



PROCESS CHANGE NOTIFICATION

PCN1817

Alternate Assembly and Test Site for Stratix® 10 Devices

This is not a new PCN issuance. This is an update to PCN1817; please see the [revision history](#) table for information specific to this update

Change Description:

Intel Programmable Solutions Group (“Intel PSG”, formerly Altera) is announcing the addition of the Intel Assembly Test Manufacturing in Penang, Malaysia as an alternate assembly and test site of Stratix 10 devices.

Intel (Penang) Malaysia is a long-time qualified assembly and test site for multiple Intel products and packages.

Table 1: Assembly and Test Site Change

	Current Site	Added Alternate Site
Assembly and Test Site	Intel (Arizona)	Intel (Penang)
Country of Origin	USA	Malaysia

Products Affected:

All Stratix 10 devices currently in production and all future Stratix 10 devices.

Please refer to the list of currently assembled and tested Stratix 10 devices in Excel form:

<https://www.intel.com/content/dam/www/programmable/us/en/pdfs/literature/pcn/pcn1817-opn-list.xlsx>

Recommended Action

Customers are requested to:

1. Acknowledge receipt of this notification.
2. Review and inform us, at the earliest convenience, any questions or concerns regarding this change.

Please refer to the “Product Transition Dates” for the key milestones.

Upon implementation, Intel will ship materials from either the Arizona or Penang site.

Product Transition Dates:

Customers are requested to take note of the key dates shown in the table below.

Table 2

<i>Milestone</i>	<i>Date</i>
Last date to acknowledge receipt of this notification ¹	November 2, 2018
Estimated earliest shipment date of changed products ²	March 22, 2019

Note 1: J-STD-046, section 3.2.3.1b, stipulates that lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change.

Note 2: Effective the earliest ship date listed above, Intel PSG may begin the shipment of changed products.

Intel reserves the right to continue shipment of pre-change product after the change implementation date, and customers will receive shipments of either pre-change or post-change product.

Reason for Change:

The qualification of an additional production assembly and test site for the affected devices supports supply chain risk mitigation.

Impact and Benefit of Change:

The change will not impact the form, fit, and function of the product. Product datasheet and package specifications remain the same. Intel Penang uses the same exact Bill of Materials (BOM) as the Intel Arizona site.

Qualification testing was performed according to Intel's Copy Exactly! Methodology to ensure consistency in quality and reliability of the product and processes.

Method to Identify Change Product:

COO (Country of Origin): Malaysia. This is visible on both the label and the top mark.

Qualification Data:

Qualification testing was performed according to the Copy Exactly! Methodology to ensure consistency in quality and reliability of the product and processes.

Table 3: Reliability Test Data

Test Vehicle	Test	Time point	Conditions	Number of Lots	Total Sample Size	Results (Fail/Total SS)
Stratix 10 Assembly Test Vehicle 1	Temperature Cycle Test (TCB)	1000X	-55°C /125°C	3	230	0/230
	High Temperature Storage Test (Bake)	1000hrs	150°C	3	230	0/230
	Unbiased Highly Accelerated Stress Test (uHAST)	275hrs	110°C / 85%RH	3	230	0/230

Note 1: Test Vehicle is in F2397 package, package size is 50x50 mm.

Note 2: Preconditioning performed according to J-STD-020, MSL3 @ 245°C.

Contact

For more information, please contact Sales or Customer Quality Engineering (CQE) in your region, or submit a Service Request at the [My Intel](#) support page.

Customer Notifications Subscription

Customers that have subscribed to Intel PSG's customer notification mailing list will receive the PCN document automatically via email.

If you would like to receive customer notifications by email, please subscribe to our customer notification mailing list at:

<https://www.intel.com/content/www/us/en/programmable/my-intel/mail-emailsub/technical-updates.html>

Intel PSG references J-STD-046 guidelines for PCN.

In accordance with J-STD-046, this change is deemed acceptable to the customer if no acknowledgement is received within 30 days from date of notification.

Revision History

Date	Rev	Description
08/10/2018	1.0.0	Initial Release
05/03/2019	1.1.0	Qualification Data Update

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