



# Intel® Core™ i7 Mobile 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 the product specification page which contains an expanded set of processor specifications.

<u>Processor Name</u>	<u>Product Collection</u>	<u>Segment</u>	<u>Lithography (nm)</u>	<u>Launch Year</u>	<u>Number Cores/Threads</u>	<u>Processor Base Frequency (GHz)</u>	<u>Max Intel® Turbo Boost Technology 2.0 (GHz)</u>	<u>Intel® Hyper-Threading Technology</u>	<u>Intel® Graphics</u>	<u>Graphics Max Dynamic Frequency</u>	<u>Memory Type and Speed</u>	<u>Intel® vPro Platform Eligibility</u>	<u>Intel® Virtualization Technology (VT-x), IO/VTd, EPT</u>
<a href="#">i7-1065G7</a>	10th Generation Intel® Core™ i7	Mobile	10 nm	Q3'19	4/8	1.30	3.90	Yes	Intel® Iris™ Plus Graphics	1.10 GHz	*Up to: DDR4-3200, LPDDR4-3733	No	Yes
<a href="#">i7-10710U</a>	10th Generation Intel® Core™ i7	Mobile	14 nm	Q3'19	6/12	1.10	4.70	Yes	Intel® HD Graphics	1.15 GHz	*Up to: DDR4-2666, LPDDR3-2133	No	Yes
<a href="#">i7-10510U</a>	10th Generation Intel® Core™ i7	Mobile	14 nm	Q3'19	4/8	1.80	4.90	Yes	Intel® HD Graphics	1.15 GHz	*Up to: DDR4-2666, LPDDR3-2133	No	Yes
<a href="#">i7-10510Y</a>	10th Generation Intel® Core™ i7	Mobile	14 nm	Q3'19	4/8	1.20	4.50	Yes	Intel® HD Graphics	1.15 GHz	*Up to: LPDDR3-2133, DDR3L-1600	Yes	Yes
<a href="#">i7-9850H</a>	9th Generation Intel® Core™ i7	Mobile	14 nm	Q2'19	6/12	2.60	4.60	Yes	Intel® HD Graphics 630	1.15 GHz	*Up to: DDR4-2666 MHz, LPDDR3-2133 MHz	Yes	Yes
<a href="#">i7-9750H</a>	9th Generation Intel® Core™ i7	Mobile	14 nm	Q2'19	6/12	2.60	4.50	Yes	Intel® HD Graphics 630	1.15 GHz	*Up to: DDR4-2666 MHz, LPDDR3-2133 MHz	No	Yes
<a href="#">i7-8665U</a>	8th Generation Intel® Core™ i7	Mobile	14 nm	Q2'19	4/8	1.90	4.80	Yes	Intel® UHD Graphics 620	1.15 GHz	*Up to: DDR4-2400 MHz, LPDDR3-2133 MHz	**Yes	Yes
<a href="#">i7-8650U</a>	8th Generation Intel® Core™ i7	Mobile	14 nm	Q3'17	4/8	1.90	4.20	Yes	Intel® UHD Graphics 620	1.15 GHz	*Up to: DDR4-2400 MHz, LPDDR3-2133 MHz	**Yes	Yes
<a href="#">i7-8550U</a>	8th Generation Intel® Core™ i7	Mobile	14 nm	Q3'17	4/8	1.80	4.00	Yes	Intel® UHD Graphics 620	1.15 GHz	*Up to: DDR4-2400 MHz, LPDDR3-2133 MHz	No	Yes
<a href="#">i7-7920HQ</a>	7th Generation Intel® Core™ i7	Mobile	14 nm	Q1'17	4/8	3.10	4.10	Yes	Intel® HD Graphics 630	1.10 GHz	*Up to: DDR4-2400 MHz, LPDDR3-2133 MHz, DDR3L-1600 MHz	**Yes	Yes
<a href="#">i7-7820HQ</a>	7th Generation Intel® Core™ i7	Mobile	14 nm	Q1'17	4/8	2.90	3.90	Yes	Intel® HD Graphics 630	1.10 GHz	*Up to: DDR4-2400 MHz, LPDDR3-2133 MHz, DDR3L-1600 MHz	**Yes	Yes
<a href="#">i7-7820HK</a>	7th Generation Intel® Core™ i7	Mobile	14 nm	Q1'17	4/8	2.90	3.90	Yes	Intel® HD Graphics 630	1.10 GHz	*Up to: DDR4-2400 MHz, LPDDR3-2133 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-7700HQ</a>	7th Generation Intel® Core™ i7	Mobile	14 nm	Q1'17	4/8	2.80	3.80	Yes	Intel® HD Graphics 630	1.10 GHz	*Up to: DDR4-2400 MHz, LPDDR3-2133 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-7660U</a>	7th Generation Intel® Core™ i7	Mobile	14 nm	Q1'17	2/4	2.50	4.00	Yes	Intel® Iris™ Plus Graphics 640	1.10 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	**Yes	Yes
<a href="#">i7-7660U</a>	7th Generation Intel® Core™ i7	Mobile	14 nm	Q1'17	2/4	2.80	3.90	Yes	Intel® HD Graphics 620	1.15 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	**Yes	Yes
<a href="#">i7-7567U</a>	7th Generation Intel® Core™ i7	Mobile	14 nm	Q1'17	2/4	3.50	4.00	Yes	Intel® Iris™ Plus Graphics 650	1.15 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-7560U</a>	7th Generation Intel® Core™ i7	Mobile	14 nm	Q1'17	2/4	2.40	3.80	Yes	Intel® Iris™ Plus Graphics 640	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-7500U</a>	7th Generation Intel® Core™ i7	Mobile	14 nm	Q3'16	2/4	2.70	3.50	Yes	Intel® HD Graphics 620	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-7175</a>	7th Generation Intel® Core™ i7	Mobile	14 nm	Q3'16	2/4	1.30	3.60	Yes	Intel® HD Graphics 615	1.05 GHz	*Up to: LPDDR3-1866 MHz, DDR3L-1600 MHz	**Yes	Yes
<a href="#">i7-6567U</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q3'15	2/4	3.30	3.60	Yes	Intel® Iris™ Graphics 550	1.10 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-6920HQ</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q3'15	4/8	2.90	3.80	Yes	Intel® HD Graphics 530	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	**Yes	Yes
<a href="#">i7-6820HQ</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q3'15	4/8	2.70	3.60	Yes	Intel® HD Graphics 530	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	**Yes	Yes
<a href="#">i7-6820HK</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q3'15	4/8	2.70	3.60	Yes	Intel® HD Graphics 530	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-6700HQ</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q3'15	4/8	2.60	3.50	Yes	Intel® HD Graphics 530	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-6650U</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q3'15	2/4	2.20	3.40	Yes	Intel® Iris™ Graphics 540	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	**Yes	Yes
<a href="#">i7-6600U</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q3'15	2/4	2.60	3.40	Yes	Intel® HD Graphics 520	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	**Yes	Yes
<a href="#">i7-6560U</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q3'15	2/4	2.20	3.20	Yes	Intel® Iris™ Graphics 540	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-6500U</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q3'15	2/4	2.50	3.10	Yes	Intel® HD Graphics 520	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-6770HQ</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q1'16	4/8	2.80	3.70	Yes	Intel® Iris™ Pro Graphics 580	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-6870HQ</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q1'16	4/8	2.70	3.60	Yes	Intel® Iris™ Pro Graphics 580	1.00 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-6770HQ</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q1'16	4/8	2.60	3.50	Yes	Intel® Iris™ Pro Graphics 580	950 MHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	No	Yes
<a href="#">i7-6660U</a>	6th Generation Intel® Core™ i7	Mobile	14 nm	Q1'16	2/4	2.40	3.40	Yes	Intel® Iris™ Graphics 540	1.05 GHz	*Up to: DDR4-2133 MHz, LPDDR3-1866 MHz, DDR3L-1600 MHz	**Yes	Yes
<a href="#">i7-5650U</a>	5th Generation Intel® Core™ i7	Mobile	14 nm	Q1'15	2/4	2.20	3.10	Yes	Intel® HD Graphics 6000	1.00 GHz	*Up to: DDR3L 1333 MHz/1600 MHz, LPDDR3 1600 MHz/1866 MHz	**Yes	Yes
<a href="#">i7-5600U</a>	5th Generation Intel® Core™ i7	Mobile	14 nm	Q1'15	2/4	2.60	3.20	Yes	Intel® HD Graphics 5500	950 MHz	*Up to: DDR3L 1333 MHz/1600 MHz, LPDDR3 1333 MHz/1600 MHz	**Yes	Yes
<a href="#">i7-5557U</a>	5th Generation Intel® Core™ i7	Mobile	14 nm	Q1'15	2/4	3.10	3.40	Yes	Intel® Iris™ Graphics 6100	1.10 GHz	*Up to: DDR3L 1333 MHz/1600 MHz, LPDDR3 1600 MHz/1866 MHz	No	Yes
<a href="#">i7-5550U</a>	5th Generation Intel® Core™ i7	Mobile	14 nm	Q1'15	2/4	2.00	3.00	Yes	Intel® HD Graphics 6000	1.00 GHz	*Up to: DDR3L 1333 MHz/1600 MHz, LPDDR3 1600 MHz/1866 MHz	No	Yes
<a href="#">i7-5500U</a>	5th Generation Intel® Core™ i7	Mobile	14 nm	Q1'15	2/4	2.40	3.00	Yes	Intel® HD Graphics 5500	950 MHz	*Up to: DDR3L 1333 MHz/1600 MHz, LPDDR3 1333 MHz/1600 MHz	No	Yes
<a href="#">i7-5950HQ</a>	5th Generation Intel® Core™ i7	Mobile	14 nm	Q2'15	4/8	2.90	3.80	Yes	Intel® Iris™ Pro Graphics 6200	1.15 GHz	*Up to: DDR3L 1600 MHz/1866 MHz, LPDDR3 1600 MHz/1866 MHz	No	Yes
<a href="#">i7-5850HQ</a>	5th Generation Intel® Core™ i7	Mobile	14 nm	Q2'15	4/8	2.70	3.60	Yes	Intel® Iris™ Pro Graphics 6200	1.10 GHz	*Up to: DDR3L 1600 MHz/1866 MHz, LPDDR3 1600 MHz/1866 MHz	No	Yes
<a href="#">i7-5750HQ</a>	5th Generation Intel® Core™ i7	Mobile	14 nm	Q2'15	4/8	2.50	3.40	Yes	Intel® Iris™ Pro Graphics 6200	1.05 GHz	*Up to: DDR3L 1600 MHz/1866 MHz, LPDDR3 1600 MHz/1866 MHz	No	Yes
<a href="#">i7-4720HQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q1'15	4/8	2.60	3.60	Yes	Intel® HD Graphics 4600	1.20 GHz	*Up to: DDR3L 1333 MHz/1600 MHz	No	Yes
<a href="#">i7-4722HQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q1'15	4/8	2.40	3.40	Yes	Intel® HD Graphics 4600	1.15 GHz	*Up to: DDR3L 1333 MHz/1600 MHz	No	Yes

<a href="#">i7-4980HQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q3'14	4/8	2.80	4.00	Yes	Intel® Iris™ Pro Graphics 5200	1.30 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	**Yes	Yes
<a href="#">i7-4870HQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q3'14	4/8	2.50	3.70	Yes	Intel® Iris™ Pro Graphics 5200	1.20 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	**Yes	Yes
<a href="#">i7-4770HQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q3'14	4/8	2.20	3.40	Yes	Intel® Iris™ Pro Graphics 5200	1.20 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	No	Yes
<a href="#">i7-4578U</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q3'14	2/4	3.00	3.50	Yes	Intel® Iris™ Graphics 5100	1.20 GHz	*Up to: DDR3L-1333 MHz/1600 MHz, LPDDR3-1333 MHz /1600 MHz	No	Yes
<a href="#">i7-4710HQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q2'14	4/8	2.50	3.50	Yes	Intel® HD Graphics 4600	1.20 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	No	Yes
<a href="#">i7-4710MQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q2'14	4/8	2.50	3.50	Yes	Intel® HD Graphics 4600	1.15 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	No	Yes
<a href="#">i7-4712HQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q2'14	4/8	2.30	3.30	Yes	Intel® HD Graphics 4600	1.15 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	No	Yes
<a href="#">i7-4712MQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q2'14	4/8	2.30	3.30	Yes	Intel® HD Graphics 4600	1.15 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	No	Yes
<a href="#">i7-4760HQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q2'14	4/8	2.10	3.30	Yes	Intel® Iris™ Pro Graphics 5200	1.20 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	No	Yes
<a href="#">i7-4510U</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q2'14	2/4	2.00	3.10	Yes	Intel® HD Graphics 4400	1.10 GHz	*Up to: DDR3L 1333 MHz/1600 MHz, LPDDR3 1333 MHz /1600 MHz	No	Yes
<a href="#">i7-4910MQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q1'14	4/8	2.90	3.90	Yes	Intel® HD Graphics 4600	1.30 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	**Yes	Yes
<a href="#">i7-4810MQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q1'14	4/8	2.80	3.80	Yes	Intel® HD Graphics 4600	1.30 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	**Yes	Yes
<a href="#">i7-4860HQ</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q1'14	4/8	2.40	3.60	Yes	Intel® Iris™ Pro Graphics 5200	1.20 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	**Yes	Yes
<a href="#">i7-4610M</a>	4th Generation Intel® Core™ i7	Mobile	22 nm	Q1'14	2/4	3.00	3.70	Yes	Intel® HD Graphics 4600	1.30 GHz	*Up to:DDR3L 1333 MHz/1600 MHz	**Yes	Yes

* Type and speed of memory can vary between laptops
** Refer to the laptop manufacturer for vPro support

**Technical Documents (Datasheets, Design Guides, etc)**

<https://www.intel.com/content/www/us/en/processors/core/core-technical-resources.html>

**Intel® Core™ Mobile Processor Support Documents**

[How to Find Processors Name and Number](#)

[How to Identify Intel® Processor Generation](#)

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