

PRODUCT / PROCESS CHANGE NOTIFICATION

Generic Copy

PCN#2401002

• DATE: 12th January, 2024

PCN Subject: Additional Assembly Site for Package SOT-23

• **PCN Change Category:**

- ☒ **Material**

 ☒ **Process**

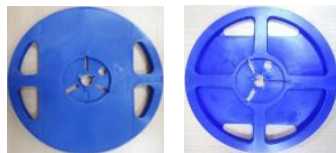
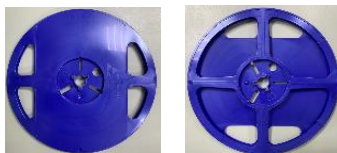
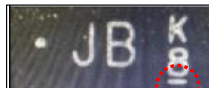
 ☐ **Datasheet/Specification**
☐ **Reliability**
☒ **Others (Additional assembly site)**

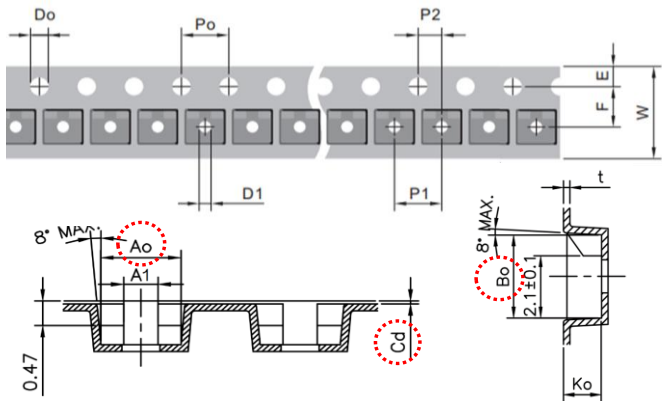
• **Description of Change Purpose or Reason:**

This PCN is being issued to announce the qualification of PANJIT Semiconductor (Xuzhou) Co., Ltd (located in Jiangsu Province, China) as an alternate assembly and test site for SOT-23 selected products. The products that will be manufactured from this new assembly/test site are form, fit, and function compatible with the current qualified manufacturing sites. The qualification incorporates new bill of material (BOM) sets and the utilization of High-Density Leadframe. For more detail, please check below change information.

We recommend that you acknowledge receipt of this notification within 30 days of this PCN date. If you require samples for further evaluation, please feel free to contact your local sales representative and make a request. We are always pleased to serve you at any time.

• **Change Information:**

Assembly Site			Current	Add
			PANJIT International Inc.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Production Site Location			Kaohsiung, Taiwan	Xuzhou, China
Material	Lead Frame	Material	Copper	
	Die Attach (Epoxy)	Product Name	84-1LMISR4	
	Epoxy molding compound	Product Name	EME-G600 FL	GR640HV-L1 B18
	Carrier tape	Material	Polycarbonate (PC)	Polystyrene (PS)
	Ending tape	Material	Polyester	Paper
		Color	Black	Yellow
Blue Anti-Static Plastic Reel				
Method	Process	De-Flash	Electrolytic De-flash	Chemical De-flash
Form	Marking Format			 Add bar “-” for new assembly site

Carrier Tape		Current	Add
Assembly Site		PANJIT International Inc.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Dimension			
Symbol (mm)		Dimension	Dimension
Ao		3.18 ± 0.10	3.15 ± 0.10
Bo		2.76 ± 0.10	2.77 ± 0.10
Cd		0.15 MAX.	0.20 MAX.

- **Verification /Qualification Data:**

The electrical characterization and high reliability testing have been completed on representative part numbers to ensure there is no change to device functionality or electrical specifications in the datasheet. There will be no change to the Form, Fit, or Function of products affected unless specifically indicated.

- **Affected Product Type:**

Function: MOSFET					
PJA3402	PJA3404	PJA3412	PJA3413	PJA3415AE	PJA3415
PJA3400	PJA3401A	PJA3401	PJA3403	PJA3404A	PJA3405
PJA3406	PJA3408	PJA3407E	PJA3407	PJA3407-TK	PJA3409E
PJA3409	PJ2301	PJA3411	PJA3411-TK	PJA3451	PJA3414
PJA3415AE-TK	PJA3415A	PJA3416AE	PJA3416	PJA3419AE	PJA3419E
PJA3419	PJA3419-TK	PJA3420E	PJA3424E	PJA3422	PJA3422-TK
PJA3430	PJA3431	PJA3432	PJA3433	PJA3440	PJA3441
PJA3448	PJA3449	PJA3460	PJA3461	PJA3461-NC	PJA3470
PJA3471	PJA65P03				

- **Effective Date : 12th April, 2024**

➤ **The reliability test results are summarized below:**

Product reliability test result: PASS

No.	DESCRIPTION	TEST CONDITION	DURATION	FAILURE RATE	
1	Temperature Cycling (TCT)	Ta = -55°C ~ +150°C (2 cycles / Hour)	1000 CYCLES	0/77 PCS	3 LOTS PASS
2	High Temperature Storage Test (HTSL)	Ta = 150°C	1000 HOURS	0/77 PCS	3 LOTS PASS
3	Resistance to Solder Heat (RSH)	Temperature of solder pot = 260 ±5°C Time for dipping in solder = 10 +2/-0 Sec	1 CYCLE	0/30 PCS	3 LOTS PASS
4	Solder ability (SD)	Temperature of solder pot = 245 ±5°C Time for dipping in solder = 5 ±0.5 Sec	1 CYCLE	0/10 PCS	3 LOTS PASS
5	Intermittent Forward Operation Life (IFOL)	△Tj ≥ 100°C Power On: 120 sec Power Off: 120 sec	15000 CYCLES	0/77 PCS	3 LOTS PASS
6	High Temperature Reverse Bias (HTRB)	Ta = 150°C , VR = 80%VB, DC supply	1000 HOURS	0/77 PCS	3 LOTS PASS
7	High Temperature Gate Bias (HTGB)	Tj ≤ Tj max, 100%VGS	1000 HOURS	0/77 PCS	3 LOTS PASS
8	Autoclave (AC)	Ta = 121°C, P = 29.7psia ,100%RH	96 HOURS	0/77 PCS	3 LOTS PASS
9	Temperature Humidity Storage (THS)	Ta = 85°C , RH = 85%	1000 HOURS	0/77 PCS	3 LOTS PASS

- **ELECTRICAL CHARACTERISTICS SUMMARY:**

There is no change to the product electrical specifications.

- **SAMPLES NEED :**

Contact your local PANJIT sales representative.

- **TECHNICAL CONTACT :**

E-mail: jwchen@panjit.com.tw

- **FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact your local PANJIT sales representative.

- **ADDITIONAL RELIABILITY :**

Contact your local PANJIT sales representative.

- **CHANGED PART IDENTIFICATION :**

The tracking of 1st delivery after change can be identified by production lot number. Please contact your local sales for tracking lot number.

Please refer to below Lot number rule:

Lot number: **4924XXXXX**.

1st digit "4" denotes Year 2024.

2nd digit "9" denotes September.

3rd and 4th digits denote Day.

From 5th digits (XXXXX) denotes production serial number.



PANJIT International Inc.
NO.24 Gangshan N. Rd., Gangshan Dist., Kaohsiung City 82063, Taiwan.
TEL:886-7-621-3121 FAX:886-7-621-3129 Website: www.panjit.com.tw

Customer Acknowledgement Form

(To be filled out by the customer and returned to HQBU of PANJIT)

The indicated Customer Notification letter was received and acknowledged by the undersigned authority.

Company Name : _____

Customer Name : _____(Signature) Date : _____

PCN Number : PCN#2401002

Approval for the Product/Process change: ☐Yes ☐No

Comments/Additional requests:

Thanks for your attention on this matter. Please return the acknowledgment form to your local PANJIT sales representative.

Please note that no objection within 30 days upon receiving will be deemed as being accepted and agreed with this Process Change Notification.

Customer	End customer	PANJIT part number
PANJIT AMERICAS, INC.	SCI-KUNSHAN	PJA3430_R1_00001
PANJIT AMERICAS, INC.	JABIL INDUSTRIAL DO BRASIL LTDA	PJA3404_R1_00001
PANJIT AMERICAS, INC.	JABIL CIRCUIT DE MEXICO	PJA3407_R1_00001
PANJIT AMERICAS, INC.	TROMBETTA ELECTRONICS	PJA3471_R1_00001
PANJIT AMERICAS, INC.	INTELBRAS S/A	PJA3415_R1_00001
PANJIT AMERICAS, INC.	INTELBRAS S/A	PJA3409_R1_00001
PANJIT AMERICAS, INC.	EASTEK INTERNATIONAL CORPORATION	PJA3416_R1_00001
PANJIT AMERICAS, INC.	AMERICA II ELECTRONICS, INC.	PJA3412_R1_00001
PANJIT AMERICAS, INC.	AMERICA II ELECTRONICS, INC.	PJA3433_R1_00001
PANJIT AMERICAS, INC.	AMERICA II ELECTRONICS, INC.	PJA3422_R1_00001
PANJIT AMERICAS, INC.	RUTRONIK INC.	PJA3415_R1_00001
PANJIT AMERICAS, INC.	RUTRONIK INC.	PJA3413_R1_00001
PANJIT AMERICAS, INC.	JFL EQUIPAMENTOS ELETRONICOS INDUSTRIA e COMERCIO LTDA	PJA3411_R1_00001
PANJIT AMERICAS, INC.	JFL EQUIPAMENTOS ELETRONICOS INDUSTRIA e COMERCIO LTDA	PJA3460_R1_00001
PANJIT AMERICAS, INC.	ITECH COM IMP EXP COMP ELETR LTDS	PJA3404_R1_00001
PANJIT AMERICAS, INC.	ITECH COM IMP EXP COMP ELETR LTDS	PJA3422_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3430_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3431_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3401_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3402_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3411_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3412_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3415_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3413_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3400_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3416_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3407_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3403_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3405_R1_00001

PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3409_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3404_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3406_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3432_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3433_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3415AE_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3440_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3441_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3419_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3449_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3415A_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3416AE_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3460_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3461_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3401A_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3404A_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3471_R1_00001
PANJIT AMERICAS, INC.	DIGI-KEY ELECTRONICS	PJA3470_R1_00001

PANJIT part number for MBU3	TYPE	PACKAGE	FUNCTION
PJA3430_R1_00501	PJA3430	SOT-23	MOSFET
PJA3404_R1_00501	PJA3404	SOT-23	MOSFET
PJA3407_R1_00501	PJA3407	SOT-23	MOSFET
PJA3471_R1_00501	PJA3471	SOT-23	MOSFET
PJA3415_R1_00501	PJA3415	SOT-23	MOSFET
PJA3409_R1_00501	PJA3409	SOT-23	MOSFET
PJA3416_R1_00501	PJA3416	SOT-23	MOSFET
PJA3412_R1_00501	PJA3412	SOT-23	MOSFET
PJA3433_R1_00501	PJA3433	SOT-23	MOSFET
PJA3422_R1_00501	PJA3422	SOT-23	MOSFET
PJA3415_R1_00501	PJA3415	SOT-23	MOSFET
PJA3413_R1_00501	PJA3413	SOT-23	MOSFET
PJA3411_R1_00501	PJA3411	SOT-23	MOSFET
PJA3460_R1_00501	PJA3460	SOT-23	MOSFET
PJA3404_R1_00501	PJA3404	SOT-23	MOSFET
PJA3422_R1_00501	PJA3422	SOT-23	MOSFET
PJA3430_R1_00501	PJA3430	SOT-23	MOSFET
PJA3431_R1_00501	PJA3431	SOT-23	MOSFET
PJA3401_R1_00501	PJA3401	SOT-23	MOSFET
PJA3402_R1_00501	PJA3402	SOT-23	MOSFET
PJA3411_R1_00501	PJA3411	SOT-23	MOSFET
PJA3412_R1_00501	PJA3412	SOT-23	MOSFET
PJA3415_R1_00501	PJA3415	SOT-23	MOSFET
PJA3413_R1_00501	PJA3413	SOT-23	MOSFET
PJA3400_R1_00501	PJA3400	SOT-23	MOSFET
PJA3416_R1_00501	PJA3416	SOT-23	MOSFET
PJA3407_R1_00501	PJA3407	SOT-23	MOSFET
PJA3403_R1_00501	PJA3403	SOT-23	MOSFET
PJA3405_R1_00501	PJA3405	SOT-23	MOSFET

PJA3409_R1_00501	PJA3409	SOT-23	MOSFET
PJA3404_R1_00501	PJA3404	SOT-23	MOSFET
PJA3406_R1_00501	PJA3406	SOT-23	MOSFET
PJA3432_R1_00501	PJA3432	SOT-23	MOSFET
PJA3433_R1_00501	PJA3433	SOT-23	MOSFET
PJA3415AE_R1_00501	PJA3415AE	SOT-23	MOSFET
PJA3440_R1_00501	PJA3440	SOT-23	MOSFET
PJA3441_R1_00501	PJA3441	SOT-23	MOSFET
PJA3419_R1_00501	PJA3419	SOT-23	MOSFET
PJA3449_R1_00501	PJA3449	SOT-23	MOSFET
PJA3415A_R1_00501	PJA3415A	SOT-23	MOSFET
PJA3416AE_R1_00501	PJA3416AE	SOT-23	MOSFET
PJA3460_R1_00501	PJA3460	SOT-23	MOSFET
PJA3461_R1_00501	PJA3461	SOT-23	MOSFET
PJA3401A_R1_00501	PJA3401A	SOT-23	MOSFET
PJA3404A_R1_00501	PJA3404A	SOT-23	MOSFET
PJA3471_R1_00501	PJA3471	SOT-23	MOSFET
PJA3470_R1_00501	PJA3470	SOT-23	MOSFET