

Wolfspeed® Product/Process Change Notification

PCN Number:	PCN-00021	PCN Issue Date:	September 22, 2022
PCN Type:	Informational		

PCN Title

Expansion of 150-mm Wafer Manufacturing for C3M 900 V 30, 65, 120, and 280 mΩ SiC MOSFETs at Wolfspeed's Durham (DUR) Facility

Description of the Change

Wolfspeed C3M 900 V SiC MOSFETs 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 Informational PCN.

Table 1. Affected Products List.

Wolfspeed Part Number	Description	Junction Temperature Range (T _j)
C3M0030090K	900 V, 30 mΩ	-40 °C – 150 °C
C3M0065090D	900 V, 65 mΩ	-55 °C – 150 °C
C3M0065090J	900 V, 65 mΩ	-55 °C – 150 °C
C3M0120090D	900 V, 120 mΩ	-55 °C – 150 °C
C3M0120090J	900 V, 120 mΩ	-55 °C – 150 °C
C3M0280090D	900 V, 280 mΩ	-55 °C – 150 °C
C3M0280090J	900 V, 280 mΩ	-55 °C – 150 °C

Qualification Status and Report

All parts to be transferred were qualified to the tests listed in the qualification plan for each respective part number. The tests for all part numbers listed in Table 1 have been performed to meet or exceed the test parameters listed in the existing qualification report.

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 Date.

Wolfspeed Part Number	(Projected) Completion Date of the Qualification Report	(Projected) First Ship Date
C3M0030090K	9/22/22	11/1/22
C3M0065090D	9/3/21	10/4/21
C3M0065090J	1/20/22	1/21/22
C3M0120090D	1/20/22	1/21/22
C3M0120090J	1/20/22	1/21/22
C3M0280090D	1/20/22	1/21/22
C3M0280090J	1/20/22	1/21/22

* Specific product schedules should be discussed with Wolfspeed sales and marketing representatives.

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 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.

Contact Information

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

Table 3. PCN Contact.

Wolfspeed Contact	PCN Administrator
Wolfspeed Contact E-Mail	pcn@wolfspeed.com
Wolfspeed Contact Phone	1.844.200.WOLF
Address	4600 Silicon Drive Durham, NC 27703 USA

Revision History

Date	Revision	Description
September 20, 2021	0 (CREE-PCN-1322)	Initial release
January 20, 2022	1 (CREE-PCN-1381)	Updated Table 1 and Table 2 due to the qualification completed on C3M0065090J, C3M0120090D, C3M0120090J, C3M0280090D, and C3M0280090J
September 22, 2022	2 (PCN-00021)	Updated Table 1 and Table 2 to add C3M0030090K