



# Product Change Notification

**Change Notification #:** 116716 - 01  
**Change Title:** Intel® Atom x5-E3930,  
Intel® Atom x5-E3940 and  
Intel® Atom x7-E3950 Processors,  
PCN 116716-01, Product Design, Order Code,  
F1 Stepping Change, **Reason for Revision:**  
**Provide additional guidance to Customers**  
**Date of Publication:** April 1, 2019

## Key Characteristics of the Change:

Product Design, Order Code

## Forecasted Key Milestones:

<b>Date of Samples Availability:</b>	January 18, 2019
<b>Date of First Availability of Post-Conversion Material*:</b>	May 06, 2019
<b>Date Customer Must be Ready to Receive Post-Conversion Material**:</b>	November 02, 2019

## Description of Change to the Customer:

### **Reason for Revision: Provide additional guidance to Customers**

In order to further improve the Quality and Reliability of products, Intel will be making changes pertaining to the Intel® Atom E3900 Series Processor listed below in the "Products Affected / Intel Ordering Codes" table below.

### **Details of Changes to the Customer:**

On the Processor: Intel will start transitioning the D-0 stepping of the Intel® Atom® Processor E3900 Series to F-1.

The new F-1 stepping will be physically and electrically drop in compatible, no change to form, fit, with additional changes which improve functionality. For Embedded and Industrial use condition applications, please review information on D-0 to F-1 updates detailed in summary of changes section and documents listed below.

**Summary of Changes from D-0 to F-1 Stepping:**

Intel identified an issue with the Low Pin Count (LPC), Real Time Clock (RTC), USB2.0, SD Card, eMMC, and SDIO interfaces on Intel® Atom™ Processor E3900 Series resulting in degradation of these signals at a rate higher than Intel's quality goals after multiple years in service.

Erratum fixes & specification changes made for earlier stepping are also included in the F-1 stepping.

For comprehensive list of changes, refer to the

Intel Apollo Lake / Apollo Lake - I Dashboard - Lite (RDC# 573991)

Intel Atom® Processor E3900 Series Specification Update Addendum - NDA (RDC# 573884)

Intel Atom® E3900 and Intel Atom® A3900 Processor Series External Design Specification (EDS) Addendum (RDC# 558402)

[Intel Atom® E3900 and A3900 Processor Platform Design Guide Addendum \(RDC # 558588\)](#)

**Customer Impact of Change and Recommended Action:**

Customers will be required to migrate to the updated version of the Intel Atom E3900 Series Processor by placing future orders using the new Post Change part numbers listed below. [The ordering window opened on March 18th, 2019 for the E Series.](#)

[Due to system design variability, slight system level hardware and firmware updates are recommended for Embedded and Industrial use condition applications on F-1 products to ensure optimal performance over the lifetime of the product. For further detailed guidance, all Customers should read the documents referred to above at <https://www.intel.com/content/www/us/en/design/products-and-solutions/processors-and-chipsets/apollo-lake/technical-library.html>](#)

\*The date of "First Availability of Post-Conversion Material" as denoted in the milestone table above is the earliest projected date when post-conversion material is expected to be available to start shipping to customers if desired. This date is also a good guideline by which customers should begin switching orders from off the old SKUs onto the new SKUs or be prepared to place a last time buy on the older SKUs.

\*\*The date of "Customer Must be Ready to Receive Post-Conversion Material" is the projected date customers must be prepared to start receiving the Post-Converted Material. After this date, the Pre-Conversion SKUs will be discontinued & no longer guaranteed. They may be available only on a first come first serve basis, while supply lasts.

### Products Affected / Intel Ordering Codes:

Marketing Name	Product Code	Pre Conversion S-Spec	Pre Conversion MM#	Stepping	Post Conversion S-Spec	Post Conversion MM#	Post Conversion Stepping
Intel Atom® x5-E3940 Processor	LH8066803102401	S R33M	953083	D-0	S REK6	983196	F1
Intel Atom® x7-E3950 Processor	LH8066803102601	S R33P	953085	D-0	S REK9	983201	F1
Intel Atom® x5-E3930 Processor	LH8066803102701	S R33Q	953086	D-0	S REKA	983203	F1

### PCN Revision History:

**Date of Revision:**

March 12, 2019

[April 1, 2019](#)

**Revision Number:**

00

[01](#)

**Reason:**

Originally Published PCN

[Provide additional guidance to Customers](#)



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**Should you have any issues with the timeline or content of this change, please contact the Intel Representative(s) for your geographic location listed below. No response from customers will be deemed as acceptance of the change and the change will be implemented pursuant to the key milestones set forth in this attached PCN.**

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