

Littelfuse, Inc.
8755 West Higgins Road, Suite 500
Chicago, IL 60631 USA
(773) 628-1000
www.littelfuse.com

Feb 10, 2025

LFPCN-DI-BTA-2025-001/01

Product Change Notification for Littelfuse: Addition of in house second source for TO-268-3 Discrete IGBTs

To whom it may concern,

Littelfuse would like to notify you of a change in the backend manufacturing of the discrete IGBT parts listed in appendix C to Littelfuse's inhouse assembly unit SBU-Lipa, Philippines.

DESCRIPTION OF CHANGE:

1. Change in assembly house: SBU-Lipa as a new supplier and second source for TO-268-3 package.
Addition of in-house SBU-Lipa assembly house as a new supplier and a second source for TO-268-3 package shall ease out the capacity constraint with the existing OSAT and shall result in additional capacity. This shall help Littelfuse to support upcoming customer demands more effectively and efficiently.
2. Change in device marking: Details under **APPENDIX A**.
3. Change in inner box and tube label: Details under **APPENDIX A**.

Reliability data summary can be found under **APPENDIX B**.

Affected part number list can be found under **APPENDIX C**.

Form, fit, function changes: Littelfuse does not anticipate any change in form/fit/function of the affected part number/s.

Further changes, if any, shall be conveyed in a timely manner.

- Please acknowledge receipt of this PCN. In your acknowledgement, you can grant approval or request additional information.
- Littelfuse will assume the change is acceptable if no acknowledgement is received within 30 days from the date of this PCN. Lack of any additional response within 30 days of PCN issuance further constitutes acceptance of change.

Your prompt reply will help Littelfuse to assure a smooth and well executed transition.

Your attention and response to this matter is greatly appreciated.



If you have any additional questions or concerns, please contact me or your Regional Sales Manager.

Best Regards,

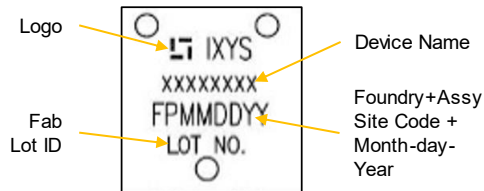
Rowena Dalisay,
Product Management Analyst
Discrete IGBTs
rdalisay@littelfuse.com

APPENDIX A: Comparison and Change Description

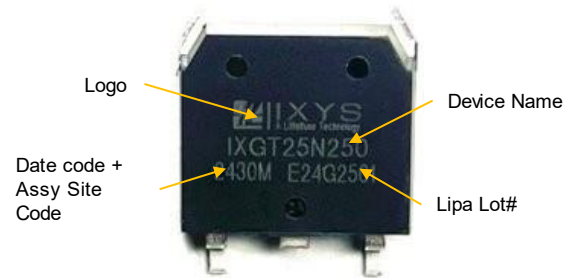
1. Comparison: Device Marking

Item	OSAT	Lipa	Change (Y/N)	Risk	Remarks
Logo			Y	Low	Change to Littelfuse Logo
Part name	Device Name	Device Name	N	No Risk	No change
Date Code	FPMDDYY	YYWW	N	No Risk	No change
Lot #	Fab lot #	Lipa Lot #	Y	Low	Lipa uses Lipa format . Wafer lot number is traceable thru Lipa MES system using the lot number
Assembly Line Code	P	M	Y	Low	Site location code

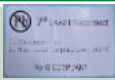
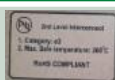


Existing OSAT



SBU Lipa Marking Format



2. Comparison: Inner Box and Tube

Item	Existing OSAT	SBU-Lipa	Change (Y/N)	Risk	Remarks
ROHS Label			N	Low	No Change
Logo			N	No Risk	No Change
Qty per Tube	30	30	N	No Risk	No Change
Qty per Box	300	300	N	No Risk	No change
Part Number	Yes	Yes	N	No Risk	No change
Lot No	Fab Lot ID	Lipa Lot ID format	Y	LOW	SBU-Lipa uses Lipa format
COO	Philippines	Philippines	N	No Risk	No change
Code Type	Barcode	Barcode + 2D Code	Y	LOW	Additional scanning code to access information
Date Code	None	YYMM	Y	No Risk	SBU-Lipa uses Lipa format + Assy Site Code

Change Description	Existing OSAT	SBU-Lipa
Inner Box Label	<p>Diagram of an inner box label. Callouts include: Catalog Part Number (pointing to PART NO: IXFB44N100P), FAB Lot ID (pointing to LOT NO: 9AKT2902F), Littelfuse-IXYS Logo (pointing to the company logos), Quantity (pointing to QUANTITY 19), Date Pack (pointing to DATE 10/05/19), and COO (pointing to ASSEMBLED IN PHILIPPINES).</p>	<p>Diagram of an inner box label. Callouts include: Qty per Box (pointing to Qty: 250), Littelfuse-IXYS Logo (pointing to the company logos), COO (pointing to the COO field), Lot # + 2-digit Box Sequential (pointing to Lot No: 23P10031100A), Catalog Part Number (pointing to Part: FUG000-100), Datecode + Plant Code (pointing to Date Code: 221001), and SAP Part Number (pointing to LP No: FUG000-100).</p>
Tube Label	<p>Diagram of a tube label. Callouts include: Catalog Part Number (pointing to PART NO: IXFB44N100P), FAB Lot ID (pointing to LOT NO: 9AKT2902F), Littelfuse-IXYS Logo (pointing to the company logos), Quantity (pointing to QUANTITY 19), Date Pack (pointing to DATE 10/05/19), and COO (pointing to ASSEMBLED IN PHILIPPINES).</p>	<p>Diagram of a tube label. Callouts include: Littelfuse-IXYS Logo (pointing to the company logos), COO (pointing to the COO field), Catalog Part Number (pointing to Part: FUG000-100), Lot # + 2-digit Box Sequential (pointing to Lot No: 23P10031100A), Qty per Tube (pointing to Qty: 25), Datecode (pointing to Date Code: 221001), and SAP Part Number (pointing to LP No: FUG000-100).</p>

There are no changes in the tape & reel, tube specifications/dimensions.

APPENDIX B: Reliability Data Summary

TEST	CONDITION	ENDPOINT	DEVICE	PACKAGE	RESULT
HTRB	MIL-STD-750-1 M1038 Method A; 125 °C	1000 hours	IXGT25N250	TO-268	0/60
HTGB	JESD22 A108; 150 °C	1000 hours	IXGT25N250	TO-268	0/58
Temperature Cycle	JESD22-A104 (-55°C to 150°C)	1000 cycles	IXGT25N250	TO-268	0/60
HAST	JESD22-A110 (130° C, 85% RH)	96 hours	IXGT25N250	TO-268	0/60
UHASt	JESD22-A118A; 130C 85% RH	96 hours	IXGT25N250	TO-268	0/60
IOL	MIL-STD-750-1 Method 1037; ΔT= 100C	15,000 cycles	IXGT25N250	TO-268	0/48

APPENDIX C: Part Number List

Sl No	Part Number	Sl No	Part Number
1	IXA12IF1200TC-TUB	22	IXGT24N170AH1
2	IXA4IF1200TC-TRL*	23	IXGT2N250
3	IXA4IF1200TC-TUB*	24	IXGT30N120B3D1
4	IXA4IF1200UZ-TRL*	25	IXGT32N120A3
5	IXBT10N170	26	IXGT32N120A3-TRL
6	IXBT12N300	27	IXGT32N170
7	IXBT16N170A	28	IXGT32N170-TRL
8	IXBT20N300	29	IXGT32N170A
9	IXBT24N170	30	IXGT40N120A2
10	IXBT2N250	31	IXGT40N120B2D1
11	IXBT2N250-TR	32	IXGT50N90B2D1
12	IXBT42N170	33	IXGT60N60C3D1
13	IXBT42N170-TRL	34	IXGT64N60B3-TRL
14	IXBT42N170A	35	IXGT6N170
15	IXBT6N170	36	IXGT6N170-TRL
16	IXGT10N170	37	IXGT6N170A
17	IXGT10N170A	38	IXGT6N170A-TRL
18	IXGT16N170	39	IXGT72N60A3
19	IXGT16N170A	40	IXGT72N60A3-TRL
20	IXGT16N170AH1	41	IXYT80N90C3
21	IXGT25N250-T/R	42	IXGT2N250

*Note: IXA4IF1200TC-TRL, IXA4IF1200TC-TUB and IXA4IF1200UZ-TRL are obsolete part. The last time buy quantity is being shipped.