



Sep. 2024

- **About PANJIT**
- Power Discrete & New Technology Focus
- Automotive



#### **PANJIT International Inc.**

2023 Revenue: NTD\$ 12.7 Billion (2481.TW)

Product: IC, MOSFET, SiC, IGBT, Diodes, TVS, ESD, Zener,

Bridge, Transistor

**Application:** Automotive, Medical, Green Energy, High Performance Computing, Consumer, IoT



#### **MILDEX Optical Inc.**

2023 Revenue: NTD\$ 1.1 Billion (4729.TW)

**Product:** Touch Panel, Display

**Application:** Automotive, IPC, Military



#### **Champion Microelectronic Corp.**

2023 Revenue: NTD\$ 1.1 Billion (3257.TW)

**Product:** Power Management IC

Application: Gaming PC/Adapter, Industrial

PC, 5G Power



#### **ALLTOP Technology Co., Ltd.**

2023 Revenue: NTD\$ 2.4 Billion (3526.TW)
Product: Connector, F cable, USB-Type C 3.1

Application: Automotive, Medical, Communication,

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## **Milestones**



- Set up Xuzhou Factory
- Issued GDR in Luxembourg



- Set up PANJIT Japan
- Set up assembly site in Philippines
- IC products launched



- Taipei operation center opened.
- Acquired Champion Microelectronic Corp.

(/) CHAMPION

2000



- Opened Wuxi factory

- Set up Pynmax Technology

2005

2003

- Set up PANJIT Europe

- Set up Shenzhen Office

2006

- TS16949 certified

- Set up PANJIT Korea

1986

Founded 1986

**HQ Kaohsiung** 

- QS-9000 certified

- PANJIT IPO in Taiwan

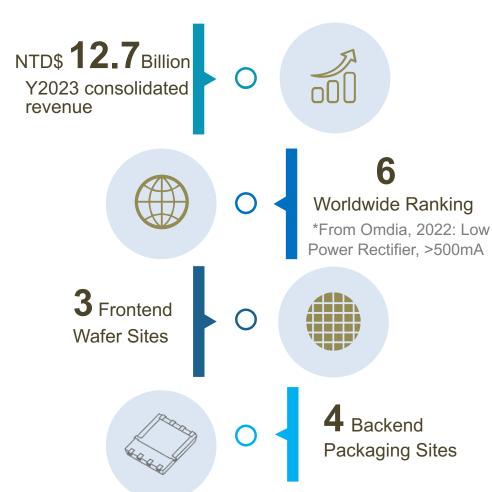




PANJIT semiconductor has been providing its comprehensive range of discrete products to global community for over 38 years. With continuous investment in packaging miniaturization, wafer capacity expansion, R&D in advanced high power discrete solution and IC design capability, PANJIT is the brand name that customers can depend on to be life-long partner of discrete semiconductor components and total solution provider.

## **PANJIT Overview**

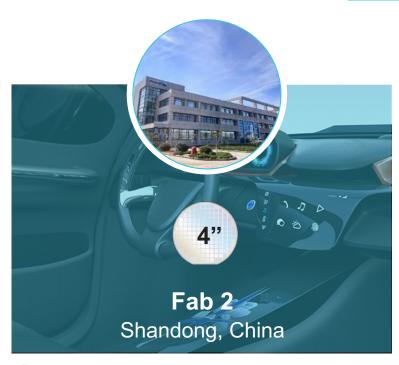
IDM Design Capability



## **PANJIT Global Footprint at a Glance**



# Wafer Capacity



▼ TVS: 30,000 pcs/month



- ✓ EPI: 60,000 pcs/month
- Schottky: 45,000 pcs/month
- ✓ TVS ESD Array: 5,000 pcs/month
- ✓ Zener: 5,000 pcs/month
- FRED: 5,000 pcs/month
- ✓ LVf Rectifier: 5,000 pcs/month



✓ MOSFET/ IGBT: 10,500 pcs/month

**Assembly Capacity** 

01

02

03

04

Overall

### Kaohsiung, Taiwan

Package:

Small Signal Devices/SMD Bridge Capacity:

2,975 million/month

### **Wuxi, China**

Package:

SMD/Power Package

**Capacity:** 

450 million/month

#### Xuzhou, China

Package:

Small Signal Device

Capacity:

520 million/month

### Cabuyao, Philippines

Package:

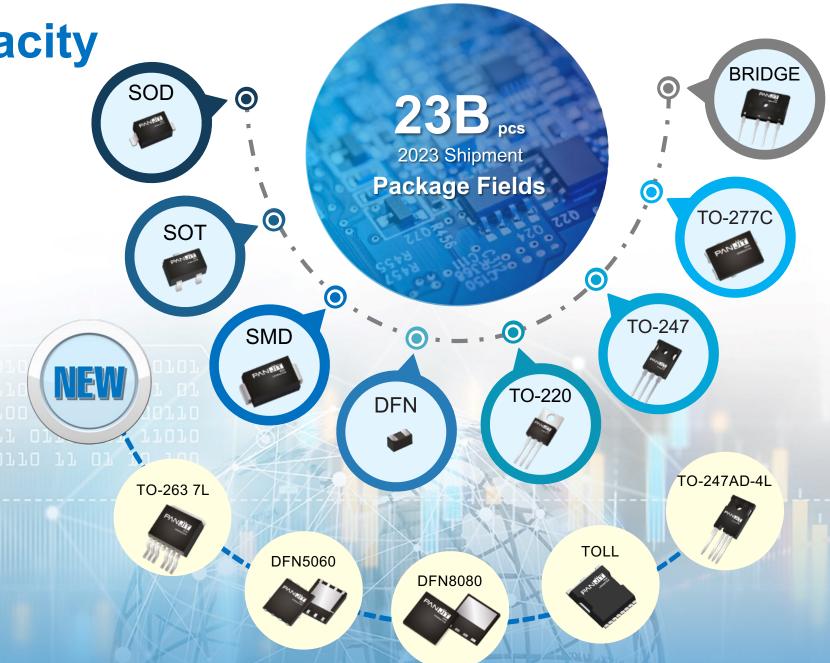
SOT-23/DFN3333/DFN5060

**Capacity:** 

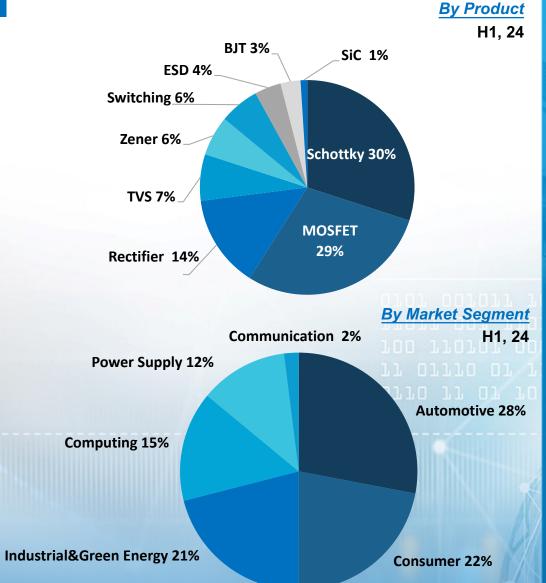
55 million/month (MP in 2024 Q4)

#### **Capacity:**

4,000 million/month



## **Market Segment**



### **Application Field**



#### **Automotive**

Lighting, Infotainment, Pump, Body & Comfort, On Board Charger



# Industrial & Green Energy

PV Inverter, Server fan, EV charger, Motor, DC fan, Robot, Medical



### Computing

Notebook, Motherboard, SSD, Server, Data center



### **Power Supply**

PD Charger, Power adapter, UPS DC-DC Brick module, ATX/Server Power



#### Consumer

TV, White/Black goods, Game console, Printer, Smart watch, PC camera



#### Communication

POE, Mobile, Base station

# **Innovation for the Future Technology**

	2023	2024	2025	2026	2027
LV MOSFET	SGT Gen.1 N-CH 30V/40V	SGT Gen.2 N-CH 30V/40V Low Ron	SGT Gen.2 N-CH 30V/40V Line up	SGT Gen.2 Dual-CH 30V/40V Line up	SGT Gen.3 N-CH 30V/40V Low RSP
MV MOSFET	<b>SGT Gen.2</b> N-CH 100V/80V	<b>SGT Gen.2</b> N-CH: 80V&40V-LL/ 60V	<b>ST Gen.2</b> P-CH 100V	SGT Gen.2/SGT Gen.3 N-CH 150V/100V	SGT Gen.1 N-CH 250V SOA FET 100V
SJ MOSFET	<b>Gen.1.5 FR</b> 600V	Gen.2 Easy/FR 650V		<b>Gen.1 Easy</b> 800V	<b>Gen.3 Easy</b> 650V
FS Trench IGBT	<b>Gen.1 HS</b> 650V	<b>Gen.1 HS</b> 1200V	<b>Gen.1 MS</b> 650V/1200V	<b>Gen.2 HS</b> 650V/1200V	<b>Gen.2</b> Voltage extension
SiC Diode	<b>Gen.2</b> 650V	<b>Gen.2</b> 1200V	<b>Gen.2</b> 1700V	<b>Gen. 3</b> 650V/1200V	
SiC MOSFET			<b>Gen.1</b> 1200V	<b>Gen.1</b> 650V	<b>Gen.2</b> 650V/1200V
FRED		<b>Gen.1</b> 650V/1200V, T <sub>J</sub> :175°C	<b>Gen.2</b> 650V/1200V	<b>Gen.2</b> Voltage extension	
Ultra LVF Bridge Rectifiers	<b>Gen.1/Gen1.5</b> 600V V <sub>F</sub> < 0.87V, T <sub>J</sub> 150-175°C	<b>Gen.2</b> 800V V <sub>F</sub> < 0.87V, T <sub>J</sub> 175°C			
Deep Snapback ESD		<b>Gen.1</b> 1V/3.3V/5V, C <sub>J</sub> :0.1pF 24V/28V C <sub>J</sub> :0.4pF	<b>Gen.2</b> 36V/48V C <sub>J</sub> :0.4pF Small PKG hi-Surge	<b>Gen.3</b> 28V/36V/48V C <sub>J</sub> :0.2pF 1V/3.3V/5V Cj:0.05pF	<b>Gen.1</b> Tiny PKG(DFN0402) <0.1pF
H-type TVS		<b>Gen.2</b> Bi, 14V-48V 6.6KW, T <sub>J</sub> :175°C	<b>Gen.2</b> Uni/Bi, 5V-220V 200W-3KW, T₁:175°C	<b>Gen.2</b> Uni/Bi, 12V-58V 5KW, T₁:175°C	











## Vision for ESG Sustainable Development



With the vision of "Strengthening Green Energy Development, Sustaining Prosperity in the Forest," we are committed to achieving carbon neutrality by 2040 through green energy sustainability initiatives.



With the vision of "Cultivating a Company that Inspires Joy and Resilience, Where Employees Take Pride," we are dedicated to promoting initiatives that prioritize employee care and community engagement.

Advancing Sustainability Globally





With the vision of "Upholding Business Integrity, Collaborating with Global Partners for Sustainable Prosperity," we are committed to make the sustainable development of our company a reality.



REACH CARBON NEUTRALITY BEFORE 2040



