CHANGE COMMUNICATION NOTIFICATION

FRM-000621 - Rev 02

TRACKING #	PCN-000098	TYPE OF CHANGE	Major	DATE OF PCN	11/13/2024
DESCRIPTION OF CHANGE	Upgrade of the blue die integrating latest continuous improvements and best layout practices				

DETAILS OF CHANGE

As part of Luminus continuous performance improvement plan, the die used for Blue and Lime channels used in SBM-40-RGBL are being upgraded which results in lumen output higher than the existing max limit. As a result, Luminus is updating the flux bins for these two channels (blue and lime) and introducing new ordering part numbers (R2). Please find new ordering part numbers in affected product section below.

As part of this change, the light-emitting areas are marginally increased as shown in the table below.

PDS-003334 SBM-40-RGBL is updated and released to Rev 02.

From	To
Current blue die Blue channel: Light emitting area: 0.95 x 0.95 mm^2 Lime channel: Light emitting area: 0.96 x 0.96 mm^2	Improved blue die Blue channel: Light emitting area: 0.97 x 0.97 mm^2 Lime channel: Light emitting area: 0.98 x 0.98 mm^2

REASON FOR CHANGE

Continuous performance Improvement plan of the underlying die used in SBM-40-RGBL.

AFFECTED ORDERING PART NUMBER	REPLACEMENT ORDERING PART NUMBER
SBM-40-RGBL-HC41-QG100	SBM-40-RGBL-HC41-QG100-R2
SBM-40-RGBL-HC41-QG110	SBM-40-RGBL-HC41-QG110-R2
SBM-40-RGBL-HC41-QG120	SBM-40-RGBL-HC41-QG120-R2
SBM-40-RGBL-HC41-QG210	SBM-40-RGBL-HC41-QG210-R2
SBM-40-RGBL-HC41-QG220	SBM-40-RGBL-HC41-QG220-R2

ANTICIPATED IMPACT ON FORM FIT, FUNCTION, QUALITY OR RELIABILITY

- No change in Form, Fit, Function.

- Product reliability is the same or better.

SCHEDULE OF Qualifications				
Actions	**Status**	**Sample size**	**Criteria**	**Result**
Temperature Cycling Test-200 cycles (JESD22-A104 (-40-125°C), 15min soak time)	Complete	10	Change in Radiometric Flux $\leq \pm$ 30% Change in Forward Voltage $\leq \pm$ 10% Change in Peak Wavelength $\leq \pm$ 2nm	Pass.
High Temperature Operating Life 500 hrs (I_f=3 A, T_{hs}=150°C)	Complete	40		Pass.

DATE OF AVAILABILITY OF QUALIFICATION DATA	11/13/2024
DATE OF AVAILABILITY OF QUALIFICATION SAMPLES	Qualification Samples should be requested within 30 days of this notice to ensure delivery before the PCN expiration date.
METHOD OF IDENTIFYING CHANGED PRODUCT	Assembly lot information marked on packaging labels allows traceability of this blue die change. Traceability is also ensured by ordering part numbers.
PLACE LAST PURCHASE ORDER BY	N/A
AVAILABILITY OF CHANGED PRODUCTS	Products assembled with new dies may begin shipping on 02/12/2025 or earlier if approved by the customer.