



INTEL® CORE™ i7 DESKTOP PROCESSOR COMPARISON CHART



INSTRUCTIONS

1. If the column heading is underlined, clicking on that will take you to a web site or document where you can get more information on that term.
2. Clicking on the individual processor number will take you to an Intel database that contains an expanded set of processor specifications.
3. Clicking on the individual box order code will take you to an Intel database that will show which Intel® Desktop Boards are compatible with that processor.

| <u>PROCESSOR NUMBER</u> | <u>BOX ORDER CODE</u> | <u>LAUNCH YEAR</u> | <u>PROCESSOR SOCKET</u> | <u>PROCESSOR BASE FREQUENCY (GHz)</u> | <u>HIGHEST INTEL® TURBO BOOST FREQUENCY</u> | <u>CACHE (MB)</u> | <u>CORES / THREADS</u> | <u>INTEL® HYPER-THREADING TECHNOLOGY</u> | <u>THERMAL DESIGN POWER (Watts)</u> | <u>FMB</u> | <u>INTEL® HD GRAPHICS</u> | <u>HD GRAPHICS SPEED (MHz)*</u> | <u>INTEL® ADVANCED ENCRYPTION STANDARD (AES)</u> | <u>INTEL® VIRTUALIZATION TECHNOLOGY (VT-X)</u> | <u>INTEL® ADVANCED VECTOR EXTENSIONS (AVX)</u> | <u>PROCESS TECHNOLOGY</u> | <u>MAXIMUM DDR3 SUPPORTED MEMORY (MHz)</u> | <u>TECHNICAL DOCUMENTS</u> |
|--------------------------|--------------------------------|--------------------|-------------------------|---------------------------------------|---|-------------------|------------------------|--|-------------------------------------|------------|---------------------------|---------------------------------|--|--|--|---------------------------|--|----------------------------|
| i7-5930K | BX80648I75930K | Q3'14 | LGA2011V3 | 3.5 | 3.7 | 15 | 6/12 | Yes | 140 | 2011P | No | N/A | Yes | Yes | Yes | 22 nm | 2133 | Go |
| i7-5820K | BX80648I75820K | Q3'14 | LGA2011V3 | 3.3 | 3.6 | 15 | 6/12 | Yes | 140 | 2011P | No | N/A | Yes | Yes | Yes | 22 nm | 2133 | Go |
| i7-5775R | Not boxed | Q2'15 | LGA1150 | 3.3 | 3.8 | 6 | 4/8 | Yes | 65 | 2013D | 6200 | 300/1150 | Yes | Yes | Yes | 14 nm | 1866 | Go |
| i7-5775C | BX80658I75775C | Q2'15 | LGA1150 | 3.3 | 3.7 | 6 | 4/8 | Yes | 65 | 2013D | 6200 | 300/1150 | Yes | Yes | Yes | 14nm | 1866 | Go |
| i7-4930K | BX80633I74930K | Q3'13 | LGA2011 | 3.4 | 3.9 | 12 | 6/12 | Yes | 130 | 2011P | No | N/A | Yes | Yes | Yes | 22 nm | 1833 | Go |
| i7-4820K | BX80633I74820K | Q3'13 | LGA2011 | 3.7 | 3.9 | 10 | 4/8 | Yes | 130 | 2011P | No | N/A | Yes | Yes | Yes | 22 nm | 1833 | Go |
| i7-4771 | BX80646I74771 | Q3'13 | LGA1150 | 3.5 | 3.9 | 8 | 4/8 | Yes | 84 | 2013D | 4600 | 350/1200 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-4770T | Not boxed | Q2'13 | LGA1150 | 2.5 | 3.7 | 8 | 4/8 | Yes | 45 | 2013B | 4600 | 350/1200 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-4770S | BX80646I74770S | Q2'13 | LGA1150 | 3.1 | 3.9 | 8 | 4/8 | Yes | 65 | 2013C | 4600 | 350/1200 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-4770R | Not boxed | Q2'13 | BGA1364 | 3.2 | 3.9 | 8 | 4/8 | Yes | 65 | 2013C | 5200 | 200/1300 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-4770K | BX80646I74770K | Q2'13 | LGA1150 | 3.5 | 3.9 | 8 | 4/8 | Yes | 84 | 2013D | 4600 | 350/1250 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-4770 | BX80646I74770 | Q2'13 | LGA1150 | 3.4 | 3.9 | 8 | 4/8 | Yes | 84 | 2013D | 4600 | 350/1200 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-4765T | Not boxed | Q2'13 | LGA1150 | 2 | 3 | 8 | 4/8 | Yes | 35 | 2012A | 4600 | 350/1200 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-3930K | BX80619I73930K | Q4'11 | LGA2011 | 3.2 | 3.8 | 12 | 6/12 | Yes | 130 | 2011P | No | N/A | Yes | Yes | Yes | 32 nm | 1600 | Go |
| i7-3820 | BX80619I73820 | Q1'12 | LGA2011 | 3.6 | 3.8 | 10 | 4/8 | Yes | 130 | 2011P | No | N/A | Yes | Yes | Yes | 32 nm | 1600 | Go |
| i7-3770T | Not boxed | Q2'12 | LGA1155 | 2.5 | 3.7 | 8 | 4/8 | Yes | 45 | 2011B | 4000 | 650/1150 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-3770S | Not boxed | Q2'12 | LGA1155 | 3.1 | 3.9 | 8 | 4/8 | Yes | 65 | 2011C | 4000 | 650/1150 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-3770K | BX80637I73770K | Q2'12 | LGA1155 | 3.5 | 3.9 | 8 | 4/8 | Yes | 77 | 2011D | 4000 | 650/1150 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-3770 | BX80637I73770 | Q2'12 | LGA1155 | 3.4 | 3.9 | 8 | 4/8 | Yes | 77 | 2011D | 4000 | 650/1150 | Yes | Yes | Yes | 22 nm | 1600 | Go |
| i7-2700K | BX80623I72700K | Q4'11 | LGA1155 | 3.5 | 3.9 | 8 | 4/8 | Yes | 95 | 2011D | 3000 | 850/1350 | Yes | Yes | Yes | 32 nm | 1333 | Go |
| i7-2600K | BX80623I72600K | Q1'11 | LGA1155 | 3.4 | 3.8 | 8 | 4/8 | Yes | 95 | 2011D | 3000 | 850/1350 | Yes | Yes | Yes | 32 nm | 1333 | Go |
| i7-2600 | BX80623I72600 | Q1'11 | LGA1155 | 3.4 | 3.8 | 8 | 4/8 | Yes | 95 | 2011D | 2000 | 850/1350 | Yes | Yes | Yes | 32 nm | 1333 | Go |
| i7-2600S | BX80623I72600S | Q1'11 | LGA1155 | 2.8 | 3.8 | 8 | 4/8 | Yes | 65 | 2011C | 2000 | 850/1350 | Yes | Yes | Yes | 32 nm | 1333 | Go |
| i7-980 | BX80613I7980 | Q2'11 | LGA1366 | 3.33 | 3.6 | 12 | 6/12 | Yes | 130 | 08 | No | No | Yes | Yes | No | 32 nm | 1066 | Go |
| i7-970 | BX80613I7970 | Q3'10 | LGA1366 | 3.2 | 3.46 | 12 | 6/12 | Yes | 130 | 08 | No | No | Yes | Yes | No | 32 nm | 1066 | Go |
| i7-960 | BX80601960 | Q4'09 | LGA1366 | 3.2 | 3.46 | 8 | 4/8 | Yes | 130 | 08 | No | No | No | Yes | No | 45 nm | 1066 | Go |
| i7-950 | BX80601950 | Q2'09 | LGA1366 | 3.06 | 3.33 | 8 | 4/8 | Yes | 130 | 08 | No | No | No | Yes | No | 45 nm | 1066 | Go |
| i7-940 | BX80601940 | Q4'08 | LGA1366 | 2.93 | 3.2 | 8 | 4/8 | Yes | 130 | 08 | No | No | No | Yes | No | 45 nm | 1066 | Go |
| i7-930 | BX80601930 | Q1'10 | LGA1366 | 2.8 | 3.06 | 8 | 4/8 | Yes | 130 | 08 | No | No | No | Yes | No | 45 nm | 1066 | Go |
| i7-920 | BX80601920 | Q4'08 | LGA1366 | 2.66 | 2.93 | 8 | 4/8 | Yes | 130 | 08 | No | No | No | Yes | No | 45 nm | 1066 | Go |
| i7-880 | BX80605I7880 | Q2'10 | LGA1156 | 3.06 | 3.73 | 8 | 4/8 | Yes | 95 | 09B | No | No | No | Yes | No | 45 nm | 1333 | Go |
| i7-875K | BX80605I7875K | Q2'10 | LGA1156 | 2.93 | 3.6 | 8 | 4/8 | Yes | 95 | 09B | No | No | No | Yes | No | 45 nm | 1333 | Go |
| i7-870 | BX80605I7870 | Q3'09 | LGA1156 | 2.93 | 3.6 | 8 | 4/8 | Yes | 95 | 09B | No | No | No | Yes | No | 45 nm | 1333 | Go |
| i7-870S | BX80605I7870S | Q2'10 | LGA1156 | 2.66 | 3.6 | 8 | 4/8 | Yes | 82 | 09A | No | No | No | Yes | No | 45 nm | 1333 | Go |
| i7-860 | BX80605I7860 | Q3'09 | LGA1156 | 2.8 | 3.46 | 8 | 4/8 | Yes | 95 | 09B | No | No | No | Yes | No | 45 nm | 1333 | Go |
| i7-860S | BX80605I7860S | Q1'10 | LGA1156 | 2.53 | 3.46 | 8 | 4/8 | Yes | 82 | 09A | No | No | No | Yes | No | 45 nm | 1333 | Go |

Technical Documents = Datasheets, Design Guides, etc;

Intel® Core™ i7 Desktop Processor Top Support Documents

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This document contains the most commonly sought after information on Intel® Desktop Processors.

[Overview of Intel® Processor Tools](#)

This document provides links to popular Intel® processor tools, with a description on what they do.

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This documents provides answers to the most frequent questions we receive regarding processor warranty.

[Intel® Processor Installation Center](#)

This web site contains installation and integration material for Intel® Desktop Processors across various socket

Intel® Core™ i7 Desktop Processor Support Home Page

http://www.intel.com/p/en_US/support/highlights/processors/corei7dt