

Converge

Create

Elevate



Converge • Create • Elevate | Company and Product Introduction

2026Q2

ABOUT PRUXIS

Rooted in Wuxi, Genuine as Uncut Jade

Based in Wuxi, Jiangsu — one of China's key semiconductor hubs — Pruxis is a dynamic new force in the industry, combining respect for technology with sharp market insight to deliver high-quality chips and solutions to customers worldwide.

Core Strengths

- **Selection & Validation**
Carefully selected wafer and OSAT resources, with electrical and reliability validation on every part.
- **Supply Chain Assurance**
Stable capacity and delivery to fully support customers' volume production.
- **Local Technical Support**
Professional FAE team for part selection, cross-referencing and design-in support.

Brand Philosophy



Genuine • Pragmatic

Putting the quality of every chip first.



Chip • Core

The core strength powering our customers' products.

Converge to Create • Together We Go Far

OUR ROADMAP

Roadmap: Steady Start, Sustained Growth

Built on rigorous selection and validation, we advance product rollout and market expansion step by step — growing with our customers and steadily broadening product and application coverage.

01

Phase 1 • Establish
Rigorous Validation, Fast Delivery

Carefully select mature, mainstream industry supply chains, rigorously validating electrical characteristics and reliability to deliver high-quality, easy-to-adopt products.

02

Phase 2 • Deepen
Self-Defined Products, Building Our Edge

Move beyond homogeneous competition through self-developed, self-defined chips, pursuing a differentiated technology path.

03

Phase 3 • Expand
Continuous Improvement, Shared Growth

Continuously strengthen our product matrix and technical services, embracing broader markets hand in hand with our customers.

OUR VALUES

Converge to Create

Together We Go Far

Pragmatic, Collaborative, Innovative,
Reliable — our unwavering commitment to
customers and partners.

CONVERGE • CREATE • ELEVATE



Pragmatic

PRAGMATIC

Down-to-earth and
disciplined — every chip must
stand the market's test.



Collaborative

COLLABORATIVE

Open and inclusive, growing
through win-win partnerships
across the industry.



Innovative

INNOVATIVE

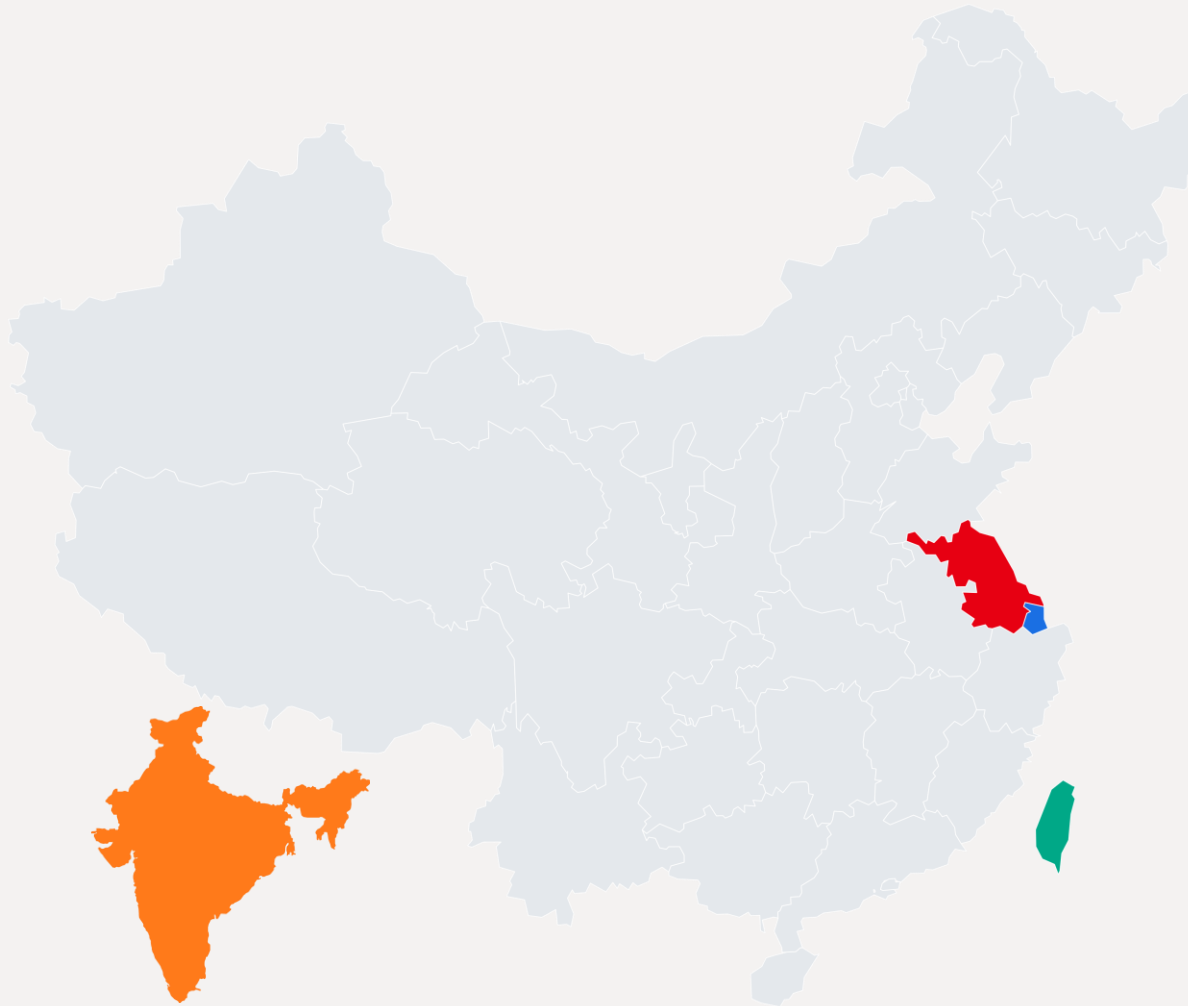
Creating value through ever-
better part selection and
solutions.



Reliable

RELIABLE

What we deliver is a firm,
consistent promise of quality
and service.



Wuxi

HQ · Operations & R&D Center



Shanghai

Sales Office



Taiwan

Sales Office



Korea

Distribution Channel



India

Distribution Channel

01

Design



02

Wafer



03

Packaging & Test



04

Reliability Qual.



Pruxis centers on **IGBT** as its core line, expanding to SiC, SGT MOS and more

AEC-Q101 Qualified · 650V/1200V

IGBT Discrete

Voltage 650/1200/1350V

Current 10 – 160A

Welding · PV · ESS · UPS

IGBT Module

Voltage 650 / 1200V

Current 10 – 600A

Inverter/Servo · PV/ESS

Hybrid IGBT+SiC

Voltage 650 / 1200V

Current 40 – 65A

Inverter · UPS · ESS · OBC

SGT MOS

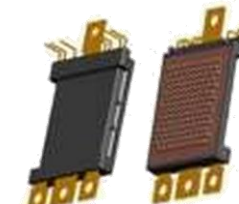
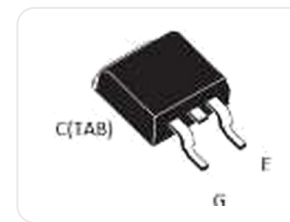
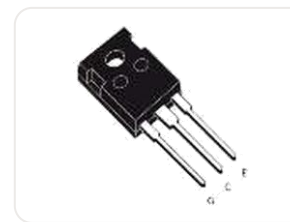
Voltage 100/110/150V

Rds(on) 1.6 – 7.2mΩ

DC-DC · Inverter · Motor

Extended Family SiC (SiC MOSFET/SBD) · FRD (Fast Recovery Diode) · SJMOS (Super-Junction HV MOS)

Product Photos Discretes & Modules



High-Performance Packaging with Chip–Package Co-Design

Chip–Package Co-Optimization

Co-optimized package system and chip front/back-side design, with salt-spray and sulfurization resistance

Symmetrical electrical layout and low-parasitic design for multi-module paralleling

Max junction temperature 175°C | Up to 24 chips in parallel

Multi-Voltage Coverage

Broad voltage-class coverage

to meet the needs of diverse applications

Voltage 600V–3300V | Current 15A–3600A

Applications

Wind Converter

PV Inverter

ESS Converter

VFD

SVG

Induction Heating

SiC SBD Chips

MPS technology

Voltage 650V–1200V | Up to 50A per chip

SiC MOSFET Chips

High-reliability planar-gate technology

Voltage 650V–1200V | Rds(on) as low as 11mΩ per chip

SiC Module Products

Low switching loss: **over 30% lower** vs. IGBT modules; max operating temperature up to **200°C**

Kelvin-source pins and laminated low-inductance design **greatly reduce module parasitic inductance**

Applications

Automotive OBC

DC/DC

EV Charger

PV Inverter

ESS Converter

HF Power Supply

Electrical · Reliability · Application · Failure Analysis | 98 test items in total

Electrical Tests **20 items**



Full static parameter testing	Surge testing
Dynamic parameter testing	Mechanical parameter testing
High/low-temp characteristics	
ESD protection test	

Reliability Tests **26 items**



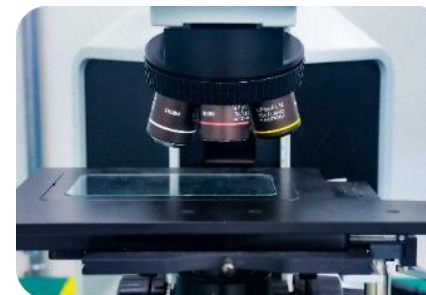
Thermal resistance	H3TRB test
Power cycling	High-temp storage
HTRB test	
HTGB test	

Application Tests **10 items**



VFD operating simulation	EV charger system testing
High-current application testing	PV inverter testing
Inverter load simulation	
Motor duty simulation	

Failure Analysis **42 items**



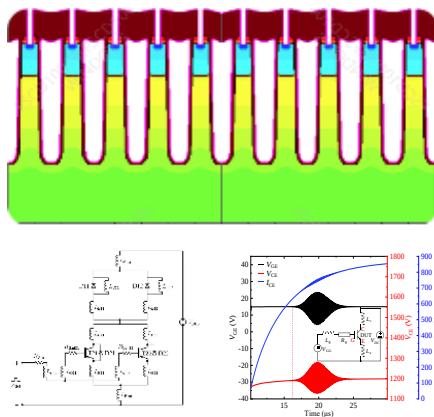
Ultrasonic scanning (SAT)	Chemical etching
X-ray inspection	Automated sample prep
Visual / dimensional inspection	
Laser decapsulation	

Four R&D support pillars, from chip to system

01

Power Chip Structure & Process Design and Simulation

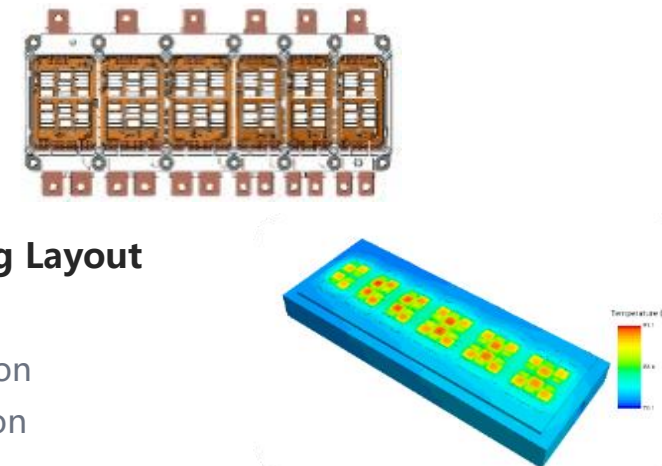
- Chip layout design & simulation
- Tape-out process definition



02

Power Module Packaging Layout Design & Optimization

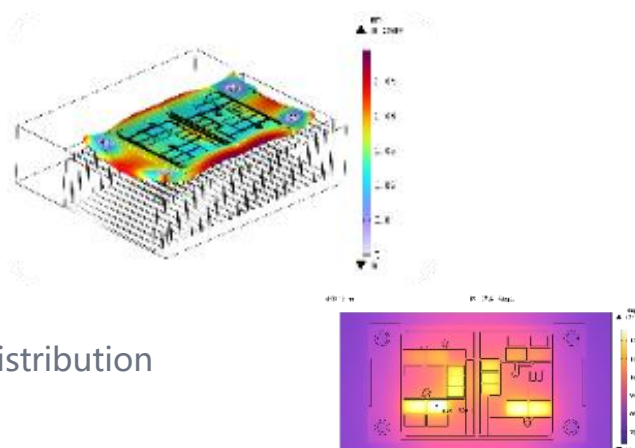
- Package design & simulation
- Packaging process definition



03

Power Device Application Simulation

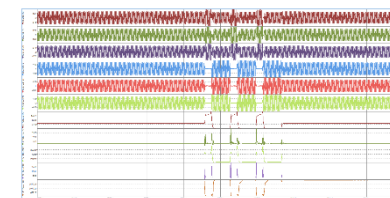
- Chip junction-temperature distribution
- Output capability evaluation



04

Power Electronics HW & SW Development

- Software algorithms (PV inverters, etc.)
- High-end custom hardware design



IGBT • Discrete Devices

Discrete IGBT • 10 models

PXID12040T

TO-247-3L

1200V · 40A

X-Ref: —

PXID07075TB

TO-247-3L

650V · 75A

X-Ref: IKW75N65EH5

PXID07050T

TO-247-3L

650V · 50A

X-Ref: IKW50N65EH5

PXID12075P

TO-247PLUS-3L

1200V · 75A

X-Ref: IKW75N120CH3

PXID07050TB

TO-247-3L

650V · 50A

X-Ref: IKW50N65EH5

PXID12120P

TO-247PLUS-3L

1200V · 120A

X-Ref: IKQ120N120CS7

PXID12050T

TO-247-3L

1200V · 50A

X-Ref: —

PXID12180P

TO-247PLUS-3L

1200V · 180A

X-Ref: IKQ140N120CH7

PXID07075T

TO-247-3L

650V · 75A

X-Ref: IKW75N65EH5

PXID12180Q

TO-247PLUS-4L

1200V · 180A

X-Ref: IKQ140N120CH7

IGBT Modules • Half-Bridge 1200V (1)

Half-Bridge Modules 1200V · 20 models · 10 on this page

PXIM12H075A

34mm

1200V · 75A | Half-bridge

X-Ref: FF75R12RT4

PXIM12H200E

62mm

1200V · 200A | Half-bridge

X-Ref: FF200R12KT4

PXIM12H100A

34mm

1200V · 100A | Half-bridge

X-Ref: —

PXIM12H200EB

62mm

1200V · 200A | Half-bridge

X-Ref: —

PXIM12H100AB

34mm

1200V · 100A | Half-bridge

X-Ref: —

PXIM12H200A

34mm

1200V · 200A | Half-bridge

X-Ref: —

PXIM12H150A

34mm

1200V · 150A | Half-bridge

X-Ref: FF150R12RT4

PXIM12H300E

62mm

1200V · 300A | Half-bridge

X-Ref: FF300R12KE4

PXIM12H150AB

34mm

1200V · 150A | Half-bridge

X-Ref: 2MBI150XAA170-50

PXIM12H300EB

62mm

1200V · 300A | Half-bridge

X-Ref: FF300R12KT4

IGBT Modules • Half-Bridge 1200V (2)

Half-Bridge Modules 1200V · 20 models · 10 on this page

PXIM12H300EC

62mm

1200V · 300A | Half-bridge

X-Ref: FF300R12KT4

PXIM12H300ED

62mm

1200V · 300A | Half-bridge

X-Ref: —

PXIM12H400E

62mm

1200V · 400A | Half-bridge

X-Ref: —

PXIM12H450D

EconoDUAL3

1200V · 450A | Half-bridge

X-Ref: FF450R12ME4

PXIM12H450DB

EconoDUAL3

1200V · 450A | Half-bridge

X-Ref: FF450R12ME4

PXIM12H450E

62mm

1200V · 450A | Half-bridge

X-Ref: FF450R12KT4

PXIM12H450EB

62mm

1200V · 450A | Half-bridge

X-Ref: FF450R12KT4

PXIM12H600E

62mm

1200V · 600A | Half-bridge

X-Ref: FF600R12KE7

PXIM12H900D

EconoDUAL3

1200V · 900A | Half-bridge

X-Ref: FF900R12ME7

PXIM12H450EC

62mm

1200V · 450A | Half-bridge

X-Ref: —

IGBT Modules • Half-Bridge 1700V

Half-Bridge Modules 1700V · 10 models

PXIM17H075A

34mm

1700V · 75A | Half-bridge

X-Ref: 2MBI75XAA170-50

PXIM17H300E

62mm

1700V · 300A | Half-bridge

X-Ref: FF300R17KE4

PXIM17H100A

34mm

1700V · 100A | Half-bridge

X-Ref: 2MBI100XAA170-50

PXIM17H400E

62mm

1700V · 400A | Half-bridge

X-Ref: FF400R17KE4

PXIM17H150E

62mm

1700V · 150A | Half-bridge

X-Ref: FF150R17KE4

PXIM17H450D

EconoDUAL3

1700V · 450A | Half-bridge

X-Ref: FF450R17ME4

PXIM17H200E

62mm

1700V · 200A | Half-bridge

X-Ref: FF200R17KE4

PXIM17H450DB

EconoDUAL3

1700V · 450A | Half-bridge

X-Ref: FF450R17ME7

PXIM17H300D

EconoDUAL3

1700V · 300A | Half-bridge

X-Ref: FF300R17ME4

PXIM17H600D

EconoDUAL3

1700V · 600A | Half-bridge

X-Ref: FF600R17ME4

IGBT Modules • 3-Level NPC

3-Level NPC Modules • 13 models

PXIM08T225Z

Easy2B

750V · 225A | NPC1

X-Ref: F3L225R07W2H3P_B63

PXIM12T225X

Easy3b+

1200V · 225A | NPC1

X-Ref: F3L225R12W3H3_B11

PXIM12T300DU

EconoDUAL3

1200V · 300A | NPC1 · Upper pair

X-Ref: F3L300R12ME4_B23

PXIM12T300DL

EconoDUAL3

1200V · 300A | NPC1 · Lower pair

X-Ref: F3L300R12ME4_B22

PXIM12T450DU

EconoDUAL3

1200V · 450A | NPC1 · Upper pair

X-Ref: —

PXIM12T450DL

EconoDUAL3

1200V · 450A | NPC1 · Lower pair

X-Ref: —

PXIM12T450DUB

EconoDUAL3

1200V · 450A | NPC1 · Upper pair

X-Ref: —

PXIM12T450DLB

EconoDUAL3

1200V · 450A | NPC1 · Lower pair

X-Ref: —

PXIM10T400X

Easy3b+

1050V · 400A | NPC1

X-Ref: NXH400N100L4Q2F2

PXIM10T400XB

Easy3b+

1050V · 400A | NPC1

X-Ref: NXH400N100L4Q2F2

PXIM12W540X

Easy3b+

1200V · 540A | NPC2

X-Ref: F3L500R12W3H7_H20

PXIM10T600X

Easy3b+

1050V · 600A | NPC1

X-Ref: NXH600N105L7F5S1HG

PXIM10T600XB

Easy3b+

1050V · 600A | NPC1

X-Ref: NXH600N105L7F5S1HG

IGBT Modules • 4-Pack / 6-Pack / Single Switch

4-Pack / 6-Pack / Single Switch • 12 models

PXIM17F075K

EconoPack3

1700V · 75A | 4-pack

X-Ref: MMG75W170HX6TC

PXIM17F100K

EconoPack3

1700V · 100A | 4-pack

X-Ref: F4-100R17N3P4_B58

PXIM17F150K

EconoPack3

1700V · 150A | 4-pack

X-Ref: F4-150R17N3P4_B58

PXIM17F200K

EconoPack3

1700V · 200A | 4-pack

X-Ref: F4-200R17N3E4_B58

PXIM12P015Y

Easy1B

1200V · 15A | 6-pack · with chopper

X-Ref: FP15R12W1T4

PXIM12Q040G

EconoPIM2

1200V · 40A | 6-pack · no chopper

X-Ref: GD35PIT120C5SNA_B90

PXIM12P040G

EconoPIM2

1200V · 40A | 6-pack · with chopper

X-Ref: 7MBR35XMA120-50

PXIM12Q050G

EconoPIM2

1200V · 50A | 6-pack · no chopper

X-Ref: GD50PIX120C5SNA_B90

PXIM12P075G

EconoPIM2

1200V · 75A | 6-pack · with chopper

X-Ref: 7MBR75XME120-50

PXIM12P100B

EconoPIM3

1200V · 100A | 6-pack · with chopper

X-Ref: FP100R12KT4

PXIM12Q150B

EconoPIM3

1200V · 150A | 6-pack

X-Ref: FS150R12KT4

PXIM17S400E

62mm

1700V · 400A | Single switch

X-Ref: —

SiC Modules & SiC Discretes

SiC Modules & Discretes · 5 models

PXCM12H240Z

Easy2B

1200V · 240A | Half-bridge

X-Ref: FF6MR12W2M1HP_B11

PXCM12H300E

62mm

1200V · 300A | Half-bridge

X-Ref: CAS175M12BM3

PXCD12014K

TO247-4

1200V · 140A · 14mΩ

X-Ref: E4M0013120K

PXCD12020K

TO247-4

1200V · 100A · 20mΩ

X-Ref: AIMZH120R020M1T

PXCD12035K

TO247-4

1200V · 70A · 35mΩ

X-Ref: C4MS036120K

New Energy Vehicles**PV & Energy Storage****Motor Drives****Industrial Power**

IGBT Modules

Module Products · 28 models (Part 1)

PXM40HF120S2F2A

34mm

1200V · 40A · 2-pack | Weld / Commercial stove

PXM100HF120S2F1A

34mm

1200V · 100A · 2-pack | Commercial stove

PXM100HF120S2F1B

34mm

1200V · 100A · 2-pack | Weld / Commercial stove

PXM75HF120S2F2

34mm

1200V · 75A · 2-pack | Weld / Commercial stove

PXM200HF120S4F1A

62mm

1200V · 200A · 2-pack | AC welder / Industrial power supply

PXM150HF120S4F2

62mm

1200V · 150A · 2-pack | AC welder / Industrial power supply

PXM400HF65S4T1A

62mm

650V · 400A · 2-pack | AC welder

PXM50FFB120C1T1H

EconoPIM2

1200V · 50A · 6-pack | EV Air compressor

PXM40FFB120C1T1

EconoPIM2

1200V · 35A · 6-pack | EV Air compressor

PXM240TU120Q1F2

Q1

1200V · 240A · Boost (Hybrid) | PV (MPPT)

PXM450ML65Q2F2

Q2

650V · 450A · I-NPC | PV (Inverters)

PXM400HF65S4T1A

EconoDual3

650V · 400A · 2-pack | AC welder

PXM600HF65S4T1

EconoDual3

650V · 600A · 2-pack | AC welder

PXM150FFB120C2T1M

EconoPack3

1200V · 150A · 6-pack | Inverters

IGBT Modules

Module Products · 28 models (Part 2)

PXM200SG65S1T1

SOT227

650V · 200A · 1-pack | AC welder

PXM10PJ120E1T3A

Easy1B

1200V · 10A · 7-pack | Inverters

PXM15PJ120E1T3A

Easy1B

1200V · 15A · 7-pack | Inverters

PXM25PJ120E2T3A

Easy2B

1200V · 25A · 7-pack | Inverters / Servo

PXM35PJ120E2T3A

Easy2B

1200V · 35A · 7-pack | Inverters / Servo

PXM40PI120C1T3A

EconoPIM2

1200V · 40A · 7-pack | Inverters / Servo

PXM50PI120C1T3A

EconoPIM2

1200V · 50A · 7-pack | Inverters / Servo

PXM100PI120C2T1

EconoPIM3

1200V · 100A · 7-pack | Inverters / Servo

PXM150FFB120C2T1M

EconoPack3

1200V · 150A · 6-pack | Inverters / Servo / Industrial power supply

PXM200HF120S4T1

EconoPack3

1200V · 200A · 2-pack | Inverters / Servo / Industrial power supply

PXM300HF120S4T1M

62mm

1200V · 300A · 2-pack | Inverters / Servo / Industrial power supply

PXM400HF120S4T1M

62mm

1200V · 400A · 2-pack | Inverters / Servo / Industrial power supply

PXM450HF120C3T1M

Econodual3

1200V · 450A · 2-pack | PV / Energy storage / EV Bus / Heavy-duty truck

PXM600HF120C3T1M

Econodual3

1200V · 600A · 2-pack | PV / Energy storage / EV Bus / Heavy-duty truck

SGT MOS

SGT MOS Products · 8 models

PXP042N011T1A

TO-220

110V · Rds(on) 4.2mΩ | DC-DC / Inverters / Motor controls

X-Ref: SKD503, SKSS042N10N

PXK040N011T1A

TO-263

110V · Rds(on) 4.0mΩ | DC-DC / Inverters / Motor controls

X-Ref: SKD503, SKSS042N10N

PXT020N010T1A

TOLL

100V · Rds(on) 2.0mΩ | DC-DC / Inverters / Motor controls

X-Ref: IPT020N10N3, AOT66912

PXP042N010T2E

TO-220

100V · Rds(on) 4.2mΩ | DC-DC / Inverters / Motor controls

X-Ref: SKD503

PXK040N010T2E

TO-263

100V · Rds(on) 4.0mΩ | DC-DC / Inverters / Motor controls

X-Ref: SKD503

PXT016N010T1A

TOLL

100V · Rds(on) 1.6mΩ | DC-DC / Inverters / Motor controls

X-Ref: IPT015N10N5

PXK07AN015T1A

TO-263

150V · Rds(on) 7.0mΩ | DC-DC / Inverters / Motor controls

X-Ref: SVGP157R2NS

PXK07BN015T1A

TO-263

150V · Rds(on) 7.2mΩ | DC-DC / Inverters / Motor controls

X-Ref: SVGP157R2NS

Main Inverter

Power: 30kW~200kW

Device: IGBT discrete, 650V120A&160A
IGBT module, HP1, HPD MOS
, 100V4.2mΩ, 2.2mΩ;
150V7.2mΩ

**HV-LV DCDC Converter**

Power: 1.5kW~3kW Device

: MOS, 100V4.2mΩ

**OBC**

Power: 3.3kW, 6.6kW, 11kW

Device: 650V40A~75A Hybrid IGBT

BMS

Device: MOS

Auxiliary Inverter

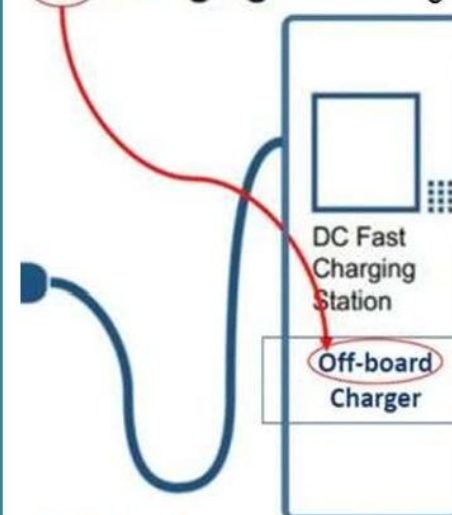
功率: 30kW~200kW

器件: IGBT单管, 650V120A&160A
IGBT模块, HP1, HPD

**PTC & compressor**

Power: 2kW~5kW

Device: IGBT discrete 650V50A, 1200V40A

**DC Charging****DC Charging**

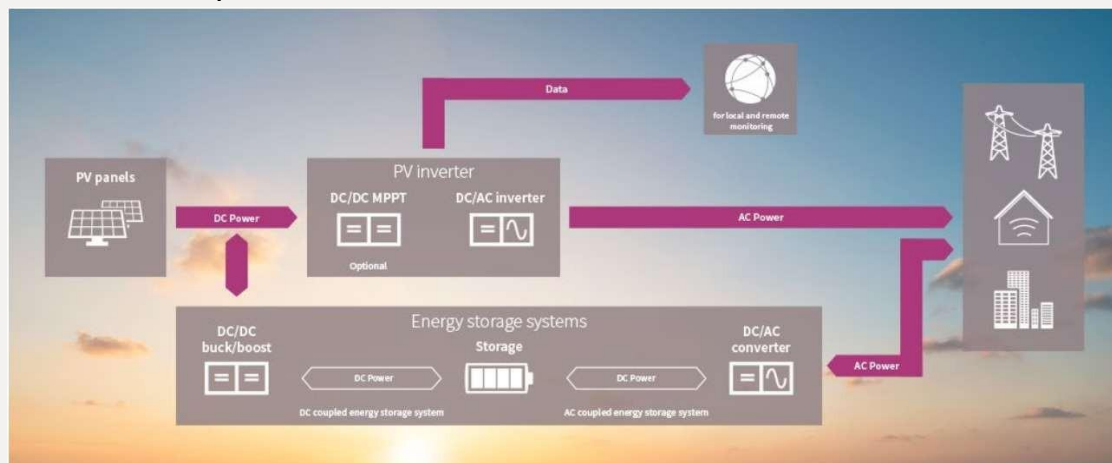
Wall-mounted DC charger:
7kw~25kw

DC fast charging module:
30kW/40kW

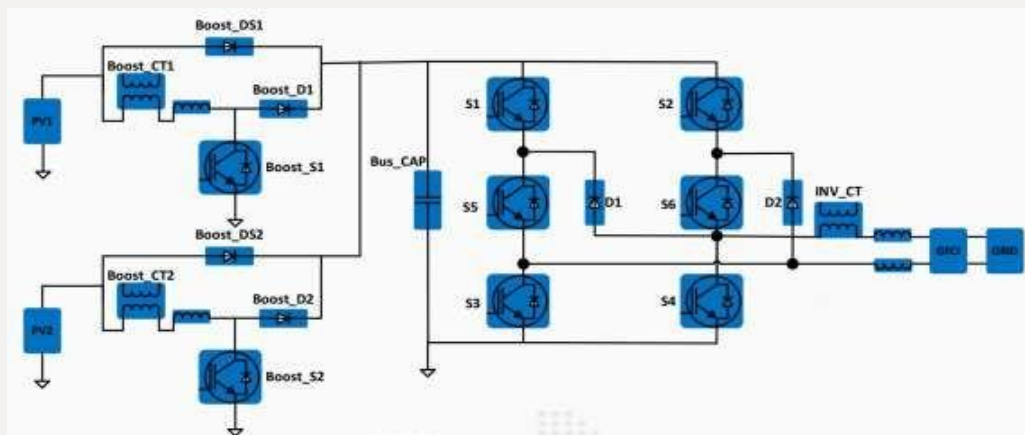
Device:
650V/1200V Hybrid IGBT
650V40A~75A IGBT discrete
1200V IGBT discrete

1. Basic Information

Type: Microinverter, String inverter, Three-Phase Photovoltaic Inverter; Product line: 650V & 1200V IGBT discrete, IGBT module

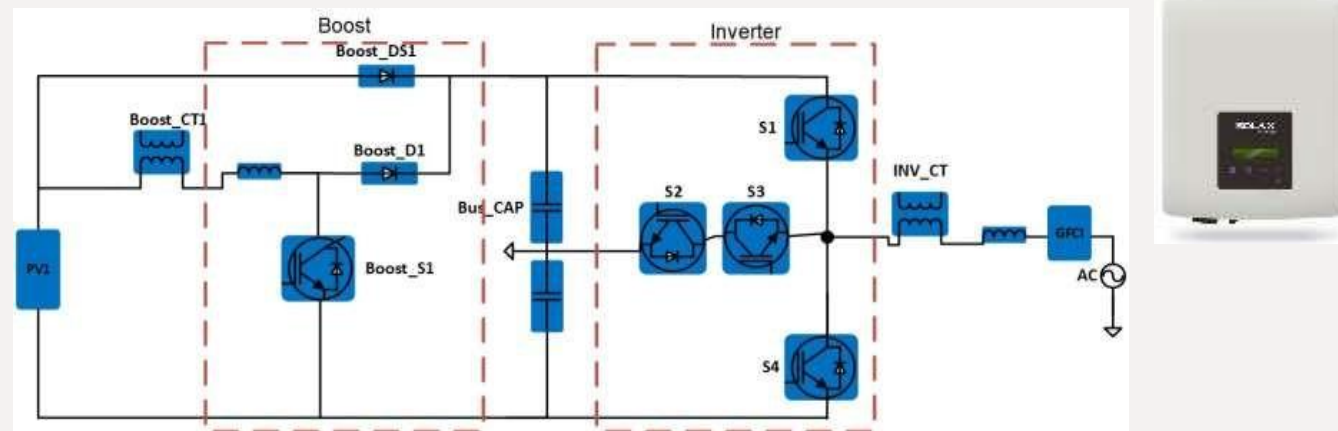


2. Circuit Structure



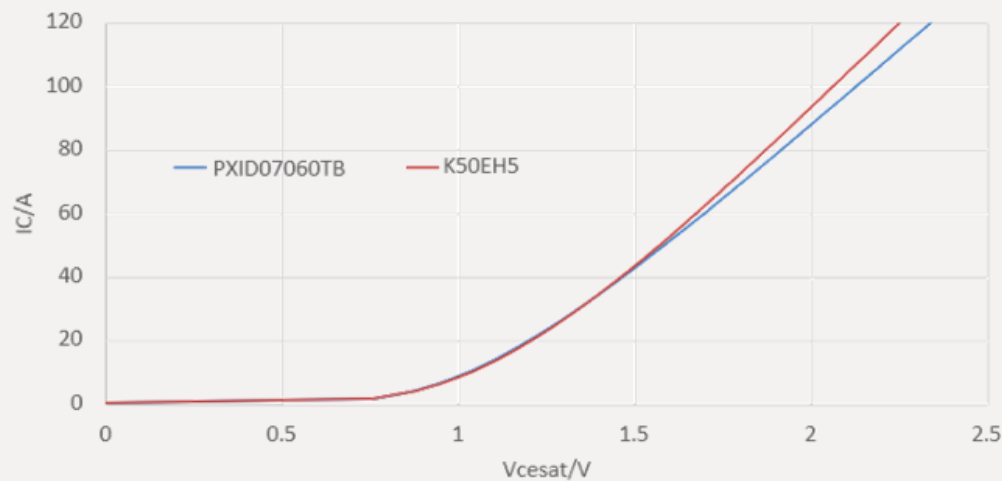
3. Devices recommendation

Product line	Part Number	Package
IGBT Discrete	PXID07020D/F/K	TO220/220F/TO263
	PXID07040T	TO247
	PXID07060T/TB	TO247
	PXID07075TC	TO247
	PXID07100P	TO247 Plus
	PXID12040TB	TO247
	PXID12050TB	TO247
	PXID12075PB	TO247 Plus
IGBT Module	PXIM07T450RB	Q2 package
	PXIM12B225Z	Easy2B
	PXIM12B225R	Q1 package

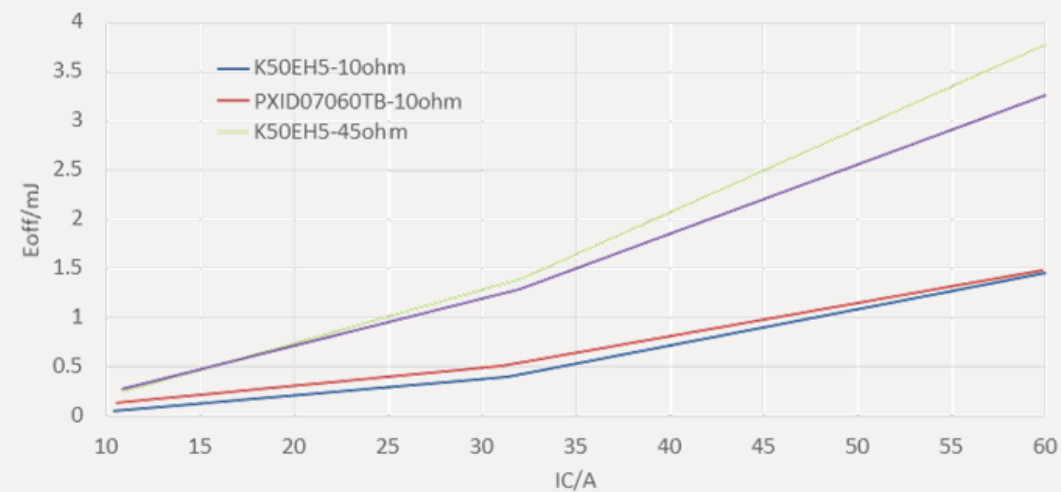


Vcesat

PXID07060TB VS I**50N65EH5

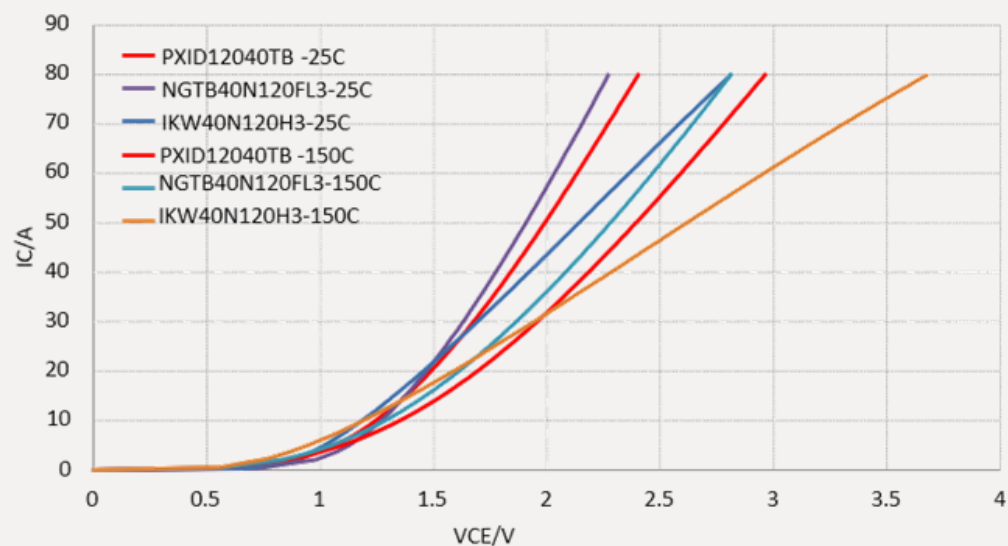


Eoff

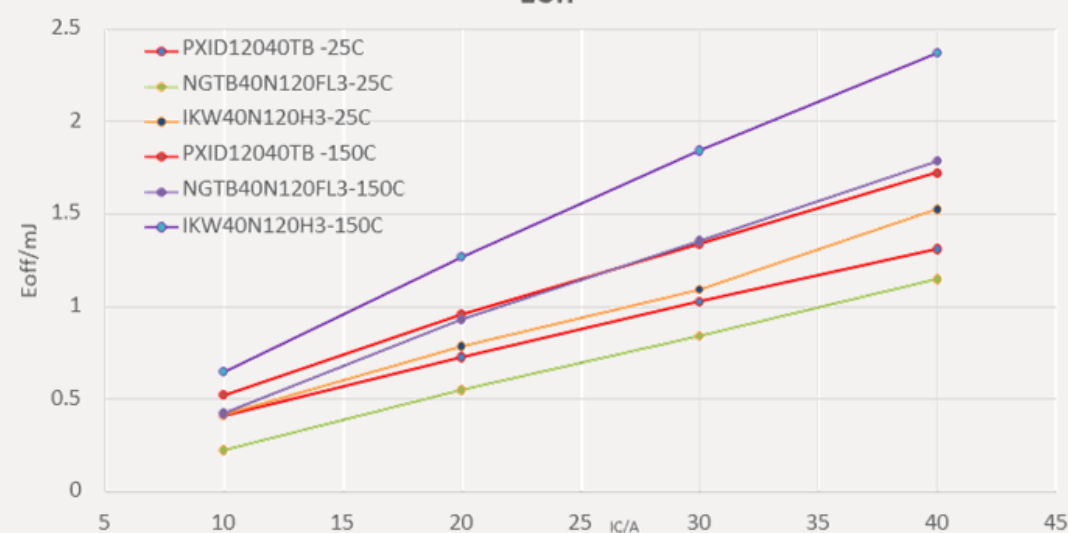


Vcesat

PXID12040TB VS I**40N120H3 VS N**B40N120FL3



Eoff

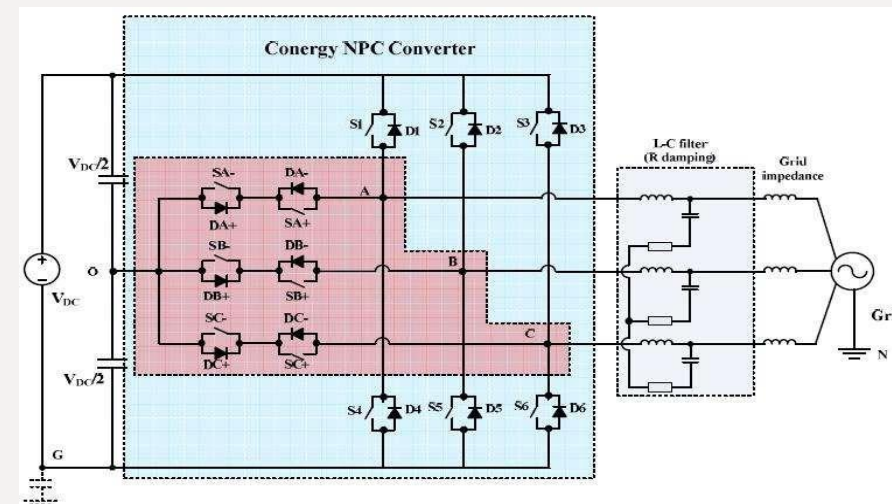


1. Temperature rise test

Model type: 30kW Three-Phase Photovoltaic Inverter;
Circuit Structure: Three-Phase T-Type Inverter, PXID12040TB Inlet and outlet pipes, PXID07075TC Cross pipes , pairwise parallel connection; Frequency: 18kHz; Inlet and outlet pipes $R_g=36\Omega$, Cross pipes $R_g=47\Omega$;

	Temperature °C
PXID12040TB	93
I**40N120H3	91

3. Circuit Structure



2. Stress testing& Output short circuit test

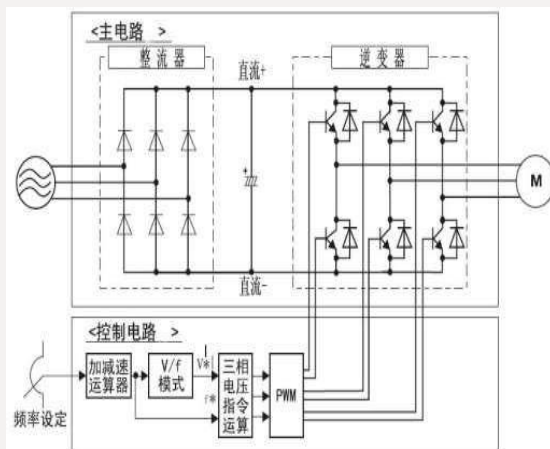
VBUS=850V, Under full load, the output short circuit test meets the requirements



1. Circuit Structure

Industry: Inverters, Water pumps etc.

Key parameter : Thermal performance, shock resistance, Short circuit capability



2. Devices recommendation

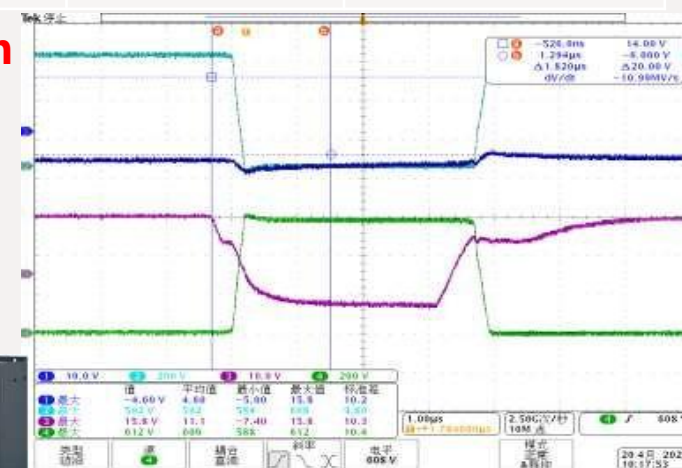
Circuit topology	Product line	Devices recommendation	Package
PFC circuit	IGBT Discrete	PXID07020D/DB	TO247
		PXID07040T	TO247
		PXID07060T	TO247
Three-phase full bridge inverter	IGBT Discrete	PXID07020F	TO247
		PXID12010T	TO247
		PXID12015T	TO247
		PXID12025TB	TO247
		PXID12040TC	TO247
	PIM Module	PXIM12P010Y	
		PXIM12P015YB	
		PXIM12P040Z	
		PXIM12P040GC	

3. Parameter comparison

	Key parameter	Company I T2	PXID12040TC
Static parameters	BV (V)	>1200	>1200
	Vcesat (V)	1.75	1.7
	Vth (V)	5.8	5.8
	Vf (V)	1.75	1.8
	If (A)	40	40
Dynamic parameters	Eon (mJ)	4.59	4.39
	Eoff (mJ)	2.05	1.6
	Td(on) (ns)	33	131
	Tr (ns)	28	48
	Isc (A)	220	240
	Tsc (μs)	>10	18
	trr (ns)	285	350
FRD parameters	Irr (A)	23	15

4. Application evaluation

- Under full load conditions, the stress of the integrated circuit components meets the requirements, and the temperature rise is at the same level as the competitors;



Power Tools

Hedge trimmers · leaf blowers · chainsaws · angle grinders——covering garden care, woodworking, metal grinding and more

01 Dual Power Options

AC corded and Li-ion cordless power for everyday DIY and demanding professional work

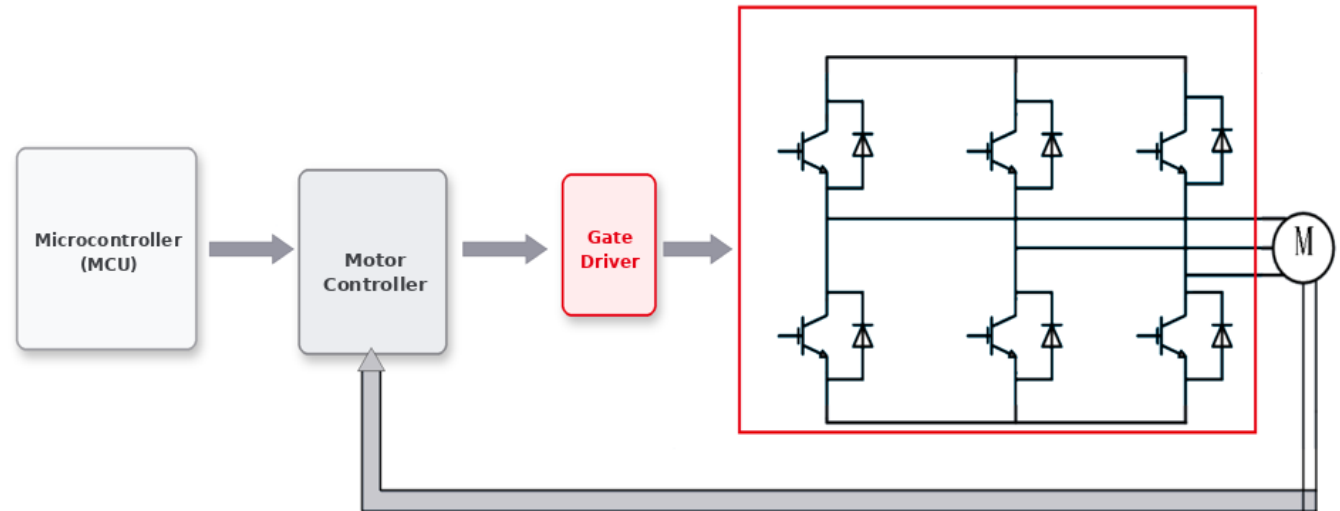
02 Flexible Motor Configurations

Brushed, 3-phase brushless or induction motors — precisely balancing power and cost

03 Optimized Motor Control

Lower energy use and longer life, with strong runtime for cordless operation

Application Circuit Topology



Inverter – UPS

“PV Generation + Energy Storage” PV+ESS Systems—the core solution for distributed clean energy today

01 Integrated System Design

PV modules, batteries, PCS and EMS — integrating generation, storage and dispatch

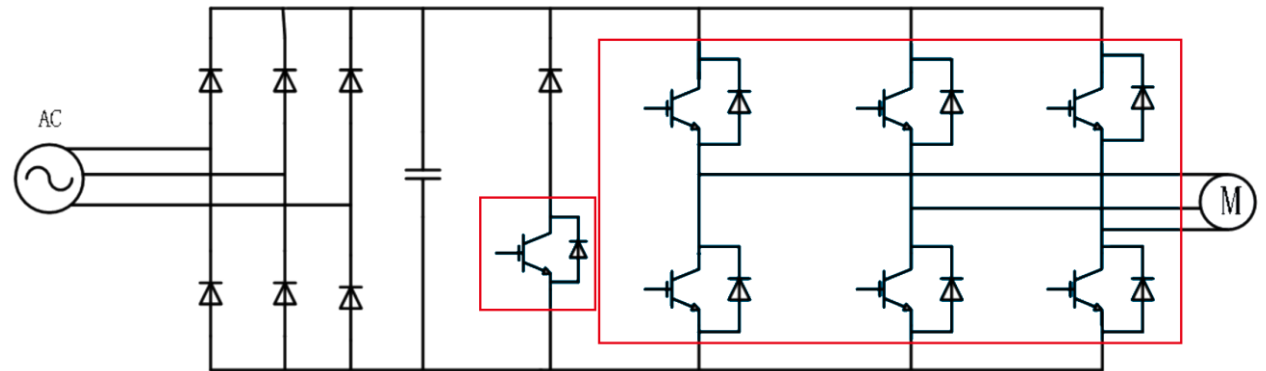
02 Stable Power Output

Overcomes the weather-dependent variability of PV generation, ensuring stable power output

03 Multiple Strategic Goals

Enables self-consumption, peak-shaving and emergency backup for the new power system

Application Circuit Topology



Inverter – PV Inverters

The core of distributed PV—two-stage power conversion: DC-DC boost stage + high-reliability DC-AC inverter stage

400W–1.5kW

Energy conversion for one to multiple PV panels

40V–60V

DC-DC boost stage stabilizes widely fluctuating DC input

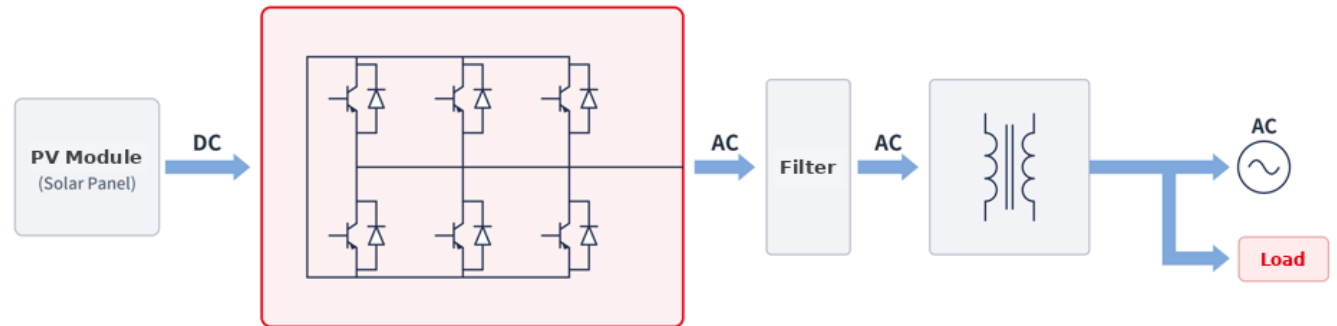
100kHz

High-frequency MPPT technology maximizes energy harvested from every panel

Module-Level MPPT

1-panel/2-panel/4-panel flexible configurations, resilient to shading

Application Circuit Topology





Converge to Create, Together We Go Far

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