

# Final Product/Process Change Notification Document #: FPCN22395X

Issue Date: 07 August 2018

Title of Change:	PIM 1200V Q0PACK & Q2PACK Alternate Assembly Site Qualification.		
Proposed first ship date:	14 November 2018 or earlier upon customer approval		
Contact information:	Contact your local ON Semiconductor Sales Office or < <u>way-shan.yong@onsemi.com</u> >.		
Samples:	Contact your local ON Semiconductor Sales Office or < PCN.samples@onsemi.com >.		
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < <a href="mailto:choonbae.Park@onsemi.com">choonbae.Park@onsemi.com</a> >.		
Type of notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change.  ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact < PCN.Support@onsemi.com>		
Change Part Identification:	Product date code WW40 onwards		
Change Category:	☐ Wafer Fab Change	Test Change Other	
Change Sub-Category(s):  ✓ Manufacturing Site Addition  ☐ Material Change  ☐ Manufacturing Site Transfer  ☐ Manufacturing Process Change		☐ Datasheet/Product Doc change ☐ Shipping/Packaging/Marking ☐ Other:	
Sites Affected:	ON Semiconductor Sites: ON Seremban, Malaysia	External Foundry/Subcon Sites: None	

## **Description and Purpose:**

This FPCN announces the addition of assembly site for PIM 1200V Q0PACK & Q2PACK to increase capacity and Mfg flexibility. The change is planned in adding 1 Onsemi Seremban. Onsemi Seremban is a qualified assembly and test site for PIM module.

Upon the expiration of this PCN, PIM 1200V Q0PACK & Q2PACK modules will be processed at Onsemi and Subcon (existing site) concurrently. These products will be qualified to industrial requirements.

## QOPACK:

Material to be changed	Before Change Description	After Change Description	
Bond Wire	TANW 12 mil with Ni doped	12 mil ALH11	
Glue	Material: Silicone Glue TSE-322	Material: DC 3-6265 HP (Black)	

#### Q2PACK:

Material to be changed	Before Change Description	After Change Description	
Solder Resist	Applied Solder Resist	No Solder Resist	
Bond Wire	TANW 12 mil with Ni doped	12 mil ALH11	
Base Plate	SDI Base Plate	Kobe Base Plate	
	3D1 Ba3C 1 Tate	SDI Base Plate (Alternate)	
Glue	Material: Silicone Glue TSE-322	Material: DC 3-6265 HP (Black)	

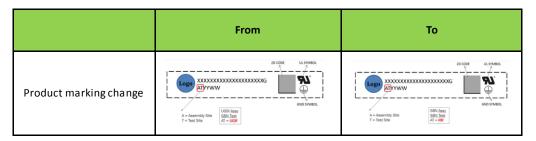
TEM001790 Rev. A Page 1 of 3



# Final Product/Process Change Notification Document #: FPCN22395X

Issue Date: 07 August 2018

### **Product Marking:**



## Reliability Data Summary:

QV DEVICE NAME : NXH80T120L2Q0S2G

NXH160T120L2Q2F2SG

PACKAGE: Q0Pack, Q2Pack and Qx platform (Die level test; HTRB, H3TRB)

Test	Specification	Condition	Interval	Results
HTRB (CN68)	JESD22-A108	Tj = 150°C for 1008 hours , Vce=520V	1008 Hrs	0/11
HTRB (CN75 FSII 384kGy)	JESD22-A108	Tj = 150°C for 1008 hours , Vce=520V	1008 Hrs	0/11
HTRB (DG6630)	JESD22-A108	Tj = 150°C for 1008 hours , Vce=520V	1008 Hrs	0/33
H3TRB (CN68)	JESD22-A101	Ta=85°C, 85% RH, 520V max	1008 Hrs.	0/11
H3TRB (CN75 FSII 385kGy)	JESD22-A101	Ta=85°C, 85% RH, 520V max	1008 Hrs.	0/11
H3TRB (DG6630)	JESD22-A101	Ta=85°C, 85% RH, 520V max	1008 Hrs.	0/33
TC (Q0Pack)	JESD22-A104	Ta = -40 to 125C	100 Cyc	0/11
TC (Q2Pack)	JESD22-A104	Ta = -40 to 125C	100 Cyc	0/11
SD (Q2Pack)	JESD22-B102	PbSn solder 215C,5S, - >Preconditioning (93C steam aging, 8H)		0/11
SD (Q2Pack)	JESD22-B102	Pb free solder 245C,5S, - >Preconditioning (93C steam aging, 8H)		0/11

<sup>\*\*\*</sup> DG6630 was first time to be assembled in SBN site so tested with 3 lots but the other die sets were already tested in other projects (QBS, Qual By Similarity) but they are tested with 1lot for confirming of 650V rating.

### **Electrical Characteristic Summary:**

Electrical Characteristic is not impacted by this change.

TEM001790 Rev. A Page 2 of 3



# Final Product/Process Change Notification Document #: FPCN22395X

Issue Date: 07 August 2018

List of Affected Parts:		
Part Number	Qualification Vehicle	
NXH80T120L2Q0S2G		
SNXH80T120L2Q0S2G	NXH80T120L2Q0S2G	
NXH80T120L2Q0S2TG	80T120L2Q0S2TG	
NXH160T120L2Q2F2SG	NXH160T120L2Q2F2SG	

TEM001790 Rev. A Page 3 of 3