

### **Wolfspeed® Product/Process Change Notification**

PCN Number:	CREE-PCN-1356	PCN Issue Date:	November 23, 2021
PCN Type:	Courtesy		

#### **PCN Title**

150-mm Wafer Manufacturing for Packaged C3M 1000 V, 65 m $\Omega$  and 120 m $\Omega$  SiC MOSFETs at Wolfspeed's Durham (DUR) Facility

### **Description of the Change**

Wolfspeed's C3M 1000 V 65 m $\Omega$  are currently manufactured on 150-mm diameter wafers at Wolfspeed's fabrication facility in Research Triangle Park (RTP), North Carolina, USA. The production line is now being expanded to utilize Wolfspeed's capacity at its fabrication facility in Durham (DUR), North Carolina, USA. All tools and processes of both facilities are qualified through the internal Process Change Review Board (PCRB).

## **Benefit of the Change**

This expansion will ensure Wolfspeed's continued ability to provide products to customers within the standard delivery time. The goal is to provide quality products that meet and exceed customer expectations.

#### **Affected Products**

Table 1 lists the expected products affected by this courtesy PCN on the date this PCN is issued.

**Table 1.** Affected Products List.

Wolfspeed Part Number	Description	Junction Temperature Range (T <sub>j</sub> )
C3M0065100J	1000 V 65 mΩ MOSFET in TO-263-7L Package	-55 °C to 150 °C
C3M0065100K	1000 V 65 mΩ MOSFET in TO-247-4L Package	-55 °C to 150 °C
C3M0120100J	1000 V 120 mΩ MOSFET in TO-263-7L Package	-55 °C to 150 °C
C3M0120100K	1000 V 120 mΩ MOSFET in TO-247-4L Package	-55 °C to 150 °C

## **Qualification Status and Plan**

All parts to be transferred will be qualified to the tests listed in the qualification plan for each respective part number. The tests for affected part number above have been performed to meet or exceed the test parameters listed in the existing qualification report.

## **Anticipated Impact**

There is no change to form, fit, function, or reliability of the products listed in Table 1. The additional DUR facility is a Class-100 (ISO 5) cleanroom certified to meet the ISO 9001: 2015 and IATF 16949:2016 standards. It has been a fully functional Wolfspeed-owned semiconductor manufacturing facility in operation for more than 20 years. This change impacts the wafer production line only, and no changes are made to the backend assembly

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	Wolfspeed's Durham (DUR) Facility	
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processes. As such, the device package is not impacted. Products manufactured at the DUR facility will have identical specifications and part numbers to those manufactured today. Customers may continue to place orders using the same part numbers.

Note that device shipments to distributors or customers may contain a mix of date codes and therefore, these shipments can contain a mix of date codes sourced from the different production lines.

### **Key Implementation Date**

Table 2 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 2.** Estimated Key PCN Dates.

Task	Date*
Qualification Report Date	November 2021
Projected First Ship Date	February 2022

<sup>\*</sup> Specific product schedules should be discussed with Wolfspeed sales and marketing representatives.

#### **Contact Information**

If you have any questions regarding this advance PCN, please refer to the contact information listed in Table 3.

Table 3. PCN Contact.

Wolfspeed Contact:	PCN Contact
Wolfspeed Contact E-Mail:	pcn@wolfspeed.com
Address:	4600 Silicon Drive
	Durham, NC 27703
	U.S.A.

# **Revision History**

Date	Revision	Description
November 23, 2021	0	Initial release

	Title: 150-mm Wafer Manufacturing for Packaged C3M 1000 V, 65 m $\Omega$ and 120 m $\Omega$ SiC MOSFETs at	
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