



# Product Change Notification

## 106358 - 00

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**Americas Contact:** [asmo.pcn@intel.com](mailto:asmo.pcn@intel.com)

**Asia Pacific Contact:** [apacgccb@intel.com](mailto:apacgccb@intel.com)

**Europe Email:** [eccb@intel.com](mailto:eccb@intel.com)

**Japan Email:** [jccb.ijkk@intel.com](mailto:jccb.ijkk@intel.com)

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# Product Change Notification

**Change Notification #:** 106358 - 00  
**Change Title:** Intel® I/O Processors, IOP331, IOP333, PCN 106358-00, Order Code, C-1/D-0 to D-1 Stepping Conversion for IOP331, A0-A1 Stepping Conversion for IOP333  
**Date of Publication:** May 23, 2006

## Key Characteristics of the Change:

Order Code

## Forecasted Key Milestones:

<b>Date of Samples Availability:</b>	May 23, 2006
<b>Date Customer Must be Ready to Receive Post-Conversion Material:</b>	Aug 25, 2006
<b>Date of First Availability of Post-Conversion Material:</b>	Jun 30, 2006

*The date of "First Availability of Post-Conversion Material" is the projected date that a customer may expect to receive the Post-Conversion Materials. This date is determined by the projected depletion of inventory at the time of the PCN publication. The depletion of inventory may be impacted by fluctuating supply and demand, therefore, although customers should be prepared to receive the Post-Converted Materials on this date, Intel will continue to ship and customers may continue to receive the pre-converted materials until the inventory has been depleted.*

## Description of Change to the Customer:

In order to incorporate changes for IOP331 and IOP333, Intel® is converting the 80331 from D-0 to D-1 and the 80333 from A-0 and A-1

- The change will fix 80331 D-0 and 80333 A-0 non-core erratum 62 'Internal clock misalignment can cause processor hang'.
- The change will also remove a previous specification clarification which reduced Tcase temperature recommendations for each product SKU. Tcase recommendations will now reflect what is stated in the original product data sheet.
- The 80331 D-1 stepping is backwards compatible with the D-0 stepping.
- The 80333 A-1 stepping is backwards compatible with the A-0 stepping.
- The internal revision identification will not be changed.
- New material markings will be changed to reflect the new stepping parts.

**Customers who are currently ordering 80331 C-1 should order equivalent 80331 D-1 product. See 80331 C-1 conversion charts below. The 80331 D-1 stepping is backwards compatible with C-1 stepping.**

## Customer Impact of Change and Recommended Action:

- Minimal validation effort for this conversion is expected as there are no logic changes between 80331 D-0 Stepping and D-1 Stepping.
- Minimal validation effort for this conversion is expected as there are no logic changes between 80333 A-0 Stepping and A-1 Stepping.
- Customers should be ready to receive a combination of both 80331 D-1 step material and 80333 A-1 step material by July 18th, 2006.
- New QDF#, S-Spec, MM numbers will be provided for 80331 D-1 and 80333 A-1 Step Qualification Samples and Production units. See tables below.

## Products Affected / Intel Ordering Codes:

### IOP331 D-0 PB Conversion

Stepping	Product Code	Frequency	Pre-Conversion		Post-Conversion		Post-Conversion	
			S-Spec	MM#	Spec	MM#	QDF	MM#
D-0 to D-1	NQ80331M250	250 MHz	SL826	865949	SL9B6	881764	Q603	881966
D-0 to D-1	NQ80331M500	500 MHz	SL823	865946	SL9B7	881976	Q604	881964
D-0 to D-1	NQ80331M500	500 MHz	SL827	865950	SL9B7	881976	Q604	881964
D-0 to D-1	NQ80331M667	667 MHz	SL824	865947	SL9B8	881973	Q605	881965
D-0 to D-1	NQ80331M667	667 MHz	SL828	865951	SL9B8	881973	Q605	881965
D-0 to D-1	NQ80331M800	800 MHz	SL825	865948	SL9B9	881978	Q606	881968
D-0 to D-1	NQ80331M800	800 MHz	SL829	865952	SL9B9	881978	Q606	881968

### IOP331 PB Free Conversion

Stepping	Product Code	Frequency	Pre-Conversion		Post-Conversion		Post-Conversion	
			S-Spec	MM#	Spec	MM#	QDF	MM#
D-0 to D-1	QG80331M250	250 MHz	SL8C8	869351	SL9BD	881974	Q607	881760
D-0 to D-1	QG80331M500	500 MHz	SL8C5	869348	SL9BE	881977	Q608	881961
D-0 to D-1	QG80331M500	500 MHz	SL8C9	869352	SL9BE	881977	Q608	881961
D-0 to D-1	QG80331M667	667 MHz	SL8C6	869349	SL9BF	881975	Q609	881962
D-0 to D-1	QG80331M667	667 MHz	SL8CA	869371	SL9BF	881975	Q609	881962
D-0 to D-1	QG80331M800	800 MHz	SL8C7	869350	SL9BG	881979	Q610	881963
D-0 to D-1	QG80331M800	800 MHz	SL8CB	869372	SL9BG	881979	Q610	881963

### IOP333 A-0 PB Conversion

Stepping	Product Code	Frequency	Pre-Conversion		Post-Conversion		Post-Conversion	
			S-Spec	MM#	Spec	MM#	QDF	MM#
A-0 to A-1	NQ80333M500	500 MHz	SL82B	865954	SL9BA	880980	Q611	881970
A-0 to A-1	NQ80333M667	667 MHz	SL82C	865956	SL9BB	881075	Q612	881971
A-0 to A-1	NQ80333M800	800 MHz	SL82D	865957	SL89BC	881077	Q613	881972

### IOP333 A-0 PB Free Conversion

Stepping	Product Code	Frequency	Pre-Conversion		Post-Conversion		Post-Conversion	
			S-Spec	MM#	Spec	MM#	QDF	MM#
A-0 to A-1	QG80333M500	500 MHz	SL8CC	869373	SL9BH	881076	Q614	881761
A-0 to A-1	QG80333M667	667 MHz	SL8CD	869375	SL9BJ	881078	Q615	881967
A-0 to A-1	QG80333M800	800 MHz	SL8CE	869377	SL9BK	881079	Q616	881969

**IOP331 C-1 PB Conversion**

Stepping	Product Code	Frequency	Pre Conversion		Post Conversion		Post Conversion	
			S-Spec	MM#	Spec	MM#	QDF	MM#
C-1 to D-1	NQ80331M250	250	SL7UB	863831	SL9B6	881764	Q603	881966
C-1 to D-1	NQ80331M250	250	SL82Q	865918	SL9B6	881764	Q603	881966
C-1 to D-1	NQ80331M500	500	SL7NM	862515	SL9B7	881976	Q604	881964
C-1 to D-1	NQ80331M500	500	SL82R	865920	SL9B7	881976	Q604	881964
C-1 to D-1	NQ80331M667	667	SL7NN	862506	SL9B8	881973	Q605	881965
C-1 to D-1	NQ80331M667	667	SL82S	865921	SL9B8	881973	Q605	881965
C-1 to D-1	NQ80331M800	800	SL7NP	862509	SL9B9	881978	Q606	881968
C-1 to D-1	NQ80331M800	800	SL82T	865924	SL9B9	881978	Q606	881968

**IOP331 C-1 PB Free Conversion**

Stepping	Product Code	Frequency	Pre Conversion		Post Conversion		Post Conversion	
			S-Spec	MM#	Spec	MM#	QDF	MM#
C-1 to D-1	NQ80331M250	250	SL7UB	863831	SL9BD	881974	Q607	881760
C-1 to D-1	NQ80331M250	250	SL82Q	865918	SL9BD	881974	Q607	881760
C-1 to D-1	NQ80331M500	500	SL7NM	862515	SL9BE	881977	Q608	881961
C-1 to D-1	NQ80331M500	500	SL82R	865920	SL9BE	881977	Q608	881961
C-1 to D-1	NQ80331M667	667	SL7NN	862506	SL9BF	881975	Q609	881962
C-1 to D-1	NQ80331M667	667	SL82S	865921	SL9BF	881975	Q609	881962
C-1 to D-1	NQ80331M800	800	SL7NP	862509	SL9BG	881979	Q610	881963
C-1 to D-1	NQ80331M800	800	SL82T	865924	SL9BG	881979	Q610	881963

**Reference Documents / Attachments:****Document:**

Intel® 80331 I/O Processor Data Sheet

Intel® 80333 I/O Processor Data Sheet

Intel® 80333 I/O Processor Specification Update

Intel® 80331 I/O Processor Specification Update

**Doc #/Location:**

273943/http://developer.intel.com/design/iio/datashts/273943.htm

305433/http://developer.intel.com/design/iio/specupdt/273930.htm

273930/http://developer.intel.com/design/iio/specupdt/273930.htm

305435/http://developer.intel.com/design/iio/specupdt/305435.htm

**PCN Revision History:****Date of Revision:**

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00

**Reason:**

Originally Published PCN