Intel CPU Processor Family Product Lifecycle

From product launch to the end of support, Intel® CPU processor families have a product lifecycle shaped by manufacturing supply, functional and security updates, and technical support.

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Figure 1. An Intel processor

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Overview

Intel develops products to support many market segments, following a development process called the unified product lifecycle (UPLC) The UPLC is defined in five distinct phases, spanning product concept until end of support. **This paper focuses on the milestones in production and post-production phases, specifically for Intel Central Processing Unit (CPU) processors.**[i]

After launch, the processor family will remain in the market for some time, during which Intel may provide customers with **manufacturing supply**, **functional and security updates,** and **technical support**.

The milestones described in this paper do not affect product warranty periods, or other parameters, as set forth in Intel's Terms & Conditions of Sale.
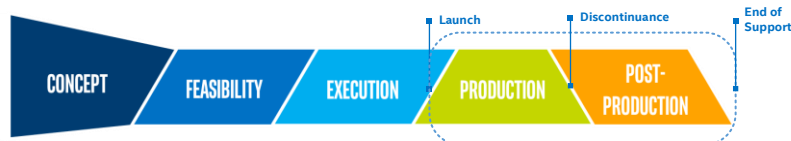

Figure 2. Intel unified product lifecycle

Supply Lifecycle

Product Launch

When Intel launches a new processor family, also referred to as a product introduction, it typically also initiates its manufacturing ramp and the product is placed on the market. This is also when Intel typically releases public product pricing, stock keeping unit (SKU) specifications, and availability.

Some examples of processor families include 13th Generation Intel® Core™ i9 processors, 3rd Generation Intel® Xeon® Scalable processors, and the Intel Atom® processor C5000 Series.

Production Supply Period

Processor families and individual SKUs may have different supply periods based on the market segment, customer demand, and customer-specific agreements. Customers should speak to their Intel representative to understand the supply lifecycle for specific products.

Supply Discontinuance

Intel issues a Product Discontinuance Notification (PDN) when it intends to stop supplying a given product to

customers. The PDN is typically provided at least 12 months prior to discontinuance and is intended to minimize disruption to the customers' business by providing them with the impacted product's intended **Last Order Date (LOD)** and **Last Ship Dates (LSD)**. After the LSD, a processor family (or a subset of its SKUs) is generally no longer shipped and, therefore, discontinued[ii].
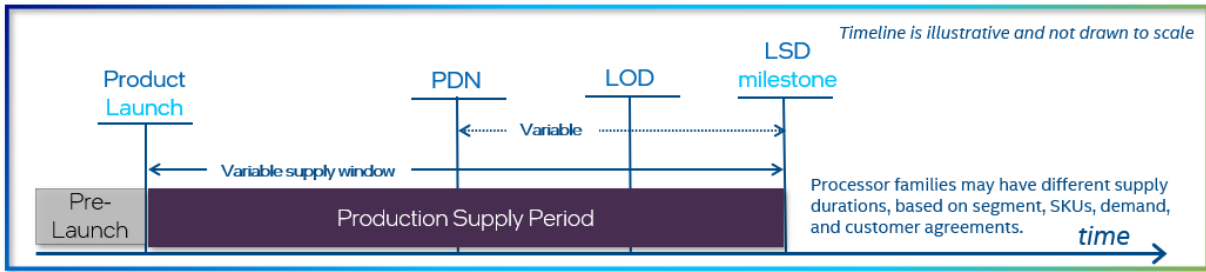

Figure 3. Illustrative Supply Lifecycle

Servicing and Technical Support Lifecycle

Baseline Servicing Period
During this period Intel provides functional and security updates for Intel processors or platforms, typically utilizing the [Intel Platform Update](#) and the [Intel Coordinated Vulnerability Disclosure](#) process[iii].

End of Servicing Updates
Prior to the conclusion of baseline servicing for a processor family, Intel issues an **End of Servicing Updates Notification** (ESUN) in advance: typically, 12 months.[iv] At the **End of Servicing Updates** (ESU) milestone, Intel concludes servicing the broad market. For the conclusion of interactive support, the **End of Interactive Support** (EOIS) milestone will typically be issued around the same time as ESU. Some SKUs may continue to have shipments from Intel after ESU[v].

End of Servicing Lifetime
A processor family reaches its end of servicing lifetime (EOSL) when all servicing and interactive technical support services have been concluded, including any extended servicing and support as described below. Self-help resources may still be available on intel.com.

Interactive Support Period
Technical support refers to the range of services provided by Intel that assist customers with the design-in, installation, customization, training, troubleshooting, failure analysis, and other areas. Processor family support often begins in the pre-launch phase, where Intel's teams proactively engage with prospective customers to assist with design Intel products into the customers intended solution.

Interactive support occurs when a customer opens a support case investigated by an Intel employee or contracted vendor. Support cases can be opened via [Intel Support](#) or [Intel Premier Support](#) in the form of a community forum post, web ticket, email, chat, social media comment, or phone call.

End of Support
A processor family reaches its end of support (EOS) milestone when all supply, servicing, and technical support has concluded. This includes Intel removing self-help resources for the processor, including documentation available on [intel.com](#).
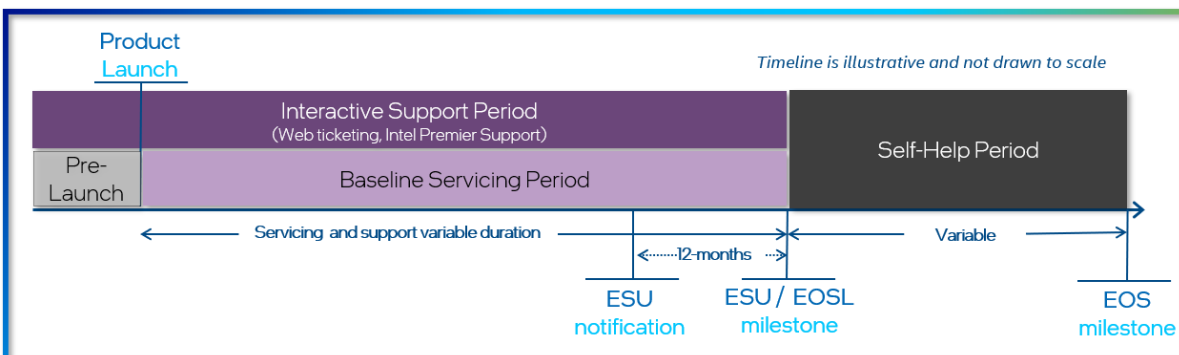

Figure 4. Illustrative servicing and support lifecycle typical for client desktop and mobile processor families

Extended Servicing and Support

Extended servicing and interactive support may be provided to customers for certain processor families and with an agreement with Intel.

Not all processor families offer extended servicing and interactive support. For example, there are server, network, and embedded platforms that offer extended servicing options, while client desktop and mobile processors currently do not.
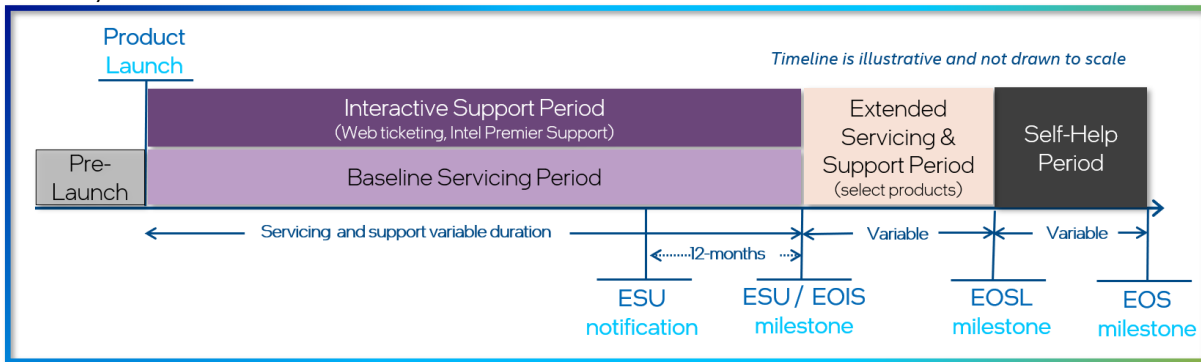

Figure 5. Illustrative servicing and support lifecycle typical for server and network processor families

Appendix

Supply Terminology

Product Discontinuance Notification (PDN)	Communication to customers that Intel will no longer ship a product as of a specific date. The change communication enables customers to receive advanced notice and manage and mitigate the disruption that might otherwise be caused by the discontinuation of a product.
Product Introduction	The date when Intel releases product pricing and availability to the public via media and industry. Product introduction and product launch are the same; however, the term product introduction is preferred for clarity.

Servicing Terminology

Servicing	The process of providing functional and security updates for Intel processors or platforms, typically utilizing the Intel Platform Update and the Intel Coordinated Vulnerability Disclosure process. Due to the highly integrated nature of hardware, firmware, and software, updates often require additional validation and integration from Intel's ecosystem of participants in the coordinated handling process. These ecosystem partners include operating system vendors, cloud service providers, independent firmware vendors, OEMs, and system integrators who release validated updates through direct channels to their customers.
Baseline Servicing	Servicing for the broad market.
End of Servicing Updates (ESU) Date	Intel concludes baseline servicing to the broad market as of this date.
End of Servicing Lifetime (EOSL) Date	Intel concludes baseline and any offered extended servicing as of this date
Extended Servicing	Servicing option after the processor's End of Servicing Updates (ESU) date[vi]. Not all processor families will have extended servicing offered.

Support Terminology

End of Interactive Support (EOIS) Date	Interactive support provided to the broad market concludes as of this date.
End of Support (EOS)	A processor family reaches its end of support (EOS) milestone when all supply, servicing, and technical support has concluded. This includes Intel removing

	self-help resources for the processor, including documentation available on intel.com.
Interactive Support	Interactive support occurs when a customer opens a support case investigated by an Intel employee or contracted vendor. Support cases can be opened via Intel Support or Intel Premier Support in the form of a community forum post, web ticket, email, chat, social media, or phone call.
Technical Support	Refers to the range of services provided to assist customers with the design-in, installation, customization, training, troubleshooting, failure analysis, and other areas of help requested.

Other Terminology

Intel CPU Processor (or Microprocessor)	A compute component that can interpret IA (Intel® architecture) instructions and is often referred to as a CPU (central processing unit) or SOC (system on chip).
Intel Processor Family	A logical grouping of processors that share a common design, feature sets, and manufacturing technology. Example families include 13th Generation Intel® Core™ i9 Processors, 3rd Generation Intel® Xeon® Scalable Processors, and the Intel Atom® Processor C5000 Series.
OEM	An **O**riginal **E**quipment **M**anufacturer is an organization that makes devices from component parts bought from other organizations.
Product Lifecycle	The succession of stages that a product goes through, starting from its planning until it is no longer supported.
SKU	Stock keeping unit.

About Intel

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i The term "processor" in this technical paper refers to Intel CPUs and does not refer to other processing units offered by Intel, such as graphics processing units (GPU) or infrastructure processing units (IPU).

ii To the extent customers may have particular supply terms, Intel honors those contractual agreements.

iii Intel's baseline servicing period excludes providing customers with new feature enablement, performance optimizations, or other such enhancements after product launch.

iv Intel reserves the right to end servicing without such notice where necessary.

v To the extent products are shipped after ESU, they are governed by Intel's Terms & Conditions of Sale, and nothing in this document affects those sales terms.

vi Extended servicing is available only to customers who have entered into extended servicing agreements with Intel.