

PRODUCT / PROCESS CHANGE NOTIFICATION

Generic Announcement

PCN#2511005-AU • DATE: 28th November, 2025

PCN Subject: Additional Assembly Site for SOT-23 and SOT-363 Series Automotive Products

• **PCN Change Category:**

- ☒ **Material**

 ☐ **Process**

 ☐ **Data sheet / Specification**
☐ **Reliability**
☒ **Others (Additional Assembly Site)**

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

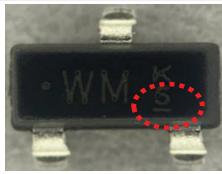
In order to respond to customer requirements, PANJIT will qualify PANJIT Semiconductor (Xuzhou) Co., Ltd. (located in Jiangsu Province, China) as an alternate assembly and test site for selected SOT-23 and SOT-363 automotive products.

PANJIT Semiconductor (Xuzhou) Co., Ltd. has developed mature production capabilities for SOT-23 and SOT-363 automotive products, which will enhance our supply and service capabilities. Products manufactured at PANJIT Semiconductor (Xuzhou) Co., Ltd. are form, fit, and function compatible with those from the currently qualified sites.

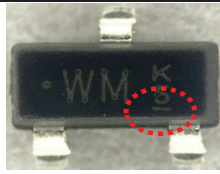
As part of the qualification process for PANJIT Semiconductor (Xuzhou) Co., Ltd., suppliers of key materials used in production, including the wafer, lead frame, die attach process, wire, epoxy molding compound, carrier tape, and ending tape, have also been qualified to ensure consistent quality and performance. In addition, due to the change of wafer suppliers, die size variations may occur accordingly. For more details, please refer to the change information below.

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.

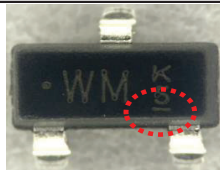
• **Change Information:**

Comparison			Table 1	
			Current	Add
Assembly Site			PANJIT International Inc.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Production Site Location			Kaohsiung, Taiwan	Xuzhou, China
Package			SOT-23	
Material	Lead Frame	Material	Copper Alloy 42	Alloy 42 (Full Cu Plating)
	Die Attach	Process	Eutectic	
	Wire	Material / Diameter *Number	RB491D-AU: Cu / 2.4mil*2	Cu / 1.5mil*3
		Material / Diameter	Au / 1.0mil Ag / 1.0mil Cu / 1.0mil	Cu / 1.0mil Cu / 1.0mil Cu / 1.0mil
	Epoxy Molding Compound	Product Name	EME-G600FL ELER-8-500C	GR640HV-Series
	Ending Tape	Material	Polyester	Paper
		Color	Black	Yellow
Form	Marking Format			 Add bar "-" for new assembly site

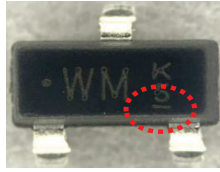
• **Change Information:**

Comparison			Table 2	
			Current	Add
Assembly Site			PANJIT International Inc.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Production Site Location			Kaohsiung, Taiwan	Xuzhou, China
Package			SOT-23	
Material	Wafer	Supplier	Phenitex semiconductor Corp.	Jiangsu Xinshun Microelectronics Co., Ltd.
		Die Size	250*270 (μm) ~ 660*660 (μm)	300*300 (μm) ~ 620*620 (μm)
	Lead Frame	Material	Copper Alloy 42	Alloy 42 (Full Cu Plating)
	Die Attach	Process	MMBT5551-AU: Epoxy (84-1LMISR4)	Eutectic
			Other Products: Eutectic	
	Wire	Material / Diameter	Au / 1.0mil Ag / 1.0mil	Cu / 0.8mil & 1.0mil Cu / 0.8mil & 1.0mil
	Epoxy Molding Compound	Product Name	EME-G600FL	GR640HV-Series
	Ending Tape	Material	Polyester	Paper
		Color	Black	Yellow
Form	Marking Format			 Add bar "-" for new assembly site

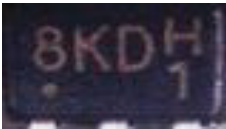
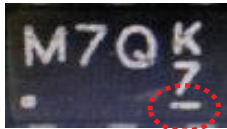
• **Change Information:**

Comparison			Table 3	
			Current	Add
Assembly Site			PANJIT International Inc.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Production Site Location			Kaohsiung, Taiwan	Xuzhou, China
Package			SOT-23	
Material	Wafer	Supplier	Phenitex semiconductor Corp.	Pynmax Technology CO., LTD
		Die Size	300*300 (μm)	310*310 (μm)
	Lead Frame	Material	Copper	Alloy 42 (Full Cu Plating)
	Die Attach	Process	Eutectic	
	Wire	Material / Diameter	Cu / 1.0mil	
	Epoxy Molding Compound	Product Name	EME-G600FL	GR640HV-Series
	Ending Tape	Material	Polyester	Paper
		Color	Black	Yellow
Form	Marking Format			 Add bar "-" for new assembly site

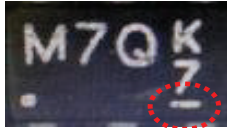
• **Change Information:**

Comparison			Table 4	
			Current	Add
Assembly Site			PANJIT International Inc.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Production Site Location			Kaohsiung, Taiwan	Xuzhou, China
Package			SOT-23	
Material	Wafer	Supplier	Mosel Vitelic Inc. Vanguard International Semiconductor Corp.	Wuxi CRM Microelectronics Technology Co., Ltd.
		Die Size	360*360 (μm) 365*365 (μm)	314*314 (μm) 365*365 (μm)
	Lead Frame	Material	Copper Alloy 42	Alloy 42 (Full Cu Plating)
	Die Attach	Process	Eutectic	
	Wire	Material / Diameter	Cu / 1.0mil	Cu / 0.8mil & 1.0mil
	Epoxy Molding Compound	Product Name	EME-G600FL ELER-8-500C	GR640HV-Series
	Ending Tape	Material	Polyester	Paper
		Color	Black	Yellow
Form	Marking Format			 Add bar "-" for new assembly site

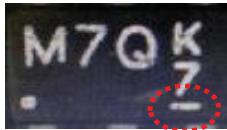
• **Change Information:**

Comparison			Table 5	
			Current	Add
Assembly Site			PANJIT International Inc.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Production Site Location			Kaohsiung, Taiwan	Xuzhou, China
Package			SOT-363	
Material	Lead Frame	Material	Copper Alloy 42	Alloy 42 (Full Cu Plating)
	Die Attach	Process	Eutectic	
	Wire	Material / Diameter	Cu / 0.8mil & 1.0mil	
	Epoxy Molding Compound	Product Name	EME-G600FL	KHG500
	Ending Tape	Material	Polyester	Paper
		Color	Black	Yellow
Form	Marking Format			 Add bar "-" for new assembly site

• **Change Information:**

Comparison			Table 6	
			Current	Add
Assembly Site			PANJIT International Inc.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Production Site Location			Kaohsiung, Taiwan	Xuzhou, China
Package			SOT-363	
Material	Wafer	Supplier	Phenitex semiconductor Corp.	Jiangsu Xinshun Microelectronics Co., Ltd.
		Die Size	250*270 (μm) ~ 490*490 (μm)	300*300 (μm) ~ 460*460 (μm)
	Lead Frame	Material	Copper Alloy 42	Alloy 42 (Full Cu Plating)
	Die Attach	Process	Eutectic	
	Wire	Material / Diameter	Au / 1.0mil Ag / 1.0mil	Cu / 0.8mil & 1.0mil Cu / 0.8mil & 1.0mil
	Epoxy Molding Compound	Product Name	EME-G600FL ELER-8-500C	KHG500
	Ending Tape	Material	Polyester	Paper
		Color	Black	Yellow
Form	Marking Format			 Add bar “-” for new assembly site

• **Change Information:**

Comparison			Table 7	
			Current	Add
Assembly Site			PANJIT International Inc.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Production Site Location			Kaohsiung, Taiwan	Xuzhou, China
Package			SOT-363	
Material	Wafer	Supplier	Vanguard International Semiconductor Corp.	Wuxi CRM Microelectronics Technology Co., Ltd.
		Die Size	365*365 (μm) 365*365 (μm)	314*314 (μm) 365*365 (μm)
	Lead Frame	Material	Alloy 42	Alloy 42 (Full Cu Plating)
	Die Attach	Process	Eutectic	
	Wire	Material / Diameter	Cu / 1.0mil	Cu / 0.8mil & 1.0mil
	Epoxy Molding Compound	Product Name	ELER-8-500C	KHG500
	Ending Tape	Material	Polyester	Paper
		Color	Black	Yellow
Form	Marking Format			 Add bar “_” for new assembly site

- **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.

- **Effective Date** : 28th May, 2026

● **Affected Product Type:**

Table 1					
Current Material / Diameter	Add Material / Diameter	Function: MOSFET			
Cu / 1.0 mil		BSS123-AU	BSS84-AU	BSS84E-AU	PJA3428-AU
		PJA3434-AU	PJA3435-AU	PJA3436-AU	PJA3438-AU
		PJA3439-AU	PJA3472B-AU	PJA3476-AU	
Current Material / Diameter	Add Material / Diameter	Function: SCHOTTKY			
Cu / 1.0 mil		BAS40A-AU	BAS40-AU	BAS40C-AU	BAS40S-AU
		BAT54A-AU	BAT54-AU	BAT54C-AU	BAT54S-AU
		BAT54SG-AU	SBA0520CA-AU	SBA0530CA-AU	SBA0540CA-AU
Current Material / Diameter * Number	Add Material / Diameter * Number	Function: SCHOTTKY			
Cu / 2.4 mil * 2	Cu / 1.5 mil * 3	RB491D-AU			
Current Material / Diameter	Add Material / Diameter	Function: Small Signal Switching Diodes			
Au / 1.0 mil	Cu / 1.0 mil	MMBD3004C-AU			
Cu / 1.0 mil		BAL99-AU	BAS116-AU	BAS16-AU	BAS19-AU
		BAS20-AU	BAS21-AU	BAS21C-AU	BAV170-AU
		BAV199-AU	BAV70-AU	BAV99-AU	BAW156-AU
		BAW56-AU	MMBD4148-AU	MMBD7000-AU	
Current Material / Diameter	Add Material / Diameter	Function: ESD Protection			
Ag / 1.0 mil	Cu / 1.0 mil	PJSOT15-AU	PJSOT36-AU		
Au / 1.0 mil	Cu / 1.0 mil	PE4105C2A-AU	PJMBZ15V-AU	PJMBZ27V-AU	PJSOT05C-02-AU
Cu / 1.0 mil		PE4305C2A-AU	PE4309C2A-AU	PE4312C2A-AU	PE4315C2A-AU
		PE4318C2A-AU	PE4322C2A-AU	PE4324C2A-AU	PE4336C2A-AU
		PE9180C1A-AU	PEC3808C2A-AU	PEC3812C2A-AU	PEC3815C2A-AU
		PEC3824C2A-AU	PEC3836C2A-AU		

• **Affected Product Type:**

Table 1					
Current Material / Diameter	Add Material / Diameter	Function: ZENER Diodes			
Cu / 1.0 mil		AZ23C10-AU	AZ23C12-AU	AZ23C15-AU	AZ23C18-AU
		AZ23C20-AU	AZ23C22-AU	AZ23C24-AU	AZ23C27-AU
		AZ23C36-AU	AZ23C3V3-AU	AZ23C4V7-AU	AZ23C5V1-AU
		AZ23C5V6-AU	AZ23C6V2-AU	AZ23C7V5-AU	BZX84B10-AU
		BZX84B11-AU	BZX84B12-AU	BZX84B13-AU	BZX84B14-AU
		BZX84B15-AU	BZX84B16-AU	BZX84B18-AU	BZX84B20-AU
		BZX84B22-AU	BZX84B24-AU	BZX84B27-AU	BZX84B2V4-AU
		BZX84B2V7-AU	BZX84B30-AU	BZX84B33-AU	BZX84B36-AU
		BZX84B39-AU	BZX84B3-AU	BZX84B3V3-AU	BZX84B3V6-AU
		BZX84B3V9-AU	BZX84B43-AU	BZX84B4V3-AU	BZX84B4V7-AU
		BZX84B5V1-AU	BZX84B5V6-AU	BZX84B6V2-AU	BZX84B6V8-AU
		BZX84B7V5-AU	BZX84B8V2-AU	BZX84B9V1-AU	BZX84C10-AU
		BZX84C11-AU	BZX84C12-AU	BZX84C13-AU	BZX84C14-AU
		BZX84C15-AU	BZX84C16-AU	BZX84C17-AU	BZX84C18-AU
		BZX84C20-AU	BZX84C22-AU	BZX84C24-AU	BZX84C27-AU
		BZX84C2V4-AU	BZX84C2V7-AU	BZX84C30-AU	BZX84C33-AU
		BZX84C36-AU	BZX84C39-AU	BZX84C3-AU	BZX84C3V3-AU
		BZX84C3V6-AU	BZX84C3V9-AU	BZX84C43-AU	BZX84C47-AU
		BZX84C4V3-AU	BZX84C4V7-AU	BZX84C56-AU	BZX84C5V1-AU
		BZX84C5V6-AU	BZX84C68-AU	BZX84C6V2-AU	BZX84C6V8-AU
		BZX84C75-AU	BZX84C7V5-AU	BZX84C8V2-AU	BZX84C8V7-AU
		BZX84C9V1-AU	DZ23C27-AU	MMBZ5228B-AU	MMBZ5230B-AU
		MMBZ5231B-AU	MMBZ5232B-AU	MMBZ5234B-AU	MMBZ5239B-AU
		MMBZ5240B-AU	MMBZ5242B-AU	MMBZ5243B-AU	MMBZ5244B-AU
		MMBZ5245B-AU	MMBZ5246B-AU	MMBZ5248B-AU	MMBZ5250B-AU
		MMBZ5254B-AU	MMBZ5256B-AU	MMBZ5262B-AU	

• **Affected Product Type:**

Table 2					
Current Material / Diameter	Add Material / Diameter	Function: Bipolar Junction Transistors			
Ag / 1.0 mil	Cu / 0.8 mil	BC846A-AU	BC846B-AU	BC847A-AU	BC847B-AU
		BC847C-AU	BC848A-AU	BC848B-AU	BC848C-AU
		BC849B-AU	BC849C-AU	BC850B-AU	BC850C-AU
		BC856B-AU	BC857B-AU	BC858C-AU	BC859B-AU
		BC859C-AU			
Ag / 1.0 mil	Cu / 1.0 mil	BC807-16-AU	BC807-25-AU	BC807-40-AU	BC817-16-AU
		BC817-25-AU	BC817-40-AU	MMBT2907A-AU	MMBT4401-AU
		MMBT5401-AU			
Au / 1.0 mil	Cu / 0.8 mil	BC856A-AU	BC857A-AU	BC857C-AU	BC858A-AU
		BC858B-AU	MMBT3904-AU	MMBT3906-AU	MMBTA42-AU
		MMBTA92-AU			
Au / 1.0 mil	Cu / 1.0 mil	MMBT2222A-AU	MMBT5551-AU	MMBTA05-AU	MMBTA06-AU
		MMBTA55-AU	MMBTA56-AU	2SC2411K-AU	

Table 3					
Current Material / Diameter	Add Material / Diameter	Function: SCHOTTKY			
Cu / 1.0 mil		BAS70A-AU	BAS70-AU	BAS70C-AU	BAS70S-AU

Table 4					
Current Material / Diameter	Add Material / Diameter	Function: MOSFET			
Cu / 1.0 mil	Cu / 0.8 mil	PJA138K-AU			
Cu / 1.0 mil		2N7002K-AU	BSS138-AU		

Table 5					
Current Material / Diameter	Add Material / Diameter	Function: MOSFET			
Cu / 0.8 mil		PJT7802-AU			
Cu / 1.0 mil		BSS84DW-AU	PJT7604-AU	PJT7605-AU	PJT7839-AU

• **Affected Product Type:**

Table 6					
Current Material / Diameter	Add Material / Diameter	Function: Bipolar Junction Transistors			
Ag / 1.0 mil	Cu / 0.8 mil	BC846BPN-AU	BC847BPN-AU	BC856BS-AU	BC857BS-AU
		BC857CS-AU	DMMT3904W-AU	MMDT2227A-AU	DMMTM3904W-AU
Au / 1.0 mil	Cu / 0.8 mil	BC846AS-AU	BC846BS-AU	BC847AS-AU	BC847BS-AU
		BC847CPN-AU	BCM847BS-AU	DMMT3906W-AU	MMDT3906-AU
Au / 1.0 mil	Cu / 1.0 mil	MMDT5551-AU			

Table 7					
Current Material / Diameter	Add Material / Diameter	Function: MOSFET			
Cu / 1.0 mil	Cu / 0.8 mil	PJT138K-AU			
Cu / 1.0 mil		2N7002KDW-AU			

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

Product reliability test result: PASS

No.	DESCRIPTION	TEST CONDITION	DURATION	FAILURE RATE	
1	High Temperature Reverse Bias (HTRB)	$T_j = T_j \text{ max}$, $V = 100\%VR$, DC supply	1000 HOURS	0/77 PCS	3 Lots Pass
2	Temperature Cycling (TCT)	$T_a = -55^\circ\text{C} \sim +150^\circ\text{C}$ (2 cycles / Hour)	1000 CYCLES	0/77 PCS	3 Lots Pass
3	Autoclave (AC)	$T_a = 121^\circ\text{C}$, $P = 15\text{psig}$,100%RH	96 HOURS	0/77 PCS	3 Lots Pass
4	Intermittent Operational Life (IOL)	$\Delta T_j \geq 100^\circ\text{C}$ Power On: 120 sec Power Off: 120 sec	15000 CYCLES	0/77 PCS	3 Lots Pass
5	Resistance to Solder Heat (RSH)	Temperature of solder pot = $260 \pm 5/-0^\circ\text{C}$ Time for dipping in solder = $10 \pm 2/-0$ Sec	1 CYCLE	0/30 PCS	3 Lots Pass
6	Solderability (SD)	Temperature of solder pot = $245 \pm 5^\circ\text{C}$ Time for dipping in solder = 5 ± 0.5 Sec	1 CYCLE	0/10 PCS	3 Lots Pass
7	High Humidity High Temp. Reverse Bias(H3TRB)	$T_a = 85^\circ\text{C} \pm 2^\circ\text{C}$ RH = 85% $\pm 5\%$ $V = 80\%VR$ DC Supply	1000 HOURS	0/77 PCS	3 Lots Pass
8	High Temperature Gate Bias (HTGB)	$T_j \leq T_j \text{ max}$, $100\%V_{GS}$	1000 HOURS	0/77 PCS	3 Lots Pass

• **ELECTRICAL CHARACTERISTICS SUMMARY:**

There is no change to the product electrical specifications.

• **SAMPLES REQUEST :**

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: **6524XXXXX**.

1st digit "6" denotes Year 2026.

2nd digit "5" denotes May.

3rd and 4th digits denote Day.

Lot number: **6 5 2 4 X X X X X**

1st digit "6" denotes Year

2nd digit "5" denotes May.

3rd and 4th digits denote Day.

Denotes the 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#2511005-AU

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

Comments/Additional requests:

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

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

Dear Team,

Please distribute to sales and customers.

The affected part no. starts with "BAS40S-AU" in prefix.

BAS40S-AU

BAS40S-AU-R1-005A1

Best Regards,



Capacitors
Circuit Protection
Connectors
Discretes
Electromagnetic
Electromechanical
Optoelectronics
Power
Resistors
Sensors



Heidi Yeung
Product Manager
TTI, Inc.

Office: +852 3658 4948 (direct phone number)

Branch: +852 3658 4700 x4948

Location: Hong Kong

heidi.yeung@ttiinc.com

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