

Revision 1.0.0 ADV Issue Date: 01/05/2018

CUSTOMER ADVISORY ADV1719

Stratix® 10 FPGA IHS Dimple Fiducial Addition

Change Description:

Intel® Programmable Solutions Group ("Intel PSG", formerly Altera) is notifying customers that Stratix®10 products use either an integrated heat spreader (IHS) lid design with a small dimple fiducial or an IHS lid with no dimple. See Figure 1 and 2 below for side by side comparison.

The dimple fiducial is added as a continuous improvement action for detection by the vision system during the lid pick-up process.

There is no change to the package dimensions and no expected impact to the customer's board assembly process.

After depletion of the IHS lid material with no dimple, the affected products will continue to use the IHS with the dimple fiducial.

Fig. 1
Zoomed-in image of IHS without the dimple fiducial



Fig. 2
Zoomed-in image of the dimple fiducial
This is a round impression on the lid



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Fig. 3 IHS Lid with Dimple



Recommended Action

Customers are being notified to take note of this change to the integrated heat spreader lid appearance. Please note that once the change takes effect, customers may receive units with or without the fiducial dimple on the IHS.

Products Affected:

All Stratix 10 Products

- The scope of this customer advisory also covers all new or future Ordering Part Numbers (OPNs).
- Only for reference, a list of the current OPNs that have shipped to-date are also provided via the link below. It is important to note that the change is <u>not only</u> limited to this list of OPNs, but applies to all Stratix 10.

https://www.altera.com/content/dam/altera-www/global/en_US/pdfs/literature/pcn/adv1719-opn-list.xlsx

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Reason for Change:

The dimple fiducial is added as a continuous improvement action for detection by the vision system during the lid pick-up process.

Change Implementation

Table 1

Milestone	Date
Date Change in Effect ¹	January 12, 2018

Note 1: Once the change takes effect, customers will receive units either with or without the fiducial dimple on the IHS

Contact

For more information, please contact Sales or Customer Quality Engineering (CQE) in your region, or submit a Service Request at Intel PSG's mySupport website.

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.altera.com/subscriptions/email/signup/eml-index.jsp

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.

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Revision History

Date	Rev	Description
01/05/2018	1.0.0	Initial Release

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		Affected Part Numbers		
1SG210HN1F43E2VGS1	 1SG250LU3F50E1VG	1SG280LN2F43E2VGS2	1SX250LH3F55E2LG	1SX280LH3F55E2LG
1SG210HN2F43E2VGS1	1SG250LU3F50E2LG	1SG280LN2F43I1VG	1SX250LH3F55E2VG	1SX280LH3F55E2VG
1SG210HN3F43E2VGS1	1SG250LU3F50E2VG	1SG280LN2F43I2LG	1SX250LH3F55E3VG	1SX280LH3F55E3VG
1SG210HN3F43E3VGS1	1SG250LU3F50E3VG	1SG280LN2F43I2VG	1SX250LH3F55I1VG	1SX280LH3F55I1VG
1SG210HU1F50E2VGS1	1SG250LU3F50I1VG	1SG280LN3F43E1VG	1SX250LH3F55I2LG	1SX280LH3F55I2LG
1SG210HU2F50E2VGS1	1SG250LU3F50I2LG	1SG280LN3F43E2LG	1SX250LH3F55I2VG	1SX280LH3F55I2VG
1SG210HU3F50E2VGS1	1SG250LU3F50I2VG	1SG280LN3F43E2VG	1SX250LH3F55I3VG	1SX280LH3F55I3VG
1SG210HU3F50E3VGS1	1SG250LU3F50I3VG	1SG280LN3F43E2VGS1	1SX250LN2F43E1VG	1SX280LN2F43E1VG
1SG250LH2F55E1VG	1SG280HH1F55E2VGS1	1SG280LN3F43E2VGS2	1SX250LN2F43E2LG	1SX280LN2F43E2LG
1SG250LH2F55E2LG	1SG280HH2F55E2VGS1	1SG280LN3F43E3VG	1SX250LN2F43E2VG	1SX280LN2F43E2VG
1SG250LH2F55E2VG	1SG280HH3F55E2VGS1	1SG280LN3F43E3VGS1	1SX250LN2F43I1VG	1SX280LN2F43E2VGS1
1SG250LH2F55I1VG	1SG280HH3F55E3VGS1	1SG280LN3F43E3VGS2	1SX250LN2F43I2LG	1SX280LN2F43I1VG
1SG250LH2F55I2LG	1SG280HN1F43E2VGS1	1SG280LN3F43I1VG	1SX250LN2F43I2VG	1SX280LN2F43I2LG
1SG250LH2F55I2VG	1SG280HN2F43E2VGS1	1SG280LN3F43I2LG	1SX250LN3F43E1VG	1SX280LN2F43I2VG
1SG250LH3F55E1VG	1SG280HN3F43E2VGS1	1SG280LN3F43I2VG	1SX250LN3F43E2LG	1SX280LN3F43E1VG
1SG250LH3F55E2LG	1SG280HN3F43E3VGS1	1SG280LN3F43I3VG	1SX250LN3F43E2VG	1SX280LN3F43E2LG
1SG250LH3F55E2VG	1SG280HU1F50E2VGS1	1SG280LU2F50E1VG	1SX250LN3F43E3VG	1SX280LN3F43E2VG
1SG250LH3F55E3VG	1SG280HU2F50E2VGS1	1SG280LU2F50E2LG	1SX250LN3F43I1VG	1SX280LN3F43E2VGS1
1SG250LH3F55I1VG	1SG280HU3F50E2VGS1	1SG280LU2F50E2VG	1SX250LN3F43I2LG	1SX280LN3F43E3VG
1SG250LH3F55I2LG	1SG280HU3F50E3VGS1	1SG280LU2F50E2VGS2	1SX250LN3F43I2VG	1SX280LN3F43E3VGS1
1SG250LH3F55I2VG	1SG280LH2F55E1VG	1SG280LU2F50I1VG	1SX250LN3F43I3VG	1SX280LN3F43I1VG
1SG250LH3F55I3VG	1SG280LH2F55E2LG	1SG280LU2F50I2LG	1SX250LU2F50E1VG	1SX280LN3F43I2LG
1SG250LN2F43E1VG	1SG280LH2F55E2VG	1SG280LU2F50I2VG	1SX250LU2F50E2LG	1SX280LN3F43I2VG
1SG250LN2F43E2LG	1SG280LH2F55E2VGS2	1SG280LU3F50E1VG	1SX250LU2F50E2VG	1SX280LN3F43I3VG
1SG250LN2F43E2VG	1SG280LH2F55I1VG	1SG280LU3F50E2LG	1SX250LU2F50I1VG	1SX280LU2F50E1VG
1SG250LN2F43I1VG	1SG280LH2F55I2LG	1SG280LU3F50E2VG	1SX250LU2F50I2LG	1SX280LU2F50E2LG
1SG250LN2F43I2LG	1SG280LH2F55I2VG	1SG280LU3F50E2VGS1	1SX250LU2F50I2VG	1SX280LU2F50E2VG
1SG250LN2F43I2VG	1SG280LH3F55E1VG	1SG280LU3F50E2VGS2	1SX250LU3F50E1VG	1SX280LU2F50E2VGS1
1SG250LN3F43E1VG	1SG280LH3F55E2LG	1SG280LU3F50E3VG	1SX250LU3F50E2LG	1SX280LU2F50I1VG
1SG250LN3F43E2LG	1SG280LH3F55E2VG	1SG280LU3F50E3VGS1	1SX250LU3F50E2VG	1SX280LU2F50I2LG
1SG250LN3F43E2VG	1SG280LH3F55E2VGS1	1SG280LU3F50E3VGS2	1SX250LU3F50E3VG	1SX280LU2F50I2VG
1SG250LN3F43E3VG	1SG280LH3F55E2VGS2	1SG280LU3F50I1VG	1SX250LU3F50I1VG	1SX280LU3F50E1VG
1SG250LN3F43I1VG	1SG280LH3F55E3VG	1SG280LU3F50I2LG	1SX250LU3F50I2LG	1SX280LU3F50E2LG
1SG250LN3F43I2LG	1SG280LH3F55E3VGS1	1SG280LU3F50I2VG	1SX250LU3F50I2VG	1SX280LU3F50E2VG
1SG250LN3F43I2VG	1SG280LH3F55E3VGS2	1SG280LU3F50I3VG	1SX250LU3F50I3VG	1SX280LU3F50E2VGS1
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1SG250LU2F50E1VG	1SG280LH3F55I2LG	1SX250LH2F55E2LG	1SX280LH2F55E2LG	1SX280LU3F50E3VGS1
1SG250LU2F50E2LG	1SG280LH3F55I2VG	1SX250LH2F55E2VG	1SX280LH2F55E2VG	1SX280LU3F50I1VG
1SG250LU2F50E2VG	1SG280LH3F55I3VG	1SX250LH2F55I1VG	1SX280LH2F55I1VG	1SX280LU3F50I2LG
1SG250LU2F50I1VG	1SG280LN2F43E1VG	1SX250LH2F55I2LG	1SX280LH2F55I2LG	1SX280LU3F50I2VG
1SG250LU2F50I2LG	1SG280LN2F43E2LG	1SX250LH2F55I2VG	1SX280LH2F55I2VG	1SX280LU3F50I3VG
1SG250LU2F50I2VG	1SG280LN2F43E2VG	1SX250LH3F55E1VG	1SX280LH3F55E1VG	