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Control No. PCN-23144

April 25, 2023

### PRODUCT/PROCESS CHANGE NOTIFICATION

**TYPE OF CHANGE:**       Design       Manufacturing       Other: For Information Only

This notification is provided in accordance with Power Integrations policy of major change notification. If you have any questions or need further assistance, please contact your regional Power Integrations sales office.

#### DESCRIPTION OF CHANGE

An existing qualified leadframe supplier, Hua Yang, will be added as an alternative leadframe supplier for 170x240 mil leadframe to be used for the SMD-8C products listed in Appendix 1.

#### REASON FOR CHANGE

For increased manufacturing capacity and flexibility.

#### PRODUCTS AFFECTED

See Appendix 1

#### QUALIFICATION STATUS

Please refer to Appendix 2 for the qualification data.

#### EFFECT ON CUSTOMER

No adverse impact in manufacturers' applications is expected.

#### EFFECTIVE DATE

Immediate

#### SAMPLE AVAILABILITY

Not Applicable

### CONFIDENTIAL

The information in this report contains confidential and proprietary information of Power Integrations and its manufacturing partners. By receiving this report, the customer agrees to use this information for the sole purpose of addressing the issues reviewed in this report and to keep the contents confidential. If it becomes necessary for the customer to disclose this information to a third party, a non-disclosure agreement, which provides reasonable and customary protection for the disclosed information, must be executed.

## APPENDIX 1

Product Family	Ordering Part Number	Package
LinkSwitch-II	LNK606GG, LNK606GG-TL, LNK616GG-TL	SMD-8C
LinkSwitch-TN2	LNK3202G-TL, LNK3204G-TL, LNK3205G-TL, LNK3205G0237-TL, LNK3206G, LNK3206G-TL, LNK3207G, LNK3208G-TL, LNK3209G-TL, LNK3294G, LNK3294G-TL, LNK3296G, LNK3296G-TL	SMD-8C
LinkSwitch-XT2	LNK3604G, LNK3604G-TL, LNK3604G0209, LNK3604G0209-TL, LNK3694G-TL, LNK3696G-TL	SMD-8C
LinkZero-AX	LNK584GG-TL, LNK585GG-TL, LNK586GG-TL	SMD-8C
TinySwitch-III	TNY274GN, TNY274GN-TL, TNY274GN0004-TL, TNY274GN0152-TL, TNY274GN0225-TL, TNY274GN0242-TL, TNY275GN, TNY275GN-TL, TNY275GN0152-TL, TNY275GN0209-TL, TNY275GN0225-TL, TNY275GN0242-TL, TNY276GN, TNY276GN-TL, TNY276GN0156-TL, TNY276GN0242-TL, TNY276GN0246-TL, TNY277GN, TNY277GN-TL, TNY277GN0004-TL, TNY277GN0152-TL, TNY277GN0156-TL, TNY277GN0166-TL, TNY277GN0225-TL, TNY277GN0242-TL, TNY278GN, TNY278GN-TL, TNY278GN0004-TL, TNY278GN0054, TNY278GN0152-TL, TNY278GN0209, TNY278GN0209-TL, TNY278GN0225-TL, TNY279GN, TNY279GN-TL, TNY279GN0105-TL, TNY279GN0152-TL, TNY279GN0225-TL, TNY279GN0242-TL, TNY280GN, TNY280GN-TL, TNY280GN0105-TL, TNY280GN0156-TL, TNY280GN0152-TL, TNY280GN0209-TL, TNY280GN0225-TL, TNY280GN0242-TL, SC1128GG, SC1128GG-TL	SMD-8C
TinySwitch-4	TNY284PG, TNY285PG, TNY285PG0004, TNY286PG, TNY287PG, TNY288GG-TL, TNY288PG0004, TNY288PG0164, TNY288PG0246, TNY289PG, TNY290PG, TNY290PG0105	SMD-8C
TinySwitch-PK	TNY380GN-TL, TNY380GN0152-TL	SMD-8C
TOPSwitch-HX	TOP252GN-TL, TOP252GN0025, TOP252GN0025-TL, TOP253GN-TL, TOP254GN-TL, TOP255GN-TL, TOP256GN-TL, TOP257GN, TOP257GN-TL, TOP257GN0004-TL, TOP257GN0166-TL, TOP257GN0255, TOP257GN0225-TL, TOP258GN, TOP258GN-TL	SMD-8C

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Appendix 1  
Reliability Engineering  
Qualification Report

Qualification Project: P221408

**Project Title: TSHT 2nd source lead frame supplier (Hua Yang) for SMD 8C package**

**Summary:**

Reliability testing was performed to qualify the Hua Yang 170x240 mil SMD-8C leadframe for assembly of TinySwitch-III products. Three TNY277GN qualification lots using the Hua Yang 170x240 mil SMD-8C leadframe were subjected to MSL4 + TMCL and MSL4+HTSL for qualification with passing results obtained. CSAM, Lead Integrity (Tension & Fatigue) and Construction Analysis were all completed with passing results. Yield analysis was completed on each product with acceptable results.

Based on these results, the Hua Yang 170x240 SMD-8C leadframe is qualified. (See above Products Affected list).

**Reliability Test Descriptions and Conditions**

Test Name	Conditions	Reference Specification
TMCL (Temperature Cycle, Air to Air)	-65°C to +150°C, air to air	EIA/JESD22-A104-E
HTSL (High Temperature Storage Life)	Ta=150°C; unbiased	EIA/JESD22-A103-D
MSL4 Preconditioning	24-hr 150°C Bake + 96-hr 30°C, 60% RH Soak + 3 Passes 260°C Solder Reflow	IPC/JEDEC J-STD-020

**TMCL (Temperature Cycling)**

Product	Lot #	Leadframe	Test Duration	Failures/Sample Size
TNY277GN	BL200G	Hua Yang 170x240 mil SMD-8C	MSL4 + 1000 cycles	0 / 45
TNY277GN	BL201H	Hua Yang 170x240 mil SMD-8C	MSL4 + 1000 cycles	0 / 45
TNY277GN	BL208D	Hua Yang 170x240 mil SMD-8C	MSL4 + 1000 cycles	0 / 45

**HTSL (High Temperature Storage Life)**

Product	Lot #	Leadframe	Test Duration	Failures/Sample Size
TNY277GN	BL200G	Hua Yang 170x240 mil SMD-8C	MSL4+1000 hours	0 / 45
TNY277GN	BL201H	Hua Yang 170x240 mil SMD-8C	MSL4+1000 hours	0 / 45
TNY277GN	BL208D	Hua Yang 170x240 mil SMD-8C	MSL4+1000 hours	0 / 45

**Conclusion:** Based on passing results, the Hua Yang 170x240 mil SMD-8C leadframe is qualified. (See above Products Affected list).

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**CUSTOMER ACKNOWLEDGEMENT**

Power Integrations requests you acknowledge the receipt of the above-mentioned PCN. If no acknowledgment is received within 30 days of this notification, Power Integrations will assume the change is acceptable. Lack of any additional response within 90 days of this notification further constitutes acceptance of the change.

Power Integrations reserves the right to ship either version manufactured after the effective date.

If you have any questions or need further assistance, please contact your regional Power Integrations sales office. Otherwise, please check the box below, acknowledging the receipt of the PCN.

The indicated Product/Process Change Notification was received by the undersigned authority.

Name/Title: \_\_\_\_\_

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**CUSTOMER COMMENTS**

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