



## PCN#03A-14 Frequently Asked Questions

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### 1. **Why is Lattice issuing this PCN (Alternate Qualified Assembly/Test Site and Material Sets)?**

With this PCN, Lattice is able to provide additional assembly/test location and material sets for our mainstream, high running devices including the LatticeECP2™/3, LatticeXP2™, MachXO™/2 and ispMACH™ 4000V/B/C/ZC/ZE, to ensure supply and meet growing customer demand.

### 2. **Is Cu bonding wire material new at Lattice?**

No, it is not new to Lattice products. Our 40nm products (iCE™40) have been manufactured using Cu bonding wire since the product introduction. Lattice also qualified Cu bonding wire for our mainstream devices including the MachXO/XO2, LatticeECP2/3, LatticeXP2 and ispMACH 4000ZE devices at ASE Malaysia in 2012 and ASE Taiwan in 2013. With this PCN, we are further expanding the Cu bonding wire manufacturing capacity for those product lines.

### 3. **What is the difference this time between this PCN and PCN#09A-12 (Alternate Qualified Material Sets - Cu bonding wire @ ASE Malaysia) and PCN#03A-13 (Alternate Qualified Material Sets - Cu bonding wire @ ASE Taiwan)?**

PCN#09A-12 was for our ASE package and test facility in Malaysia. PCN#03A-13 qualified ASE Taiwan for high running devices. PCN#03A-14 qualifies Amkor Philippines to further expand our manufacturing capabilities. This allows us to provide the additional assembly and test location to minimize the supply interruption that could be caused by unforeseen or uncontrollable events.

### 4. **How do I order Cu bonding wire sample devices?**

If a customer requires Cu bonding wire evaluation devices from Amkor Philippines, they can be obtained by submitting a sample request through your local Sales Representative within 30 days from date of PCN notification. Please specify the custom OPN when requesting samples. Please refer to the [PCN](#) for custom OPN information for sample support.

### 5. **Will samples be available for all device/package combinations undergoing Amkor Philippines Cu bonding wire qualification at the time of PCN notice?**

Customers requiring samples for evaluation should submit a sample request to their Lattice Sales Representative within 30 days from the date of PCN notification. Samples will be available for most but not all of the high volume device/package combinations at the time of PCN notice.

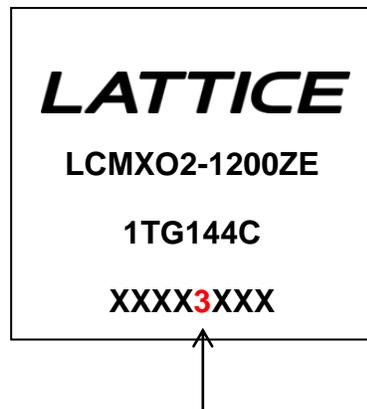
If Lattice is unable to fulfill the sample request immediately, Lattice will schedule to build the samples for the customer. Lattice will provide the customer 90 days from the receipt of samples to complete their evaluation.

**6. When will I begin getting Cu bonding wire material from Amkor Philippines?**

Unless a customer needs additional time to evaluate the Cu bonding wire samples from Amkor Philippines, Lattice plans to start shipping the new material as early as 90 days after the PCN notification date.

**7. Is there a way to identify Cu bonding wire material by looking at the physical device?**

Devices with Cu bonding wire material sets from Amkor Philippines can be identified by the numeric value “3” in the fifth position of the datecode marked on the topside of the devices. This datecode is also marked on the label on the outside of the inventory box as well as on the anti-static, moisture barrier bag within. See device topside marking example below.



Numeric character “3” in fifth position of Datecode indicates Cu-wire material set from Amkor Philippines

**8. Will Lattice provide any qualification or characterization reliability data?**

Lattice is providing qualification and characterization data as part of PCN document. Please refer to the [PCN](#) for information on how to access this data. Manufacturability and Construction Analysis reports will be also available on request through your local Sales Representative.

**9. Can I still buy existing material devices only?**

Lattice has performed thorough analysis and evaluation of Cu bonding wire devices from Amkor Philippines and ensure they will meet customer expectations. As both gold (Au) and Cu are qualified at multiple assembly locations, we reserve the right to manufacture and ship using either material set from any qualified manufacturing location. If a customer requires existing material till they complete the qualification of this PCN, they may order to the custom Ordering Part Number (OPN) documented

in the PCN. Any request that we limit location of test and assembly to one or the other location must be reviewed and may also come at additional cost.

**10. How long will I have to validate the new Cu bonding wire devices from Amkor Philippines in my end product?**

Customers will have 90 days from the PCN notification date to complete their evaluations. If customers request samples to complete their evaluation, they will have 90 days from the date of receipt of samples to evaluate the Cu bonding wire devices from Amkor Philippines. Customers who do not want to receive the Cu bonding wire devices from Amkor Philippines until they complete their evaluation must initiate a change order request prior to the PCN Expiration Date to convert their backlog to the existing qualified material custom OPN. Please refer to the [PCN](#) for custom OPN information.

**11. Who do I contact if I have technical questions on this PCN?**

Please contact your local Sales Representative or you may contact [pcn@latticesemi.com](mailto:pcn@latticesemi.com) for any questions related to this PCN.