

ideacentre 510 Intel Platform Specifications

Processor	<p><i>IKL:</i> Intel® Celeron® Processor, Intel Pentium® Processor or 7th Generation Intel Core™ i3 / i5 / i7 Processors</p> <table border="1"> <thead> <tr> <th>Processor</th> <th>Cores / Threads</th> <th>Frequency (Base/Max)</th> <th>Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>Celeron G3930</td> <td>2 / 2</td> <td>2.9 GHz</td> <td>2 MB</td> <td>DDR4-2133</td> <td>Intel HD Graphics 610</td> </tr> <tr> <td>Pentium G4560</td> <td>2 / 4</td> <td>3.5 GHz</td> <td>3 MB</td> <td rowspan="3">DDR4-2400</td> <td rowspan="3">Intel HD Graphics 630</td> </tr> <tr> <td>Core i3-7100</td> <td>2 / 4</td> <td>3.9 GHz</td> <td>3 MB</td> </tr> <tr> <td>Core i5-7400</td> <td>4 / 4</td> <td>3.0 GHz / 3.5 GHz</td> <td>6 MB</td> </tr> <tr> <td>Core i7-7700</td> <td>4 / 8</td> <td>3.6 GHz / 4.2 GHz</td> <td>8 MB</td> <td></td> <td></td> </tr> </tbody> </table> <p><i>ICB:</i> Intel Celeron Processor, Intel Pentium Gold Processor or 8th Generation Intel Core i3 / i5 / i7 Processors</p> <table border="1"> <thead> <tr> <th>Processor</th> <th>Cores / Threads</th> <th>Frequency (Base/Max)</th> <th>Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>Celeron G4900</td> <td>2 / 2</td> <td>3.1 GHz</td> <td>2 MB</td> <td rowspan="3">DDR4-2400</td> <td rowspan="3">Intel UHD Graphics 610</td> </tr> <tr> <td>Pentium Gold G5400</td> <td>2 / 4</td> <td>3.7 GHz</td> <td>4 MB</td> </tr> <tr> <td>Core i3-8100</td> <td>4 / 4</td> <td>3.6 GHz</td> <td>6 MB</td> </tr> <tr> <td>Core i5-8400</td> <td>6 / 6</td> <td>2.8 GHz / 4.0 GHz</td> <td>9 MB</td> <td rowspan="2">DDR4-2666</td> <td rowspan="2">Intel UHD Graphics 630</td> </tr> <tr> <td>Core i7-8700</td> <td>6 / 12</td> <td>3.2 GHz / 4.6 GHz</td> <td>12 MB</td> </tr> </tbody> </table>					Processor	Cores / Threads	Frequency (Base/Max)	Cache	Memory Types	Integrated Graphics	Celeron G3930	2 / 2	2.9 GHz	2 MB	DDR4-2133	Intel HD Graphics 610	Pentium G4560	2 / 4	3.5 GHz	3 MB	DDR4-2400	Intel HD Graphics 630	Core i3-7100	2 / 4	3.9 GHz	3 MB	Core i5-7400	4 / 4	3.0 GHz / 3.5 GHz	6 MB	Core i7-7700	4 / 8	3.6 GHz / 4.2 GHz	8 MB			Processor	Cores / Threads	Frequency (Base/Max)	Cache	Memory Types	Integrated Graphics	Celeron G4900	2 / 2	3.1 GHz	2 MB	DDR4-2400	Intel UHD Graphics 610	Pentium Gold G5400	2 / 4	3.7 GHz	4 MB	Core i3-8100	4 / 4	3.6 GHz	6 MB	Core i5-8400	6 / 6	2.8 GHz / 4.0 GHz	9 MB	DDR4-2666	Intel UHD Graphics 630	Core i7-8700	6 / 12	3.2 GHz / 4.6 GHz	12 MB
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Chipset	<p><i>IKL:</i> Intel B250 platform <i>ICB:</i> Intel B360 platform</p>																																																																		
Front ports*	<p><i>All:</i> one headphone / microphone combo jack (3.5mm), one microphone (3.5mm), optional media reader <i>ICB:</i> two USB 3.1 Gen1, two USB 3.1 Gen2, one USB 3.1 Type-C Gen1 <i>IKL:</i> four USB 3.1 Gen1</p>																																																																		
Rear ports*	<p><i>All:</i> power connector, one VGA-out, one HDMI-out, one ethernet (RJ-45) <i>ICB:</i> four USB 2.0 <i>IKL:</i> two USB 2.0, two USB 3.1 Gen1</p>																																																																		
Rear audio ports	<p><i>ICB:</i> one headphone / microphone combo jack (3.5mm) <i>IKL:</i> line-in (3.5mm), line-out (3.5mm), microphone-in (3.5mm)</p>																																																																		
IEEE 1394	<p>None <i>* Depending on many factors, actual data transfer speed may be lower than theoretical speed</i></p>																																																																		
Audio support	<p>High Definition (HD) Audio <i>IKL:</i> Realtek ALC662 / Dolby Atoms® Audio <i>ICB:</i> Realtek ALC233 / Dolby Atoms Audio</p>																																																																		
WLAN (opt)	<p><i>Some:</i> 11ac Wi-Fi + Bluetooth 4.0 combo adapter, M.2 card, 1x1 <i>Some:</i> 11ac Wi-Fi + Bluetooth 4.0 combo adapter, M.2 card, 2x2</p>																																																																		
Bluetooth™ (opt)	<p>Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter</p>																																																																		
Ethernet	<p>Gigabit ethernet Realtek® RTL8111GN (for IKL) or Intel I219-V (for ICB)</p>																																																																		
Modem	<p>None</p>																																																																		
Security chip	<p>None</p>																																																																		
Security features	<p>Power-on password, administrator password, hard-disk password, Kensington® lock</p>																																																																		
Keyboard (opt)	<p>Lenovo Calliope Keyboard (USB connector), black or silver Lenovo Wireless Keyboard (2.4GHz via USB receiver), black or silver</p>																																																																		
Mouse	<p>Lenovo Calliope Mouse (USB connector), black or silver Lenovo Wireless Mouse (2.4GHz via USB receiver), black or silver</p>																																																																		
Mechanical	<ul style="list-style-type: none"> • Tower (15L), black / silver color, metal case • (WxDxH) with bezel: 5.71" x 11.22" x 14.41"; 145mm x 285.2mm x 366.03mm • Approx 12.8 lb (5.8 kg), weight may vary by configuration • Optional front / rear system fan • Bay 1: slim optical bay • Bay 2: 3.5", disk bay • Bay 3: 3.5" or 2.5", disk bay • Slot 1: full-length half-height, PCIe 3.0 x16 • Slot 2: full-length half-height, PCIe 3.0 x1 • M.2 card slots: one for WLAN, one for M.2 SSD / Optane 																																																																		
Power supply	<p><i>Some:</i> 180 watts, autosensing, 85% PSU <i>Some:</i> 210 watts, autosensing, 85% PSU</p>																																																																		
Limited warranty	<p>1-year or 2-year, depot repair service / service upgrades available</p>																																																																		
Preload	<p>Preloaded operating system Windows® 10 Home 64 or Windows 10 Pro 64 Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • Microsoft Office preloaded; purchase a product key to activate • Lenovo® Application Explorer • Lenovo PC Manager • McAfee® LiveSafe™ (30-day trial) • PowerDVD (DVD±RW) • Power2GO (DVD±RW) 																																																																		
Environment	<p><i>ICB:</i> ENERGY STAR® 6.1 (support version 7.0 after November); ErP Lot 3; RoHS-compliant <i>IKL:</i> ENERGY STAR 6.1; ErP Lot 3; GREENGURAD®; RoHS-compliant</p>																																																																		
Accessories	<p>For compatible accessories, please go to http://smartfind.lenovo.com</p>																																																																		
Memory	<p><i>IKL:</i> 16GB max offering, UDIMM, DDR4-2400, two 288-pin DIMM sockets <i>ICB:</i> 16GB max offering, UDIMM, DDR4-2666, two 288-pin DIMM sockets <i>* System automatically clocks down for the processors with lower memory controller</i></p>																																																																		
Storage	<p><i>Some:</i> Hard Drive / SATA 6.0Gb/s, 3.5", 7200 rpm <i>Some:</i> M.2 SSD / SATA 6.0Gb/s <i>Some:</i> M.2 Solid State Drive (SSD) / PCIe NVMe, PCIe 3.0 x4, 32Gb/s <i>Some:</i> Intel Optane™ Memory, PCIe NVMe, PCIe 3.0 x2, 16Gb/s, M.2 <i>* 128GB SSD M.2 (2242) PCIe NVMe only supports PCIe 3.0 x 2, 16Gb/s</i> DVD Burner (DVD±RW), slim, 9.0mm high Three onboard SATA 6.0Gb/s connectors Optional 7-in-1 media card reader</p>																																																																		
Optical (opt)	<p>Onboard SATA Media reader</p>																																																																		
Graphics	<p><i>Some:</i> Intel HD Graphics 610 / 630 or Intel UHD Graphics 610 / 630 in processor, Max resolution: 1920x1080@30Hz (HDMI); 1920x1200@60Hz (VGA) <i>Some:</i> NVIDIA® GeForce® GT 730, 1GB or 2GB GDDR5, DirectX 12, one VGA, one HDMI; Max resolution: 3840x2160 (HDMI)@30Hz; 2048x1536 (VGA)@75Hz; <i>Some:</i> NVIDIA® GeForce® GT 730, 2GB GDDR3, DirectX 12, one VGA, one HDMI; Max resolution: 1920x1080 (HDMI)@60Hz; 2048x1536 (VGA)@85Hz; <i>Some:</i> NVIDIA GeForce GTX 1050, 2GB GDDR5, DirectX 12, one DVI, one HDMI, one DP; Max resolution: 4096x2160 (HDMI)@60Hz; 7680x4320 (DP)@60Hz; 2560x1600 (DVI)@60Hz <i>Some:</i> NVIDIA GeForce GTX 1050 Ti, 4GB GDDR5, DirectX 12, one DVI, one HDMI, one DP; Max resolution: 4096x2160 (HDMI)@60Hz; 7680x4320 (DP)@60Hz; 2560x1600 (DVI)@60Hz <i>Some:</i> AMD Radeon™ RX 460, 4GB GDDR5, DirectX 12, one HDMI, one DP, one DVI; Max resolution: 4096x2160 (HDMI)@60Hz; 7680x4320 (DP)@60Hz; 2560x1600 (DVI)@60Hz <i>Some:</i> AMD Radeon RX 550, 2GB GDDR5, DirectX 12, one HDMI, one VGA, one DP; Max resolution: 4096x2160 (HDMI)@60Hz; 5120x2880 (DP)@60Hz; 2048x1536 (VGA)@60Hz <i>Some:</i> AMD Radeon RX 560, 4GB GDDR5, DirectX 12, one HDMI, one DVI, one DP; Max resolution: 4096x2160 (HDMI)@60Hz; 5120x2880 (DP)@60Hz; 2560x1600 (DVI)@60Hz <i>Some:</i> AMD Radeon R7 350, 2GB GDDR5, DirectX 11, one VGA, one HDMI; Max resolution: 1920x1080 (HDMI)@60Hz; 2048x1536 (VGA)@85Hz;</p>																																																																		

Note: The specifications above may not be available in all regions.