

# Intel® Xeon® Processor X3430 (8M Cache, 2.40 GHz)

Facastiala		
- Essentials	I	
Status	Launched	
Launch Date	Q3'09	
Processor Number	X3430	
Intel® Smart Cache	8 MB	
DMI	2.5 GT/s	
Instruction Set	64-bit	
Instruction Set Extensions	SSE4.2	
Embedded Options Available	Yes	
Lithography	45 nm	
VID Voltage Range	0.6500V-1.4000V	
Recommended Customer Price	TRAY: \$224.00 BOX: \$203.00	
Datasheet	Link	
Additional Information URL	Link	
- Performance		
# of Cores	4	
# of Threads	4	
Processor Base Frequency	2.4 GHz	
Max Turbo Frequency	2.8 GHz	
TDP	95 W	
- Memory Specifications		
Max Memory Size (dependent on memory type)	32 GB	
Memory Types	DDR3 800/1066/1333	
Max # of Memory Channels	2	
Max Memory Bandwidth	21 GB/s	
Physical Address Extensions	36-bit	
ECC Memory Supported <sup>‡</sup>	Yes	
- Expansion Options		
PCI Express Revision	2.0	
PCI Express Configurations <sup>‡</sup>	1x16, 2x8, 4x4	
Max # of PCI Express Lanes	16	
- Package Specifications		
Max CPU Configuration	1	
T <sub>CASE</sub>	72.7°C	
Package Size	37.5mm x 37.5mm	

Processing Die Size		296 mm <sup>2</sup>
# of Processing Die Transistors		774 million
Sockets Supported L		LGA1156
ow Halogen Options Available		See MDDS
- Advanced Technologies		
Intel® Turbo Boost Technology ‡		1.0
Intel® vPro Technology ‡	Q	No
Intel® Hyper-Threading Technology ‡	Q	No
Intel® Virtualization Technology (VT-x) ‡		Yes
Intel® Virtualization Technology for Directed I/O (VT-d) ‡	Q	Yes
Intel® VT-x with Extended Page Tables (EPT) ‡	Q	Yes
Intel® 64 ‡	Q	Yes
Idle States		Yes
Enhanced Intel SpeedStep® Technology	Q	Yes
Intel® Demand Based Switching	Q	Yes
Thermal Monitoring Technologies		No
- Intel® Data Protection Technology		
Intel® AES New Instructions	Q	No
- Intel® Platform Protection Technology		
Trusted Execution Technology ‡	Q	Yes
Execute Disable Bit ‡		Yes

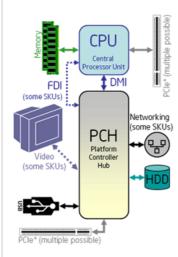
# **Compatible Products**

- Chipsets	Chipsets						
Compare	Product Name	Status	Embedded Options Available	TDP	Recommended Customer Price		
Compare All +							
	Intel® 3450 Chipset (Intel® BD3450 PCH)	Launched	Yes	5.9 W	T&R:\$44.00		
	Intel® 3400 Chipset (Intel® BD3400 PCH)	Launched	No		N/A		
	Intel® 3420 Chipset (Intel® BD3420 PCH)	Launched	Yes		T&R:\$31.00		

Compare	Product Name	Status	Chassis Form Factor	<b>Board Form Factor</b>	Socke
Compare All +					
	Intel® Server System SR1630GP	End of Life	1U Rack		LGA1156
	Intel® Server System SR1630GPRX	End of Life	1U Rack		LGA1156
	Intel® Server System SR1695GPRX1AC	End of Life	1U Rack		LGA1156
	Intel® Server System SR1695GPRX2AC	End of Life	1U Rack		LGA1156
	Intel® Server System SR1630HGP	End of Life	1U Rack		LGA1156
	Intel® Server System SR1630HGPRX	End of Life	1U Rack		LGA1156

Compare All +	Product Name	Status	Board Form Factor	Chassis Form Factor	Socket	Embedded Options Available	TDP
	Intel® Server Board S3420GPLC	End of Life	ATX	Rack or Pedestal	LGA1156	Yes	
	Intel® Server Board S3420GPLX	End of Life	ATX	Rack or Pedestal	LGA1156	Yes	
	Intel® Server Board S3420GPRX	End of Life	ATX	Rack	LGA1156	Yes	
	Intel® Server Board S3420GPV	End of Life	ATX	Rack or Pedestal	LGA1156		

## **Product Images**



## Ordering and Spec Information

### **Trade Compliance Information**

ECCN	CCATS	US HTS
5A992	NA	8542310000-HYBRD

## Ordering and Spec Information

Spec Code	Ordering Code	Step RCP		
Intel® Xeon® Processor X3430 (8M Cache, 2.40 GHz) FC-LGA8, Tray				
SLBLJ BV80605001914AG		B1	\$224.00	

#### **Retired and Discontinued**

	Spec Code	Ordering Code	Step	RCP		
Boxed	Boxed Intel® Xeon® Processor X3430 (8M Cache, 2.40 GHz) FC-LGA8					
SLBLJ BX80605X3430		B1	\$203.00			

## **Download Drivers**



## BIOS Implementation Test Suite (BITS)

BITS provides a bootable pre-OS environment for testing BIOSes and in particular their initialization of Intel® Processors, hardware, and technologies

Version: Build 2073 (Latest)

Date: 2/10/2016

Operating Systems: OS Independent



Intel® Processor Diagnostic Tool

The Intel® Drocescar Diagnostic Tool release 2.0.0.2E is compatible with multiprocessor systems

\_

The litter Processor Diagnostic Tool release 5.0.0.25 is compatible with multiprocessor systems.

Version: 3.0.0.25 (Latest)

Operating Systems: Linux\*, Windows 7\*, Windows 8\*, 5 more



#### Intel® Processor Identification Utility - Windows\* Version

Version 5.40 of the Intel® Processor Identification Utility is provided by Intel to identify characteristics of a processor inside a system.

Version: 5.40 (Latest) Date: 12/23/2015

Operating Systems: Windows 2000\*, Windows 7\*, Windows 8\*, 8 more



### Intel® Processor Identification Utility - Bootable Version

The Intel® Processor Identification Utility is provided by Intel to identify characteristics of a processor inside a system.

**Version:** 5.30 (Latest) **Date:** 9/11/2015

Operating Systems: OS Independent



### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors. Intel periodically releases these microcode updates.

**Version:** 20150121 (Latest) **Date:** 1/27/2015

Operating Systems: Caldera Linux\*, Chromium OS\*, Debian 3.1 Linux\*, 91 more



#### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors. Intel periodically releases these microcode updates.

**Version:** 20150107 (Latest) **Date:** 1/13/2015

Operating Systems: Caldera Linux\*, Chromium OS\*, Debian 3.1 Linux\*, 89 more



### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors. Intel periodically releases these microcode updates.

**Version:** 20140913 (Latest) **Date:** 9/15/2014

Operating Systems: Caldera Linux\*, Chromium OS\*, Debian 3.1 Linux\*, 82 more



#### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors. Intel periodically releases these microcode updates.

Version: 20140122 (Latest) Date: 2/24/2014

Operating Systems: Caldera Linux\*, Chromium OS\*, Debian 3.1 Linux\*, 80 more



### Display Drivers for Intel® Core™ Processors on 64-bit Windows 7\* and Windows Embedded Standard 7\*

Intel® HD Graphics, Intel® Display Audio Driver, and Intel® Turbo Boost Technology for Intel® processors on 64-bit Windows 7\*.

**Version:** 15.22.54.64.2622 (Current) **Date:** 3/22/2013

Operating Systems: Windows 7, 64-bit\*, Windows Embedded Standard 7\*



### TnT Hardware Tools SW Updates DB

This is the rev of the DB that is already present on the InstallShield-like service.

**Version:** 5 (Current) **Date:** 11/14/2011

Operating Systems: Windows XP Professional\*



## Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors. Intel periodically releases these microcode updates.

Version: 20140624 (Previously Released) Date: 9/17/2014

Operating Systems: Linux\*



## Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors. Intel periodically releases these microcode updates.

Version: 20140430 (Previously Released) Date: 9/15/2014

Operating Systems: Linux\*



#### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors.

Version: 20130906 (Previously Released) Date: 9/10/2013

Operating Systems: Caldera Linux\*, Chromium OS\*, Debian 3.1 Linux\*, 80 more



### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors. Intel periodically releases these microcode updates.

Version: 20130808 (Previously Released) Date: 8/14/2013

Operating Systems: Caldera Linux\*, Chromium OS\*, Debian 3.1 Linux\*, 80 more



#### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors.

Version: 20130222 (Previously Released) Date: 2/26/2013

Operating Systems: Caldera Linux\*, Chromium OS\*, Debian 3.1 Linux\*, 75 more



#### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors. Intel periodically releases these microcode updates.

Version: 20120606-v2 (Previously Released) Date: 10/1/2012

Operating Systems: Caldera Linux\*, Debian 3.1 Linux\*, Debian Linux\*, 73 more



#### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors. Intel periodically releases these microcode updates.

**Version:** 20120606 (Previously Released) **Date:** 6/6/2012 **Operating Systems:** Caldera Linux\*, Debian 3.1 Linux\*, Debian Linux\*, 73 more



#### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors.

Version: 20111110 (Previously Released) Date: 2/29/2012

Operating Systems: Caldera Linux\*, Debian 3.1 Linux\*, Debian Linux\*, 71 more



#### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors.

Version: 20110915 (Previously Released) Date: 11/14/2011

Operating Systems: Caldera Linux\*, Debian 3.1 Linux\*, Debian Linux\*, 71 more



#### Linux\* Processor Microcode Data File

The microcode data file contains the latest microcode definitions for all Intel processors.

Version: 20110428 (Previously Released) Date: 11/14/2011

Operating Systems: Caldera Linux\*, Debian 3.1 Linux\*, Debian Linux\*, 71 more

All information provided is subject to change at any time, without notice. Intel may make changes to manufacturing life cycle, specifications, and product descriptions at any time, without notice. The information herein is provided "as-is" and Intel does not make any representations or warranties whatsoever regarding accuracy of the information, nor on the product features, availability, functionality, or compatibility of the products listed. Please contact system vendor for more information on specific products or systems.

"Intel classifications" consist of Export Control Classification Numbers (ECCN) and Harmonized Tariff Schedule (HTS) numbers. Any use made of Intel classifications are without recourse to Intel and shall not be construed as a representation or warranty regarding the proper ECCN or HTS. Your company may be the exporter of record, and as such, your company is responsible for determining the correct classification of any item at the time of export.

Refer to Datasheet for formal definitions of product properties and features.

"Announced" SKUs are not yet available. Please refer to the Launch Date for market availability.

Some products can support AES New Instructions with a Processor Configuration update, in particular, i7-2630QM/i7-2635QM, i7-2670QM/i7-2675QM, i5-2430M/i5-2435M, i5-2410M/i5-2415M. Please contact OEM for the BIOS that includes the latest Processor configuration update.

‡ This feature may not be available on all computing systems. Please check with the system vendor to determine if your system delivers this feature, or reference the system specifications (motherboard, processor, chipset, power supply, HDD, graphics controller, memory, BIOS, drivers, virtual machine monitor-VMM, platform software, and/or operating system) for feature compatibility. Functionality, performance, and other benefits of this feature may vary depending on system configuration.

"Conflict free" and "conflict-free" means "DRC conflict free", which is defined by the U.S. Securities and Exchange Commission rules to mean products that do not contain conflict minerals (tin, tantalum, tungsten and/or gold) that directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo (DRC) or adjoining countries. Intel also uses the term "conflict-free" in a broader sense to refer to suppliers, supply chains, smelters and refiners whose sources of conflict minerals do not finance conflict in the DRC or adjoining countries. Intel processors manufactured before January 1, 2013 are not confirmed conflict free. The conflict free designation refers only to product manufactured after that date. For Intel Boxed Processors, the conflict free designation refers to the processor only, not to any additional included accessories, such as heatsinks/coolers.

See http://www.intel.com/content/www/us/en/architecture-and-technology/hyper-threading/hyper-threading-technology.html?wapkw=hyper+threading for more information including details on which processors support Intel® HT Technology.

Max Turbo Frequency refers to the maximum single-core processor frequency that can be achieved with Intel® Turbo Boost Technology. See www.intel.com/technology/turboboost/ for more information.

The Recommended Customer Price ("RCP") is pricing guidance for Intel products. Prices are for direct Intel customers, typically represent 1,000-unit purchase quantities, and are subject to change without notice. Taxes and spipping, etc. not included. Prices may vary for other package types and shipment quantities, and special promotional arrangements may apply. If sold in bulk, price represents individual unit. Listing of these RCP does not constitute a formal pricing offer from Intel. Please work with your appropriate Intel representative to obtain a formal price quotation.

System and Maximum TDP is based on worst case scenarios. Actual TDP may be lower if not all I/Os for chipsets are used.

Low Halogen: Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. Intel components as well as purchased components on the finished assembly meet JS-709 requirements, and the PCB / substrate meet IEC 61249-2-21 requirements. The replacement of halogenated flame retardants and/or PVC may not be better for the environment.

For benchmarking data see http://www.intel.com/performance

Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See <a href="http://www.intel.com/content/www/us/en/processors/processor-numbers.html">http://www.intel.com/content/www/us/en/processors/processor-numbers.html</a> for details.

Processors that support 64-bit computing on Intel® architecture require an Intel 64 architecture-enabled BIOS.

Send us your feedback!