



CHANGE COMMUNICATION

FRM-000621, Rev 1

TRACKING #	20200407-1	TYPE OF CHANGE	Information Only	DATE OF PCN	4/16/2020
CHANGE NAME	Core Board Solder Mask change from Electra to Taiyo				
DETAILS OF CHANGE					
Luminus Core Board Manufacturer is changing the solder mask manufacturer as follows:					
From			To		
Electra EMP-110			Taiyo America PSR-4000 MP Series		
The Taiyo America solder mask properties are comparable or better compared to the Electra solder mask. The Taiyo solder mask meet IPC-SM-840, Qualification and Performance Specification of Permanent Solder Mask and Flexible Cover Materials, Class H for Military/High Reliability Applications					
REASON FOR CHANGE					
Minor change implemented by supplier of Metal Core Board					
AFFECTED PRODUCT LIST [final digits for bin kit intentionally omitted]					
CBT-90-W65S-C11			CBM-40-UV-X32		
CBT-90-W57S-C11			CBM-80-UV-X31		
CBT-90-W57H-C11			CBM-120-UV-X31		
CBT-90-B-L11			CBT-39-UV-C32		
CBT-90-RX-Lxx			CBT-90-UV-L11		
CBT-90-G-L11			CBM-90-IRD-X33		
CFT-90-CG-L11			CBM-120-FR-C15		
CBT-90-CG-L11			PT-40-RAX-Lxx		
CBT-90-A-Lxx			PT-54-RAX-L35		
CBT-140-WCS-L16			PT-39-B-L21		
CBT-140-WDH-L16			PT-39-G-L21		
PT-121-B-L11			PT-120-B-L11		
PT-121-RAX-L15			PT-120-RAX-L15		

PT-121-G-L11	PT-120-G-L11

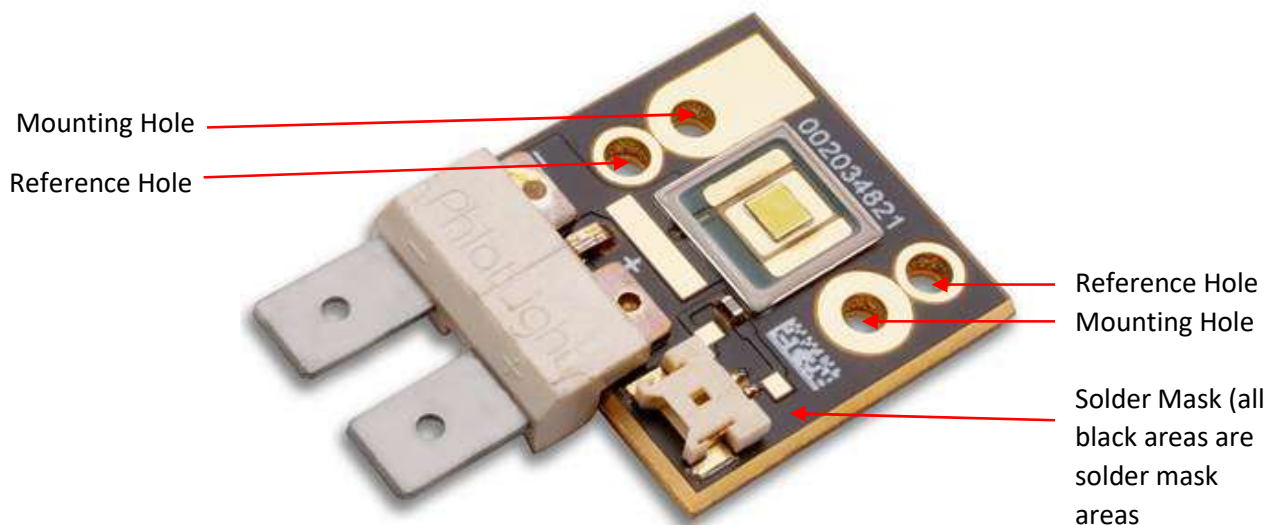
ANTICIPATED IMPACT ON FORM FIT, FUNCTION, QUALITY OR RELIABILITY

This change does not impact form, fit, function, quality or reliability.

1. The solder mask has no active electrical or optical function in the product.
2. Its function is isolation of areas with solder from those that do not. This function is critical for boards with a high population of component pads that are close to each other that run the risk of solder bleed and shorting of those pads. The Luminus design does not have these features in the design.
3. It also protects the metal plated areas from oxidation or exposure to subsequent manufacturing environments.
4. The Luminus requirement of maximum allowed 1 mm missing solder over metal which is tighter than IPC 6012 prevents the exposure of large areas of metal.
5. REACH and RoHS compliance have been met for the new solder mask.

The new solder mask remains unchanged per IPC standards regarding material and dimensional characteristics. (IPC-SM-840 Class H, Bellcore GR-78-CORE Issue 1, and have a UL flammability rating of 94 V-0.).

Sample Diagram and Photo of Core Board:





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SCHEDULE OF ACTIONS FOR TAIYO AMERICA PSR-4000 MP SERIES		
Actions	Status	Result
Vendor Qualification	Done	Passed IPC –SM-8340 Class H
Luminus Visual Inspection	Done	Passed IPC-A-610 and IPC 6012
Luminus Test	Done	Passed Luminus Test specifications
DATE OF AVAILABILITY OF QUALIFICATION DATA	N/A	
DATE OF AVAILABILITY OF QUALIFICATION SAMPLES	N/A	
METHOD OF IDENTIFYING CHANGED PRODUCT	The new solder mask will be traceable by datecode/serial number.	