

# Product/Process Change Notice (PCN)



- Major change  
 Minor change

PCN #:  
PCN\_WE\_RJ45LAN\_20180131\_7498XXXXX\_S14100043  
Product Affected: WE-RJ45 LAN

- Product Mark  
 Date Code  
 Packaging  
 Others

PCN Date: October 31<sup>st</sup> 2017

Effective Date: January 31<sup>st</sup> 2018

Contact: Product Management

Attachment:  Yes  No

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## DESCRIPTION AND PURPOSE OF CHANGE:

In order to enhance the product quality and reliability, Würth Elektronik will improve the plastic header and LEDs for all RJ45 low profile SMT types. There will be no change in fit or the function of the product. Affected part numbers are:

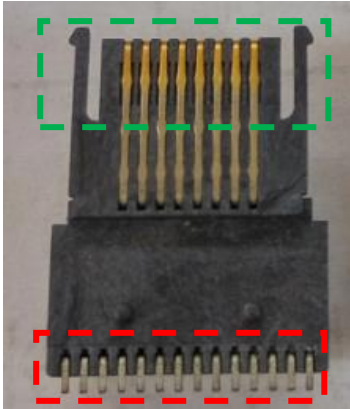
-7498011122  
-7498011122A  
-7498011122AR  
-7498011122R  
-7498011125  
-7498111120  
-7498111120A  
-7498111120AR  
-7498111120R  
-7498210003  
-7498210220  
-7498210220A  
-S14100043

All products with date code January 31<sup>st</sup> 2018 or later will be affected by this change.

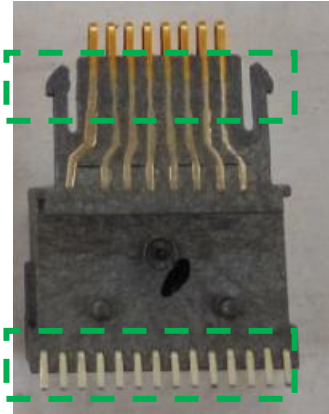
**DETAIL OF CHANGE:**

**OLD**

**RJ45 insert bottom view:**



**NEW**



**Hook:**

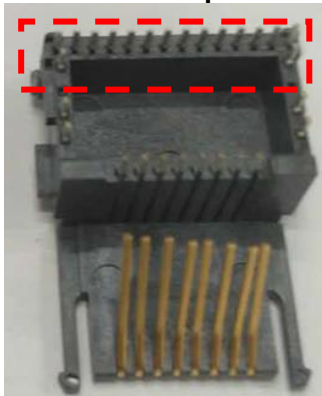
To increase the mechanical stability of the insert housing-connection, the head of the mechanical hook will be enlarged, while the body will be shortened.

**Pins:**

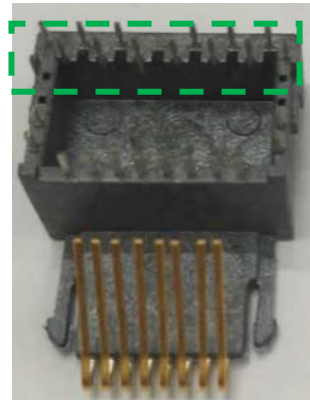
The pins will be molded inside the plastic, to increase their mechanical stability. The pin thickness will be changed from 0.20 mm to 0.25 mm.

**OLD**

**RJ45 insert top view:**



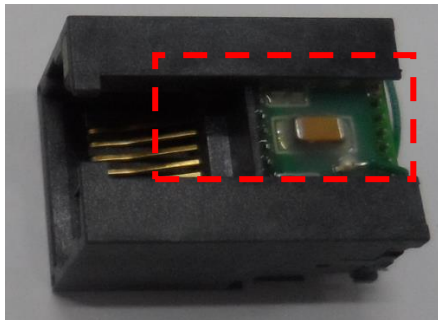
**NEW**



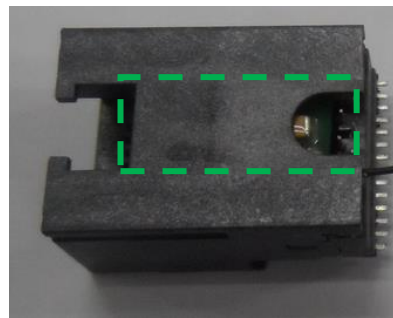
An additional pin row will be added to increase the pin to pin distance.

**OLD**

Plastic header to view:



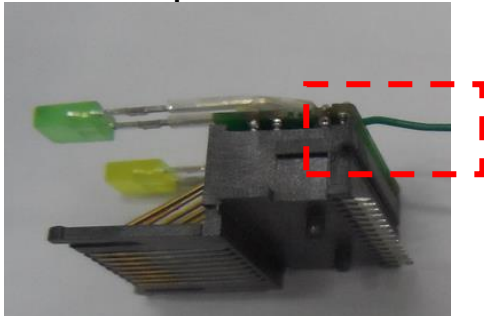
**NEW**



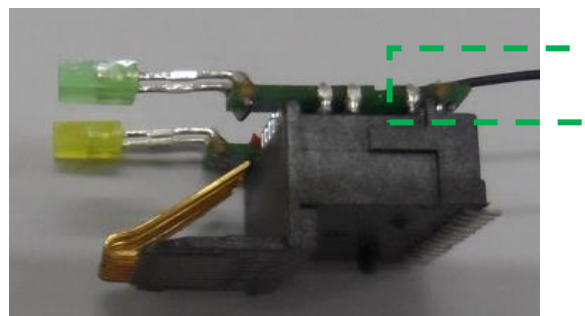
The new header will be closed, to improve the mechanical temperature stability at the IR reflow process.

**OLD**

RJ45 insert top view with GND wire:



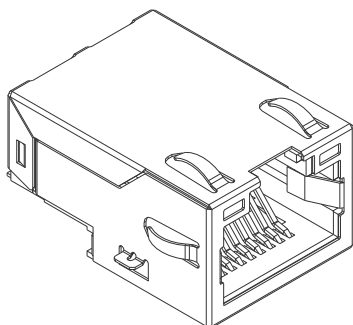
**NEW**



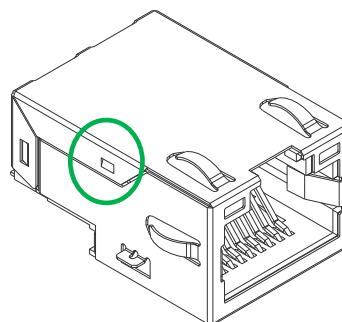
The wire material will be changed from PVC to XLPE.

**OLD**

RJ45 low profile with shield:



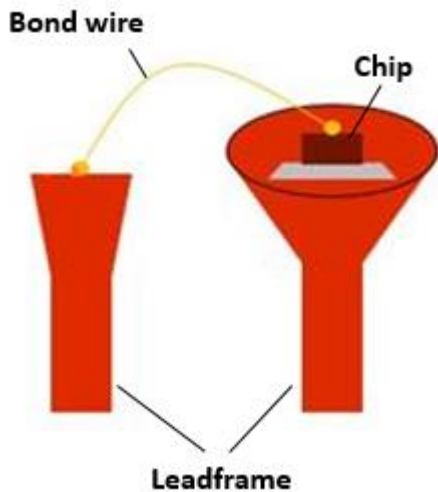
**NEW**



A latch will be added to prevent the shield from bending

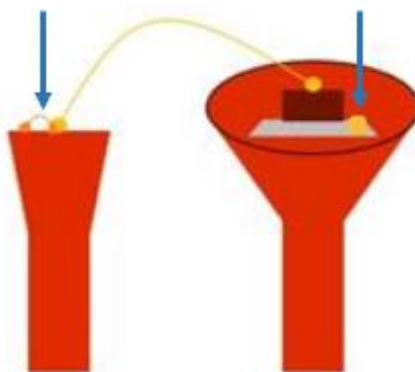
**OLD**

Lead frame inside RJ45 LEDs:



**NEW**

Fish tail bond Fish tail bond



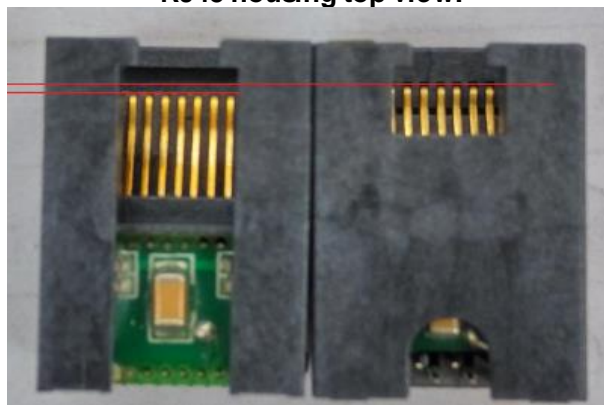
Inside the LEDs, a fish tail bond will be added to the golden wire and silver paste to increase the LED temperature resistance

**OLD**

**NEW**

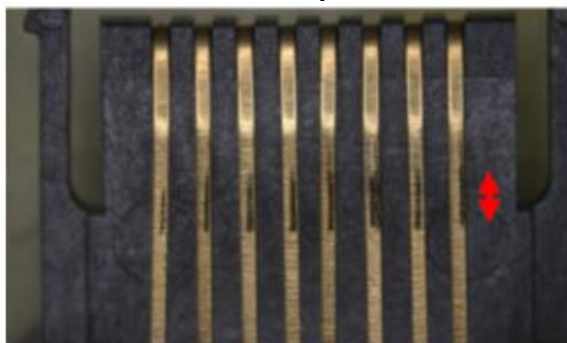
RJ45 housing top view:

0.5 mm



The golden contact spring will be moved 0.5 mm to the connector front. This will increase the contact area for the inserted plug.

Top view on contact springs after 750 mating cycles



**RELIABILITY / QUALIFICATION SUMMARY:**

- 3-Times Reflow according to J-STD-020E
- Solderability according to IPC-A610 chapter 8.3.5
- High Temperature Exposure according to MIL-STD-202 Method 108
- Thermal Shock according to MIL-STD-202 Method 107
- Vibration according to MIL-STD-202 Method 204
- Mating & Unmating force according to EIA-364-13
- Durability according to EIA-364-09
- Dynamic Pull test according to EIA-364-98

**DATA SHEET CHANGE:** Yes No**Würth Elektronik eiSos GmbH & Co. KG**

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