

## Cree® Product Change Notification

<b>Customer Name:</b>	<b>PCN Reference Number:</b> CREE-PCN-0899
<b>Customer Contact:</b>	<b>Date Issued:</b> 08/22/2019
<b>Customer E-Mail:</b>	
<b>Address:</b>	

Please be advised that Cree has qualified a Major Change to the devices listed in table 1. For your convenience, a Qualification Report is available. Samples of product with the described major change are now available. If you need samples, be sure request them from the Cree contact listed in Table 3.

Be advised that if we do not hear from you within 90 days of the PCN Issue Date, Cree will assume that you have approved the PCN and we will begin shipping the affected product.

Please review the additional PCN information below.

### Affected Product

Table 1 provides a list of products affected by this Major change:

*Table 1 Affected Products List*

Cree Part Number	Customer Part Number	Cree Part Number	Customer Part Number
<b>CGH40006P</b>		CGHV40050F	
<b>CGH55015F2</b>			
<b>CGH55015P2</b>			

### Description of the Change

In March of 2018, Cree announced the acquisition of Infineon’s RF Power business. This acquisition included manufacturing facilities. The main facility is in Morgan Hill (MGH), California which includes packaging and test operations for LDMOS and GaN-on-SiC RF components.

Cree intends to begin the use of Morgan Hill as an alternate manufacturing site for our RF components. Cree’s Research Triangle Park (RTP) manufacturing site will also continue packaging and test operations.

The appearance of devices manufactured will look different, only in the lid marking and lot number format.



Fabrication of the semiconductor die will not change. GaN-on-SiC die will continue to be fabricated on the Cree campus in North Carolina. The affected RF components are listed below.

The following parameters will see no change:

1. Product's Bill of Materials
2. DC and RF parameters
3. Data sheet specifications
4. Shipping containers
5. Shipping labels
6. Certificates of Compliance

Labels from the Cree Morgan Hill factory are slightly different than Cree RTP labels. Below are examples of Shipping Container Label (Figure 1) and the individual tray or reel label (Figure 2).

Shipping Container Label (Figure 1)

(1T) is the Master Ship Lot (MSL). This lot number is for the shipment. A shipment can contain many sub-lots (Figure 2) for product inside the container.

The MSL format is MSLnnnnnnYY

nnnnnn is the sequential number

YY is Year, last 2 digits

(1P) is the Product Part Number

(9D) is the Date Code YYMM

(Q) is the Quantity of parts inside the container.

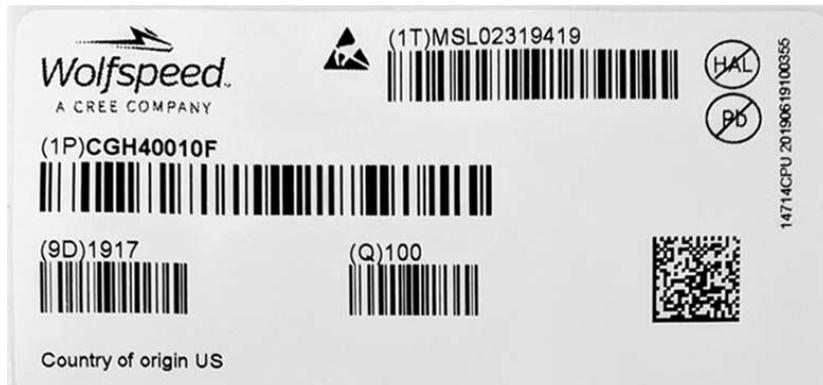


Figure 1 – Label on the exterior of the shipping container

### Individual Tray or Reel Label (Figure 2)

Tray and Reel labels (Figure 2) include a bar code. The bar code is in the format : %\$<part>\$<lot>\$Q<qty>\$%. For the example label below, the read-out is %\$CGH40025F\$M1923499\$Q34\$%



Figure 2 – Label on the individually bagged trays or reels.

## Reason for the Change

This letter is to inform you that Cree will establish an alternate assembly and test facility for its RF components.

## Change Impact on Form, Fit, Function, or Reliability

The device markings and shipping containers will change as indicated above.

## Key Dates

Table 2 provides estimated dates for Key PCN Milestones based on information available at the date the PCN was issued. Any updates to these dates can be provided by the Cree contact listed in Table 3.

*Table 2 Key PCN Estimated Dates*

<b>Qualification Report Availability</b>	12/31/2019
<b>Sample Availability</b>	9/1/2019
<b>Proposed First Ship Date</b>	9/1/2019
<b>Last Date of Unchanged Product</b>	N/A since this is an alternate site

## Cree Contact Information

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

*Table 3 PCN Contact*

<b>Cree Contact:</b>	<b>Ryan Baker</b>
<b>Cree Contact E-Mail:</b>	Ryan_Baker@cree.com
<b>Cree Contact Phone:</b>	919.407.7816
<b>Cree Contact Fax Number:</b>	N/A
<b>Address:</b>	4600 Silicon Drive Durham NC, 27703 USA