (IGBTM)

High-performance switching modules designed for high-voltage and high-current industrial applications. Designed for high-current switching applications, LTSCT IGBT Modules combine high current capability with fast switching performance, enabling efficient and reliable power conversion across industrial applications.

Key Benefits

- High over-current capability
- Low conduction losses
- Superior thermal management
- Compact package
- Long operational life



Ideal for

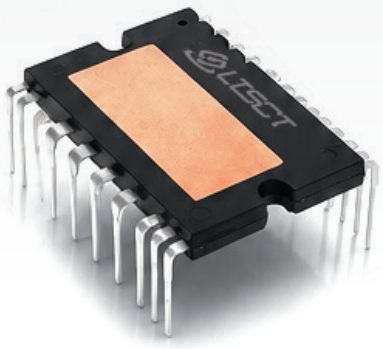
- Industrial Drives
- Motor Control
- Welding Equipment
- UPS
- Renewable Energy

Intelligent Power Modules (IPM)

Integrated modules combining IGBTs, gate drivers, protection circuitry, and temperature sensing into a compact package. LTSCT IPMs integrate power switches, gate drivers, protection functions, and temperature monitoring into a single compact solution, reducing component count while improving system reliability.

Integrated Features

- Built-in Gate Driver
- Overcurrent Protection
- Low Voltage Lockout
- Overtemperature Protection
- Temperature Sensing



Ideal for

- HVAC Systems
- Industrial Robots
- Compressors
- Machine Tools
- Servo Drives

Power Integrated Modules (PIM)

Highly integrated converter, inverter, and brake circuits in one module to simplify design and improve reliability. PIMs combine converter, inverter, and brake functions into one integrated package, simplifying assembly while reducing overall system size.

Advantages

- Reduced PCB complexity
- Lower assembly cost
- Compact design
- Improved thermal performance
- Enhanced reliability



Ideal for

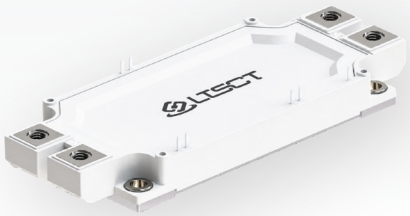
- Variable Frequency Drives
- Elevators
- Industrial Automation
- Motor Drives

Si IGBT Half-Bridge Power Module

Designed for demanding medium- and high-power applications requiring robust switching performance, low conduction losses, and high thermal reliability. Designed for high-power industrial applications where efficient switching, mechanical robustness, and thermal stability are critical.

Advantages

- Increased robustness
- High current capability
- Excellent thermal cycling
- Optimized package design
- Industrial-grade reliability



Ideal for

- Industrial Inverters
- Solar Power Systems
- UPS
- Motor Drives

SiC Half-Bridge Power Module (Top Module / Bottom Module)

Built on Silicon Carbide technology, these modules deliver higher efficiency and significantly lower switching losses than conventional silicon-based solutions, enabling more compact, lightweight, and energy-efficient power systems. Designed for high-power industrial applications where

Advantages

- Lower switching losses
- Higher power density
- Reduced parasitic inductance
- Better thermal performance
- Higher operating efficiency
- Compact form factor
- Integrated NTC temperature sensor
- 4 kVAC isolation
- RoHS compliant



Ideal for

- Renewable Energy
- UPS Systems
- Industrial Drives
- Factory Automation
- HVAC Equipment
- Motor Drives
- Robotics
- Battery Energy Storage Systems

From Engineering Excellence to Mass Production

At LTSCT, we are building next-generation semiconductor solutions that power smarter industries, energy systems, mobility platforms, and data centers. We have recently acquired Fujitsu General Electronics' power module design assets bringing decades of Japanese engineering expertise combined with agile innovation.

The result? A growing portfolio of **integrated power modules** already in mass production.

Type	Compatible	P/N	Product Status*	Category	Configuration	Voltage	Current
Type-A	P630 (Fuji)	LTI-6I075A120A1	MP	IPM	6 in 1	1200	75
Type-A	P630 (Fuji)	LTI-6I200A065D1	ES	IPM	6 in 1	650	200
Type-C	LargeDIP (Mitsubishi)	LTI-6I050C065C1	ES	IPM	6 in 1	650	50
Type-C	LargeDIP (Mitsubishi)	LTI-6I010C120C1	ES	IPM	6 in 1	1200	10
Type-C	LargeDIP (Mitsubishi)	LTI-6I025C120C1	MP	IPM	6 in 1	1200	23
Type-C	LargeDIP (Mitsubishi)	LTI-6I035C120C1	MP	IPM	6 in 1	1200	35
Type-C	LargeDIP (Mitsubishi)	LTI-6I050C120C1	ES	IPM	6 in 1	1200	50
Type-D	M274 (Fuji)	LTD-2P100D160T1	MP	Diode	2 in 1	1600	100
Type-E	P629 (Fuji)	LTI-6I020E065D1	MP	IPM	6 in 1	650	20

Type	Compatible	Part Number	Product Status*	Category	Configuration	Voltage	Current
Type-E	P629 (Fuji)	LTI-6I030E065D2	QS	IPM	6 in 1	650	30
Type-E	P629 (Fuji)	LTI-6I050E065D1	MP	IPM	6 in 1	650	50
Type-E	P629 (Fuji)	LTI-6I050E065D2	MP	IPM	6 in 1	650	50
Type-G	EconoPIM2	LTI-7P050G065V1	ES	PIM	7 in 1	650	50
Type-G	EconoPIM2	LTI-7P035G120V1	ES	PIM	7 in 1	1200	35
Type-G	EconoPIM2	LTI-7P050G120V1	ES	PIM	7 in 1	1200	50
Type-G	EconoPIM2	LTI-7P075G120V1	ES	PIM	7 in 1	1200	75
Type-G	EconoPIM2	LTI-6P035G125W1	MP	PIM	6 in 1	1250	35
Type-G	EconoPIM2	LTI-6P050G125W1	MP	PIM	6 in 1	1250	50
Type-H	P622 (Fuji)	LTI-6I050H120D1	ES	IPM	6 in 1	1200	50
Type L	SlimDIP (Mitsubishi)	PBI0015L06A1	ES: Aug, 26	IPM	6 in 1	650	15
MHP	Easy2B	PSP0075M12P1	ES: Nov, 26	PM	6 in 1	1200	75
SDP	Econodual	PBC1000S12H	ES: Nov, 26	PM	Half Bridge	1200	1000
RPP	Primepack	PSC1400R12TM & PSC1400R12BM	ES: Dec, 26	PM	Half Bridge	1200	1400

**MP: Mass Production, QS: Qualified Sample and ES: Engineering Sample*

SiC Discrete Products in TO and Top Side Cooling Package

Part Number	LTSCT Package**	Blocking Voltage	Current Rating @ 25°C	$R_{DS(on)}$ @25°C	Qualification
PSD172B06-AA1	TO-247-4 and PowerPak TSC	650 V	172 A	10 mΩ	Industrial
PSD110B06-AA1	TO-247-4	650 V	110 A	21 mΩ	Industrial
PSD098B06-AA1	TO-247-4 and PowerPak TSC	650 V	98 A	25 mΩ	Industrial
PSD160B12-AA3Q	TO-247-4 and PowerPak TSC	1200 V	160 A	10.4 mΩ	Automotive
PSD155B12-AA1	TO-247-4	1200 V	155 A	14 mΩ	Industrial
PSD126B12-AA1	TO-247-4	1200 V	126 A	18 mΩ	Industrial
PSD067B12-AA1	TO-247-4	1200 V	67 A	36 mΩ	Industrial
PSD055B12-AA1	TO-247-4	1200 V	55 A	40 mΩ	Industrial
PSD137B17-AA1	TO-247-4	1700 V	137 A	16 mΩ	Industrial
PSD091B12-AA1	TO-247-4	1700 V	91 A	26 mΩ	Industrial

***PowerPak TSC is equivalent to HDSOP 22 Package*

Beyond this, LTSCT is building next generation of power modules, IGBT, GAN and SiC targeting renewables, high power HVAC, datacenter and mid-voltage industrial drives.

Our global footprint

LTSCT operates on a global scale with strategic locations in Asia, Europe, and North America. This footprint allows us to stay close to our customers, enabling rapid support, localized production, and seamless logistics.



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Contact us today!

Ready to shape the future together?
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to start a partnership that accelerates innovation.

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