

# **Cree® Product Change Notification**

**PCN Reference Number:** CREE-PCN-0953 **Date Issued:** 11/19/2019

Please be advised that Cree has qualified a new assembly location for the commercial BM2 and CM2 module product families. This notice is to inform customers that future deliveries of these products will include modules packaged at the new assembly location.

Please review the additional PCN information below.

#### **Affected Product**

All commercial module part numbers with "BM2" or "CM2" as the last three digits of the Cree part number are affected. Table 1 provides a list of products affected by this assembly location change:

Table 1: Affected Products List

Cree Part Numbers
CAS120M12BM2
CAS300M12BM2
CAS300M17BM2
CCS020M12CM2
CCS050M12CM2

## **Description of the Change**

Cree has qualified a new package assembly site as an additional packaging and test subcontractor for the BM2 and CM2 module product families, with a full list of affected part numbers in Table 1; this change will increase production capacity and ensure Cree's continued ability to provide high quality modules to our customers.

In addition to the change in the location of assembly, minor process, material, and cosmetic modifications have been made to enable continuous improvement efforts in the manufacturing flow. These changes have not resulted in changes to the internal MOSFET / diode devices within each part number and are not expected to impact end customer applications – see more information below in the Impact of Change section.

Customers may notice a visual difference in surface finish of the baseplates within both module families from the new supplier, which has no effect on performance. The change has been verified as a purely aesthetic difference in parts from the new assembly location compliant with the product specifications and will not result in performance changes.

Part numbers will not change, though modifications will be made in the lot and date codes used for product labeling. Customers may continue to place orders using the same part numbers. Product from

the new supplier will use an 'H' in the date code and a sublot tracking alphabetic character in the lot code serialization. Product from the original supplier will continue to use an 'S' at the beginning of the date code and maintain all numeric lot code serialization. Example of the lot code from the new supplier: H1901-A001. Example of the lot code from the original supplier: S1901-0001.

### **Reason for the Change**

Cree continues to solidify broad-based sources of supply to both increase the quality of final products and to ensure the continued ability to provide modules that meet and exceed customer expectations.

### **Impact of Change**

There is no change to form, fit, or function to the BM2 or CM2 module product lines as a result of this change in assembly location. The overall quality and availability of these parts is expected to improve as a result of this supply chain improvement. Modules from the new manufacturing location were subjected to and passed the same industrial qualification tests as the original manufacturing location. End of line pass / fail production test parameters will not be adjusted as a result of the new assembly location. Additionally, modules manufactured at the new location were verified for thermal, static, and dynamic characterization sameness with no findings for dissimilarities between the two manufacturing locations.

The part numbers listed within Table 1 will retain the same performance and datasheets from both assembly locations, with the exception of the CAS120M12BM2. During review of the datasheet parameters of the CAS120M12BM2, an error was noted in the maximum allowable leakage current; this error was identified as a mistake in published specification and was not aligned with the MOSFET characteristics which were tested at end-of-line. Cree will take this opportunity to align the identified leakage current maximum value error to agree with the pass / fail criteria for the devices included in the module through a revision of the CAS120M12BM2 datasheet. This revision reflects correction of a published specification, rather than a change in performance as a result of the assembly location.

## **Effective Implementation Date**

Beginning on the issue date of this PCN, Cree may begin shipment of commercial product from the new assembly location.

## **Cree Wolfspeed Contact Information**

If you have any questions regarding this Minor PCN please contact:

Table 2 PCN Contact Information

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