

PRODUCT / PROCESS CHANGE NOTIFICATION

Generic Announcement

PCN#2508001 • DATE: 5th August, 2025

PCN Subject: Change Assembly Site for Package DFN1006-2L Products.

• **PCN Change Category:**

- ☒ **Material**

 ☐ **Process**

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

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

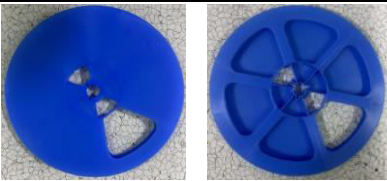
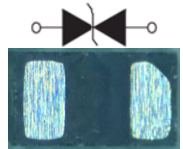
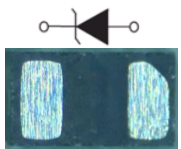
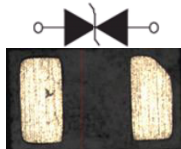
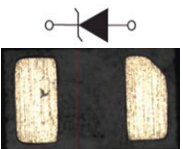
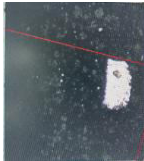
In order to respond to customer requirements, PANJIT will transfer the production of DFN1006-2L products from Carsem Semiconductor (Suzhou) Co., Ltd. to PANJIT Semiconductor (Xuzhou) Co., Ltd. (located in Jiangsu Province, China).

PANJIT Semiconductor (Xuzhou) Co., Ltd. has developed mature production capabilities for DFN1006-2L 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.

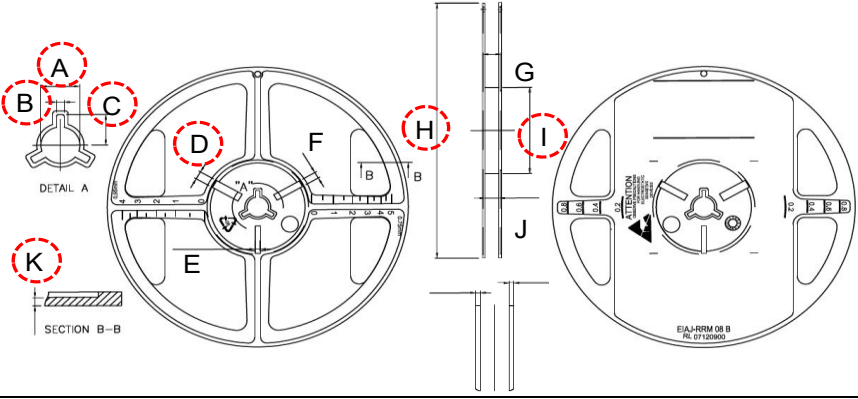
As part of the qualification process for PANJIT Semiconductor (Xuzhou) Co., Ltd., suppliers of key materials used in production, including the lead frame, die attach, wire, carrier tape, and ending tape, have also been qualified to ensure consistent quality and performance. For more details, please refer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

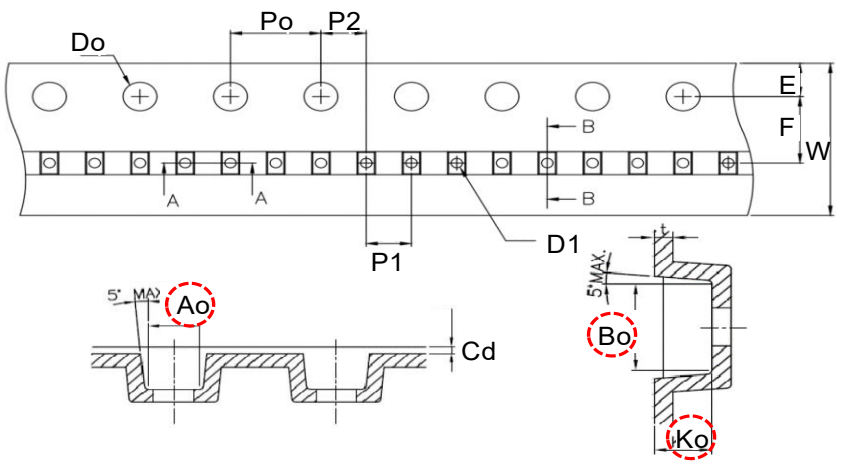
We recommend that you acknowledge receipt of this notification within 30 days of this PCN date. If you require samples for further evaluation, please feel free to contact your local sales representative and make a request. We are always pleased to serve you at any time.

● **Change Information:**

Comparison			From (Current)	Change to (New)
Assembly Site			Carsem Semiconductor (Suzhou) Co., Ltd.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Production Site Location			Suzhou, China	Xuzhou, China
Package			DFN1006-2L	
Packing			10 kpcs / reel	
Material	Lead Frame	Material	Copper (NiPdAu plated)	
	Die Attach (Epoxy)	Product Name	8008CSM	DA-5002BG-6
	Wire	Material / Diameter (mil)	Au / 0.7 Au / 0.8	PdAuCu / 0.8
	Ending Tape	Material	Polyester	Paper
		Color	White	Yellow
	Blue Anti-Static Plastic Reel			
Form	Marking Format		 	  Add bar "-" for new assembly site
	Bottom View		  Lead color: Gold	  Lead color: Gold
	Side View			

● **Change Information:**

Comparison	From (Current)	Change to (New)
Assembly Site	Carsem Semiconductor (Suzhou) Co., Ltd.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Package	DFN1006-2L	
Reel (7")		
Symbol (mm)	Dimension	
A	13.1±0.2	13±0.2
B	1.1±0.2	2±0.5
C	16.84±0.2	11
D	4.2±0.5	5±0.5
H	180±2	178±1.0
I	60±1	59.5±1.0
K	1.25	1.2

Comparison	From (Current)	Change to (New)
Assembly Site	Carsem Semiconductor (Suzhou) Co., Ltd.	PANJIT Semiconductor (Xuzhou) Co., Ltd.
Package	DFN1006-2L	
Carrier Tape		
Symbol (mm)	Dimension	
Ao	0.65±0.04	0.69±0.05
Bo	1.05±0.04	1.19±0.05
Ko	0.61±0.04	0.63±0.05

- **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.

- **Affected Product Type:**

Wire Material	Wire Diameter (mil)	Function: ESD Protection		
Au	0.7	PEC3202M1Q	PEC3203M1Q	PEC3205M1Q
Wire Material	Wire Diameter (mil)	Function: ESD Protection		
Au	0.8	PEC3112M1Q	PE3212M1Q	

- **Effective Date : 5th November, 2025**

➤ **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)	$T_j = T_j \text{ max}$, $V = 80\% V_R$, 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 ± 1 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(H ³ TRB)	$T_a = 85^\circ\text{C} \pm 2^\circ\text{C}$ RH = 85% $\pm 5\%$ $V = 80\% V_R$ DC Supply	1000 HOURS	0/77 PCS	3 Lots Pass
8	Highly Accelerated Stress Test (HAST)	$T_a = 130^\circ\text{C}$, 85%RH, $80\% V_R$	96 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: **5N24XXXXX**.

1st digit "5" denotes Year 2025.

2nd digit "N" denotes November.

3rd and 4th digits denote Day.

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

1st digit "5" denotes Year 2025.

2nd digit "N" denotes November.

3rd and 4th digits denote Day.

Denotes the production serial number.

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#2508001

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.

Function	Type	Package	料號(5類)(Carsem)	MBU3料號(5類)
TVS/ESD	PEC3112M1Q	DFN1006-2L	PEC3112M1Q_R1_00001	PEC3112M1Q_R1_00501
TVS/ESD	PEC3202M1Q	DFN1006-2L	PEC3202M1Q_R1_00201	PEC3202M1Q_R1_00501
TVS/ESD	PEC3203M1Q	DFN1006-2L	PEC3203M1Q_R1_00201	PEC3203M1Q_R1_00501
TVS/ESD	PEC3205M1Q	DFN1006-2L	PEC3205M1Q_R1_00201	PEC3205M1Q_R1_00501
TVS/ESD	PE3212M1Q	DFN1006-2L	PE3212M1Q_R1_00001	PE3212M1Q_R1_00501