



Cree® Product Change Notification

Major Change

CREE CUSTOMERS

PCN Reference Number: CREE-PCN-0968

Date Issued: 15-SEP-2020

Please be advised that Cree has qualified a new location for test, dice, and inspection of bare die power products. This notice is to inform customers that future deliveries of these products will include parts from the new location.

Affected Product

All Schottky and MOSFET bare die products will be affected by this change.

Description of the Change

Cree has qualified a new location for test, dice, and inspection (TDI) for all bare die power products. Test, die singulation (dice), and Automated Optical Inspection (AOI) will be transferred from the Research Triangle Park (RTP) facility in North Carolina, USA, to a Cree captive line at CARSEM, an IATF certified facility, in Ipoh, Malaysia.

Tools for the entire process flow, including recipes and process conditions, that are in use at the North Carolina facility will be transferred to the new manufacturing location in Asia. Manufacturing will continue at the original location in the USA until the transition has been completed at the Cree captive line at CARSEM.

Reason for the Change

This change will ensure Cree's continued ability to provide high quality products to our customers.

Change Impact on Form, Fit, Function, or Reliability

There is no change to fit, form, function, or reliability of the affected products as a result of this change in location. End of line production test parameters will not be adjusted as a result of the new location. The affected part numbers will retain the same performance and datasheet specifications from both manufacturing locations.

Note: Pre-release die are impacted by this change, but respective part numbers are not included in the list within the appendix below.

Key Dates

Table 1 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 your Cree contact.

Table 1 Key PCN Estimated Dates

Qualification Report Availability	Sep 2020
Sample Availability	Sep 2020
Proposed First Ship Date	Sep 2020

Cree Contact Information

Please contact your Cree Sales Contact should you have any questions about this Process Change Notification.

Appendix

Qualification Plan

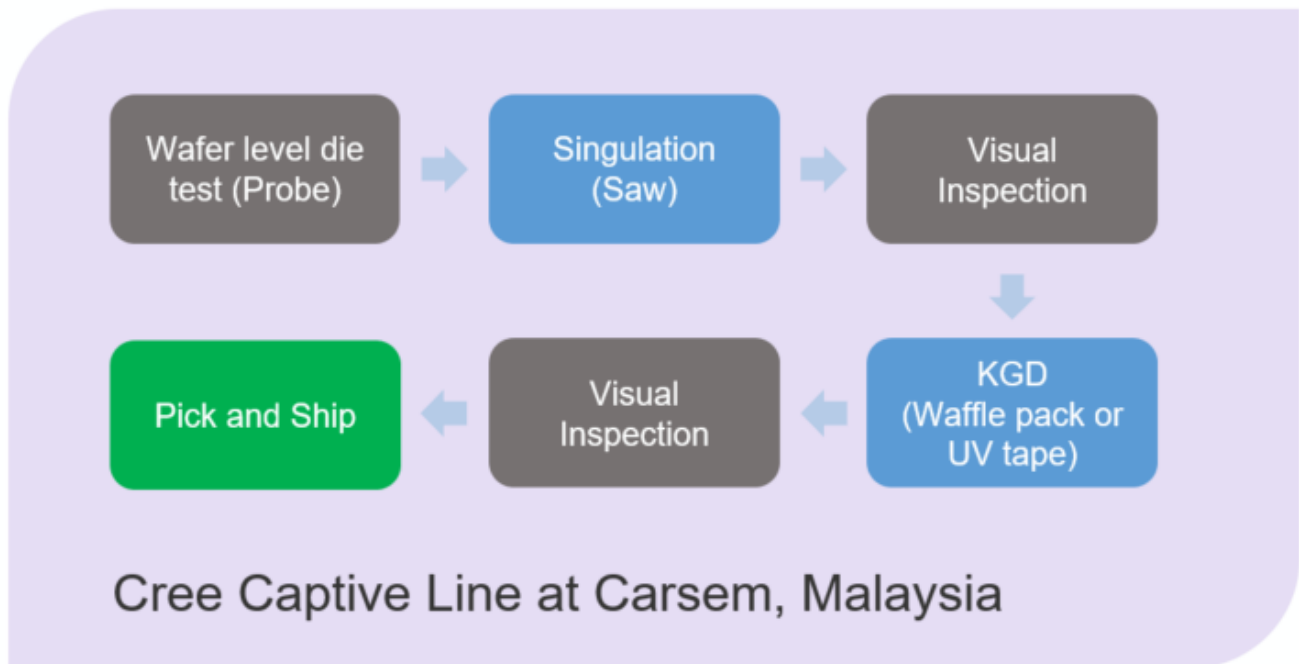
This qualification plan is based on the AEC-Q101, Rev. D test standard. Pre-stress and post-stress electrical testing will include measurement of the test parameters, per the limits defined in the Cree Product Specification.

For Automotive qualifications, Cree will be compliant to the AEC-101 standard with respective sample sizes and testing.

Cree will perform for this PCN an AEC-Q101 qualification testing on Cree's Schottky product C3D20060D, which is a double diode of 600V 20Amp, generation 3, in TO-247-3L package.

AECQ Test #	Stress	Abr.	Sample per Lot	Number of Lots	Reference	Requirements / Test Conditions
7	Temperature Cycling	TC	27	3	JESD22 A-104 Appendix6	-55°C to 150°C, 1000hrs Note: air to air Temp Shock (10 min. soak) used

Process Flow Overview (Example MOSFET)



Part numbers

- | | | |
|-------------------------|-------------------------|-------------------------|
| 1. CPW2-0600-S006B | 29. CPW5-1200-Z050B | 57. CPM2-1700-0045B-WD6 |
| 2. CPW2-0600-S006B-FA6 | 30. CPW5-1200-Z050B-FA6 | 58. CPM3-0900-0010A |
| 3. CPW2-0600-S008B | 31. CPW5-1700-Z005A | 59. CPM3-0900-0010A-FE6 |
| 4. CPW2-0600-S008B-FA6 | 32. CPW5-1700-Z005A-FA6 | 60. CPM3-0900-0010A-WD6 |
| 5. CPW2-0600-S010B | 33. CPW5-1700-Z010A | 61. CPM3-0900-0030A |
| 6. CPW2-0600-S010B-FA6 | 34. CPW5-1700-Z010A-FA6 | 62. CPM3-0900-0030A-FE6 |
| 7. CPW2-0650-S008B | 35. CPW5-1700-Z025A | 63. CPM3-0900-0030A-WD6 |
| 8. CPW2-0650-S008B-FA6 | 36. CPW5-1700-Z025A-FA6 | 64. CPM3-0900-0065A |
| 9. CPW2-0650-S010B | 37. CPW5-1700-Z050B | 65. CPM3-0900-0065A-FE6 |
| 10. CPW2-0650-S010B-FA6 | 38. CPW5-1700-Z050B-FA6 | 66. CPM3-0900-0065A-WD6 |
| 11. CPW2-1200-S005B | 39. CPWR-0600-S001B-FA6 | 67. CPM3-1200-0013A-FE6 |
| 12. CPW2-1200-S005B-FA6 | 40. EPW4-1200-S010A-FA6 | 68. CPM3-1200-0013A-WD6 |
| 13. CPW3-1700-S010B | 41. EPW4-1200-S020A-FA6 | 69. CPM3-1200-0016A-FE6 |
| 14. CPW3-1700-S010B-FA6 | 42. CPM2-1200-0025A | 70. CPM3-1200-0016A-WD6 |
| 15. CPW3-1700-S025B | 43. CPM2-1200-0025A-FE4 | 71. CPM3-1200-0021A-FE6 |
| 16. CPW3-1700-S025B-FA6 | 44. CPM2-1200-0025A | 72. CPM3-1200-0021A-WD6 |
| 17. CPW4-1200-S005B | 45. CPM2-1200-0025A-FE6 | 73. CPM3-1200-0032A-FE6 |
| 18. CPW4-1200-S005B-FA6 | 46. CPM2-1200-0025A-WD6 | 74. CPM3-1200-0032A-WD6 |
| 19. CPW4-1200-S008B | 47. CPM2-1200-0040A | 75. CPM3-1200-0075A-FE6 |
| 20. CPW4-1200-S008B-FA6 | 48. CPM2-1200-0040A-FE6 | 76. CPM3-1200-0075A-WD6 |
| 21. CPW4-1200-S010B | 49. CPM2-1200-0040A-WD6 | 77. CPW2-0600-S006B-FA6 |
| 22. CPW4-1200-S010B-FA6 | 50. CPM2-1200-0080A | 78. CPW2-0600-S008B-FA6 |
| 23. CPW4-1200-S015B | 51. CPM2-1200-0080A-FE6 | 79. CPW2-0650-S010B |
| 24. CPW4-1200-S015B-FA6 | 52. CPM2-1200-0080A-WD6 | 80. CPW2-1200-S010B |
| 25. CPW4-1200-S020B | 53. CPM2-1200-0160A | 81. CPW4-1200-S002B |
| 26. CPW4-1200-S020B-FA6 | 54. CPM2-1200-0160A-FE6 | 82. CPW4-1200-S005B |
| 27. CPW5-0650-Z030B-FA6 | 55. CPM2-1700-0045A | 83. CPW5-0650-Z030B |
| 28. CPW5-0650-Z050B | 56. CPM2-1700-0045A-FE6 | 84. CPW5-0650-Z050B-FA6 |