

**ARK | Compare Intel® Products**

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|                                            |                                                        |
|--------------------------------------------|--------------------------------------------------------|
|                                            | Intel® Xeon® Processor E3-1245 v6 (8M Cache, 3.70 GHz) |
| Code Name                                  | Kaby Lake                                              |
| <b>Essentials</b>                          |                                                        |
| Vertical Segment                           | Server                                                 |
| Processor Number                           | E3-1245V6                                              |
| Status                                     | Launched                                               |
| Launch Date                                | Q1'17                                                  |
| Lithography                                | 14 nm                                                  |
| Recommended Customer Price                 | \$284.00 - \$294.00                                    |
| <b>Performance</b>                         |                                                        |
| # of Cores                                 | 4                                                      |
| # of Threads                               | 8                                                      |
| Processor Base Frequency                   | 3.70 GHz                                               |
| Max Turbo Frequency                        | 4.10 GHz                                               |
| Cache                                      | 8 MB                                                   |
| Bus Speed                                  | 8 GT/s DMI3                                            |
| TDP                                        | 73 W                                                   |
| VID Voltage Range                          | 0.55V-1.52V                                            |
| <b>Supplemental Information</b>            |                                                        |
| Embedded Options Available                 | No                                                     |
| Conflict Free                              | Yes                                                    |
| Datasheet                                  | <a href="#">Link</a>                                   |
| <b>Memory Specifications</b>               |                                                        |
| Max Memory Size (dependent on memory type) | 64 GB                                                  |
| Memory Types                               | DDR4-2400, DDR3L-1866                                  |
| Max # of Memory Channels                   | 2                                                      |
| Max Memory Bandwidth                       | 37.5 GB/s                                              |

|                                               |                    |
|-----------------------------------------------|--------------------|
| ECC Memory Supported ‡                        | Yes                |
| <b>Graphics Specifications</b>                |                    |
| Graphics Base Frequency                       | 350 MHz            |
| Graphics Max Dynamic Frequency                | 1.15 GHz           |
| Graphics Video Max Memory                     | 1.7 GB             |
| Graphics Output                               | eDP/DP/HDMI/DVI    |
| 4K Support                                    | Yes, at 60Hz       |
| Max Resolution (HDMI 1.4)‡                    | 4096x2160@24Hz     |
| Max Resolution (DP)‡                          | 4096x2304@60Hz     |
| Max Resolution (eDP - Integrated Flat Panel)‡ | 4096x2304@60Hz     |
| Max Resolution (VGA)‡                         | N/A                |
| DirectX* Support                              | 12                 |
| OpenGL* Support                               | 4.4                |
| Intel® Quick Sync Video                       | Yes                |
| Intel® InTru™ 3D Technology                   | Yes                |
| Intel® Clear Video HD Technology              | Yes                |
| Intel® Clear Video Technology                 | Yes                |
| # of Displays Supported ‡                     | 3                  |
| Device ID                                     | 0x591D             |
| <b>Expansion Options</b>                      |                    |
| Scalability                                   | 1S Only            |
| PCI Express Revision                          | 3.0                |
| PCI Express Configurations ‡                  | 1x16, 2x8, 1x8+2x4 |
| Max # of PCI Express Lanes                    | 16                 |
| <b>Package Specifications</b>                 |                    |
| Sockets Supported                             | FCLGA1151          |
| Max CPU Configuration                         | 1                  |
| Package Size                                  | 37.5mm x 37.5mm    |
| Low Halogen Options Available                 | See MDDS           |

|                                                            |                  |
|------------------------------------------------------------|------------------|
| <b>Advanced Technologies</b>                               |                  |
| Intel® Optane™ Memory Supported ‡                          | Yes              |
| Intel® Turbo Boost Technology                              | 2.0              |
| Intel® vPro™ Technology ‡                                  | Yes              |
| Intel® Hyper-Threading Technology ‡                        | Yes              |
| Intel® Virtualization Technology (VT-x) ‡                  | Yes              |
| Intel® Virtualization Technology for Directed I/O (VT-d) ‡ | Yes              |
| Intel® VT-x with Extended Page Tables (EPT) ‡              | Yes              |
| Intel® TSX-NI                                              | Yes              |
| Intel® 64 ‡                                                | Yes              |
| Instruction Set                                            | 64-bit           |
| Instruction Set Extensions                                 | SSE4.1/4.2, AVX2 |
| Idle States                                                | Yes              |
| Enhanced Intel SpeedStep® Technology                       | Yes              |
| Thermal Monitoring Technologies                            | Yes              |
| <b>Security &amp; Reliability</b>                          |                  |
| Intel® AES New Instructions                                | Yes              |
| Secure Key                                                 | Yes              |
| Intel® Software Guard Extensions (Intel® SGX)              | Yes              |
| Intel® Memory Protection Extensions (Intel® MPX)           | Yes              |
| Intel® OS Guard                                            | Yes              |
| Intel® Trusted Execution Technology ‡                      | Yes              |
| Execute Disable Bit ‡                                      | Yes              |
| Intel® Boot Guard                                          | Yes              |