

## Wolfspeed® Product/Process Change Notification

PCN Number: PCN-00070  
PCN Type: Informational

PCN Issue Date: July 10, 2023

### PCN Title

Change How LotId and SlotNumber Are Reported in E142 Maps

### Description of the Change

Wolfspeed needs to change the LotId and SlotNumber reported in E142 wafer maps due to integration issues with the recent implementation of SEMI Specification M12-0706 in the wafer ID format for its bare die products (refer to CREE-PCN-1377 for detail). Wolfspeed currently violates the SEMI E142 specification while using M12 wafers for the SlotNumber as it is filled with the 8th and the 9th characters from wafer ID where it shows characters in the SlotNumber. SEMI E142 specification states that SlotNumber needs to have positive integers and identify the slot in the carrier in which the substrate is placed. Therefore, the new generated E142 map will report full wafer ID in the LotId field and “1” in the SlotNumber field for both legacy 9-character wafer ID and M12 wafer ID as it is shown in Figure 1.

Please note that this is a revision to PCN-00022 that was issued on July 27, 2022 (see revision history table below for more details).

(a)

```
21  <Substrate SubstrateType="Wafer" SubstrateId="UR0099-05">
22  <LotId>UR0099</LotId>
23  <SlotNumber>05</SlotNumber>

20  <Substrate SubstrateType="Wafer" SubstrateId="G8F9BB09CIB0">
21  <LotId>G8F9BB</LotId>
22  <SlotNumber>9C</SlotNumber>
```

(b)

```
21  <Substrate SubstrateType="Wafer" SubstrateId="UR0099-05">
22  <LotId>UR0099-05</LotId>
23  <SlotNumber>1</SlotNumber>

20  <Substrate SubstrateType="Wafer" SubstrateId="G8F9BB09CIB0">
21  <LotId>G8F9BB09CIB0</LotId>
22  <SlotNumber>1</SlotNumber>
```

**Figure 1.** (a) WaferID information is truncated to show characters in the SlotNumber field, which becomes awkward while using the M12 format. (b) Proposed solution is to report full WaferID in the LotId field and “1” in the SlotNumber field.

## Benefit of the Change

With Wolfspeed's commitment to continuous improvement, this change will help to maintain the E142 wafer map specification without any violations.

## Affected Products

All Power Products (Schottky Diodes and MOSFETs) and RF Products will be impacted.

## Anticipated Impact

No customer action is required. There is no change to product form, fit, function, or reliability.

## Implementation Date

Table 1 provides the estimated dates for key PCN milestones based on the information available on the date this PCN is issued. Any updates to these dates can be provided by your Wolfspeed contact.

**Table 1.** *Estimated Key PCN Dates.*

Task	Date
Projected First Ship Date	July 10, 2023

## Contact Information

If you have any questions regarding this Informational PCN, please refer to the contact information listed in Table 2.

**Table 2.** *PCN Contact.*

<b>Wolfspeed Contact</b>	PCN Administrator
<b>Wolfspeed Contact E-Mail</b>	pcn@wolfspeed.com
<b>Wolfspeed Contact Phone</b>	1.844.200.WOLF
<b>Address</b>	4600 Silicon Drive Durham, NC 27703 U.S.A.

## Revision History

Date	Revision	Description
July 27, 2022	0 (PCN-00022)	Initial release
July 10, 2023	1 (PCN-00070)	<i>Table 1. Affected Products</i> of PCN-00022 has been eliminated to indicate all POWER Products (Schottky Diodes and MOSFETs) and RF Products to be impacted.