

Wolfspeed® Product/Process Change Notification

PCN Number: CREE-PCN-1360

PCN Issue Date: December 7, 2021

PCN Type: Courtesy

PCN Title

150-mm Wafer Manufacturing of Packaged 2nd Generation, C2M, 1200 V 25 mΩ, 40 mΩ, 80 mΩ, 160 mΩ, and 280 mΩ MOSFETs at Wolfspeed's Durham (DUR) Facility

Description of the Change

Wolfspeed's Gen2, C2M, 1200 V 25 mΩ, 40 mΩ, 80 mΩ, 160 mΩ, and 280 mΩ 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 Courtesy PCN on the date this PCN is issued.

Table 1. Affected Products List.

Wolfspeed Part Number	Description	Junction Temperature Range (T _j)
C2M0025120D	2nd Generation 1200 V 25 mΩ MOSFET	-55 to 150 °C
C2M0040120D	2nd Generation 1200 V 40 mΩ MOSFET	-55 to 150 °C
C2M0080120D	2nd Generation 1200 V 80 mΩ MOSFET	-55 to 150 °C
C2M0160120D	2nd Generation 1200 V 160 mΩ MOSFET	-55 to 150 °C
C2M0280120D	2nd Generation 1200 V 280 mΩ MOSFET	-55 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 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	December 2021
Projected First Ship Date	January 2022

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

Contact Information

If you have any questions regarding this Courtesy 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
December 7, 2021	0	Initial release