

Wolfspeed® Product/Process Change Notification

PCN Number:	CREE-PCN-1341	PCN Issue Date:	November 1, 2021
PCN Type:	Advance		

PCN Title

Manufacturing of Schottky Diode Bare Die on 200-mm Wafers at the Mohawk Valley Fabrication (MVF) Facility

Description of the Change

Wolfspeed's silicon carbide (SiC) Schottky diode bare die are currently manufactured on 150-mm wafers at Wolfspeed's fabrication facilities in RTP and Durham, North Carolina, USA. To increase its production capacity, Wolfspeed will utilize its state-of-the art 200-mm wafer Mohawk Valley Fabrication (MVF) facility in New York.

Benefit of the Change

Wolfspeed is in the process of qualifying its MVF facility for 200-mm SiC wafers. The MVF facility will provide substantial capacity expansion and world-class automation to drive throughput and high quality to support its customers for various power applications.

Affected Products

Table 1 lists the expected bare die products of Schottky diodes affected by this Advance PCN on the date this PCN is issued. The list may be altered due to market dynamics or technological innovations. Updates on Table 1 can be provided by your Wolfspeed contact.

Table 1. Affected Products List.

Part Number	MVF Part Number	Part Number	MVF Part Number
CPW2-0600-S006B	QPW2-0600-S006B-FQ8	CPW3-0650-S004B	QPW3-0650-S004B-FQ8
CPW2-0600-S008B	QPW2-0600-S008B-FQ8	CPW4-1200-S002B	QPW4-1200-S002B-FQ8
CPW2-0600-S010B	QPW2-0600-S010B-FQ8	CPW4-1200-S005B	QPW4-1200-S005B-FQ8
CPW2-0650-S006B	QPW2-0650-S006B-FQ8	CPW4-1200-S008B	QPW4-1200-S008B-FQ8
CPW2-0650-S008B	QPW2-0650-S008B-FQ8	CPW4-1200-S010B	QPW4-1200-S010B-FQ8
CPW2-0650-S010B	QPW2-0650-S010B-FQ8	CPW4-1200-S015B	QPW4-1200-S015B-FQ8
CPW2-0650-S012B	QPW2-0650-S012B-FQ8	CPW4-1200-S020B	QPW4-1200-S020B-FQ8
CPW2-0650-S016B	QPW2-0650-S016B-FQ8	CPWR-0600-S001B	QPWR-0600-S001B-FQ8
CPW3-0600-S002B	QPW3-0600-S002B-FQ8	EPW4-1200-S010A	QPW4-1200-S010A-FQ8
CPW3-0600-S003B	QPW3-0600-S003B-FQ8	EPW4-1200-S020A	QPW4-1200-S020A-FQ8
CPW3-0600-S004B	QPW3-0600-S004B-FQ8		

Qualification Status and Plan

The equipment, processes, and products at the MVF facility are being qualified through Wolfspeed's standard product introduction process. The customers are urged to provide feedback in writing within 30 days from the PCN issue date. If a customer does not submit written feedback within 30 days, Wolfspeed will consider that its plan is accepted by the customer.

Anticipated Impact

There may be minor changes in fit, form, and/or function due to equipment upgraded for 200-mm wafers. Qualification and characterization activities are being performed to ensure minimal impact to the products in the table 1. The affected part numbers are expected to retain the same datasheets specification limits.

Risk Assessment

MVF is being qualified on 200-mm wafers. Engineering team has gone through rigorous R&D efforts to drive the performance matched to Wolfspeed's existing substrates. Risk is minimized by utilizing the industry standard 200-mm toolsets. Furthermore, the fabrication processes and toolsets have been validated through activities at Wolfspeed's 200mm pilot line at the State University of New York at Albany (SUNY Albany) to demonstrate matched parametric results in advance of the factory opening.

Sample Status

Customers are encouraged to submit forward-looking sample requirements within 30 days from the Advance PCN issue date. This information will be used for Wolfspeed planning purposes only. Specific sample order delivery dates will be communicated later.

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 Approval	Beginning July 2022
First Quantity-Limited Sample Shipment	Beginning July 2022
Volume Production Date	Beginning July 2022

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

Customer Acknowledgement

Customer is requested to acknowledge this notification within 30 days from its issue date by signing this PCN, scanning it into a pdf file, and emailing the file and any feedback to Wolfspeed at PCN@wolfspeed.com. Note that Wolfspeed references the JEDEC J-STD-046 guidelines for its PCNs. In accordance with J-STD-046, this

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change is deemed acceptable to the customer if no acknowledgement is received within 30 days from the PCN issue date.

Name: _____ Title: _____

Phone: _____ Email: _____

Customer Comment: _____

Customer Signature: _____ Date: _____

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:	Customer Service
Wolfspeed Contact E-Mail:	csorderadmin@wolfspeed.com
Address:	5757 Marcy SUNY Parkway Marcy, NY 13403 U.S.A.

Revision History

Date	Revision	Description
November 1, 2021	0	Initial release