



145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824
www.centalsemi.com
<mailto:processchange@centalsemi.com>

PCN #181_Rev 1

Revision 1 Notification Date: April 27, 2020
Original Notification Date: March 3, 2020

<https://www.centalsemi.com/process-change-notice>

Product / Process Change Notice

Revision 1 April 27, 2020: Issued to include additional devices not on the initial PCN. Newly added devices are shown below marked with an asterisk*.

Parts Affected:

The following TO-92 products are affected:

Part Numbers:

MPS6507	MPS6511	MPS6541	PN3563
PN3563-18	PN3563-5	PN5127	PN5130
PN5130-18	PN5132	PN918	2N5770
CEN553	CEN758	CEN1280*	PN4091*
PN4092*	PN4093*	PN4391*	PN4392*
PN4393*	CEN1292*	CEN1414*	CEN554*
CEN811*	CEN888*	CEN976*	MPS3704*
MPS3706*	MPS6531*	MPS6532*	PN3566*
PN3569*	PN3642*	PN3643*	PN5135*
PN5136*	PN5816*	PN5818*	2N3704*
2N4400*	2N5225*	PN5137*	

Extent of Change:

Silver epoxy die attach process has been qualified as an additional die attach method for the devices above.

Reason for Change:

This change will help insure an uninterrupted flow of product and provide increased supply chain management flexibility.

Effect of Change

This change does not affect the form, fit, or function of the devices.

<https://www.centrasemi.com/process-change-notices>

Qualification:

P/N: 2N5770

Package: TO-92

No.	Test	Conditions (Reference standards are in bold)	Qty	Pass/Fail	Test Results
1	Device Life Tests				
a	High Temperature Reverse Bias (HTRB)	T=125°C, t = 1000 hours Bias Conditions per Device Datasheet JESD22-A108	77	Pass	77/77
b	High Temperature Storage Life (HTSL)	T=150°C, t = 1000 hours JESD22-A103	77	Pass	77/77
C	Thermal Shock	100 cycles, dwell time = 5 min, -65°C to +150°C, max transfer time = 20 sec. JESD22-A106	77	Pass	77/77
D	Temperature Cycling (TC)	-65°C to +150°C, T _{dwell} = 15min, 1000 cycles MIL-STD-750 TM1051	77	Pass	77/77
E	Die Shear	Apply force sufficient to shear the die from its mounting. MIL-STD-750 TM2017, Condition A	5	Pass	5/5
F	Resistance To Solder Shock	Pb free: T =270°C ±5°C, Dwell=7s +2/-0 Thru-hole devices submerge to case, JESD22-B106	5	Pass	5/5
G	Solderability	Steam Age: T=93°C +3/-5°C. Pb-free Dip: T=245°C +/-5°C, Dwell time = 5+/-0.5sec MIL-STD-750 TM2026	15	Pass	15/15
H	Temperature Humidity Bias (THB)	T = 85°C, RH = 85%, t = 1000 hrs JESD22-A101.	77	Pass	77/77
I	Autoclave	Temperature = 121°C ± 2°C; relative humidity = 100%; vapor pressure, 29.7 psia (15 psig), t = 96 hrs. JESD22-A102	77	Pass	77/77



145 Adams Avenue, Hauppauge, NY 11788 USA
 Tel: (631) 435-1110 • Fax: (631) 435-1824
www.centrasemi.com
<mailto:processchange@centrasemi.com>

PCN #181_Rev 1

Revision 1 Notification Date: April 27, 2020
Original Notification Date: March 3, 2020

<https://www.centrasemi.com/process-change-notices>

Effective Date of Change:

March 3, 2020

Sample Availability:

Please contact your salesperson or manufacturer’s representative for samples.

As per JEDEC standard JESD46, Customer Notification of Product/Process Changes by Solid-State Suppliers, a lack of acknowledgement of a PCN within thirty (30) days constitutes acceptance of the change.

The undersigned acknowledges and accepts Central Semiconductor’s Product/Process Change Notification (PCN).

Company Name:	
Address:	
Printed Name:	
Title:	
Signature:	
Date:	