Chipset	**Intel C602 Chipset**
Intel AMT	*MT type 1095 and 1097:* Intel Active Management Technology 7 *Others MT types:* Intel Active Management Technology 8
Processor	Two LGA2011 sockets, supports up to two processors from **Intel Xeon E5-2600 and Intel Xeon E5-2600 v2** family, or up to one processor from **Intel Xeon E5-1600 v2** family, integrated 4-channel DDR3 memory controller per processor. Supports the following Intel Xeon E5-2600 processors on MT type 1095, 1096, and 1097; or Intel Xeon E5-2600 v2 processors on MT type 1136 and 1137:

Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Intel QPI Speed	# of QPI Links	Max TDP	Memory Speed	Intel vPro technology	MT type compatible
Xeon E5-2603	4	4	1.8 GHz		10 MB	6.4 GT/s	2	80 W	1066MHz	vPro	1095, 1096, 1097
Xeon E5-2609	4	4	2.4 GHz		10 MB	6.4 GT/s	2	80 W	1066MHz	vPro	1095, 1096, 1097
Xeon E5-2620	6	12	2 GHz	2.5 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro	1095, 1096, 1097
Xeon E5-2630	6	12	2.3 GHz	2.8 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro	1095, 1096, 1097
Xeon E5-2630L	6	12	2 GHz	2.5 GHz	15 MB	7.2 GT/s	2	60 W	1333MHz	vPro	1095, 1096, 1097
Xeon E5-2637	2	4	3 GHz	3.5 GHz	5 MB	8 GT/s	2	80 W	1600MHz	vPro	1095, 1096, 1097
Xeon E5-2640	6	12	2.5 GHz	3 GHz	15 MB	7.2 GT/s	2	95 W	1333MHz	vPro	1095, 1096, 1097
Xeon E5-2643	4	8	3.3 GHz	3.5 GHz	10 MB	8 GT/s	2	130 W	1600MHz	vPro	1095, 1096, 1097
Xeon E5-2650	8	16	2 GHz	2.8 GHz	20 MB	8 GT/s	2	95 W	1600MHz	vPro	1095, 1096, 1097
Xeon E5-2650L	8	16	1.8 GHz	2.3 GHz	20 MB	8 GT/s	2	70 W	1600MHz	vPro	1095, 1096, 1097
Xeon E5-2660	8	16	2.2 GHz	3 GHz	20 MB	8 GT/s	2	95 W	1600MHz	vPro	1095, 1096, 1097
Xeon E5-2665	8	16	2.4 GHz	3.1 GHz	20 MB	8 GT/s	2	115 W	1600MHz	vPro	1095, 1096, 1097
Xeon E5-2667	6	12	2.9 GHz	3.5 GHz	15 MB	8 GT/s	2	130 W	1600MHz	vPro	1095, 1096, 1097
Xeon E5-2670	8	16	2.6 GHz	3.3 GHz	20 MB	8 GT/s	2	115 W	1600MHz	vPro	1095, 1096, 1097
Xeon E5-2680	8	16	2.7 GHz	3.5 GHz	20 MB	8 GT/s	2	130 W	1600MHz	vPro	1095, 1096, 1097
Xeon E5-2690	8	16	2.9 GHz	3.8 GHz	20 MB	8 GT/s	2	135 W	1600MHz	vPro	1095, 1096, 1097
Xeon E5-1603	4	4	2.8 GHz		10 MB			130 W	1066MHz	vPro	1095, 1096, 1097
Xeon E5-2603 v2	4	4	1.8 GHz	1.8 GHz	10 MB	6.4 GT/s	2	80 W	1333MHz	vPro	1136, 1137
Xeon E5-2609 v2	4	4	2.5 GHz	2.5 GHz	10 MB	6.4 GT/s	2	80 W	1333MHz	vPro	1136, 1137
Xeon E5-2620 v2	6	12	2.1 GHz	2.6 GHz	15 MB	7.2 GT/s	2	80 W	1600MHz	vPro	1136, 1137
Xeon E5-2630L v2	6	12	2.4 GHz	2.8 GHz	15 MB	7.2 GT/s	2	60 W	1600MHz	vPro	1136, 1137
Xeon E5-2630 v2	6	12	2.6 GHz	3.1 GHz	15 MB	7.2 GT/s	2	80 W	1600MHz	vPro	1136, 1137
Xeon E5-2637 v2	4	8	3.5 GHz	3.8 GHz	15 MB	8 GT/s	2	130 W	1866MHz	vPro	1136, 1137
Xeon E5-2640 v2	8	16	2 GHz	2.5 GHz	20 MB	7.2 GT/s	2	95 W	1600MHz	vPro	1136, 1137
Xeon E5-2643 v2	6	12	3.5 GHz	3.8 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro	1136, 1137
Xeon E5-2650L v2	10	20	1.7 GHz	2.1 GHz	25 MB	7.2 GT/s	2	70 W	1600MHz	vPro	1136, 1137
Xeon E5-2650 v2	8	16	2.6 GHz	3.4 GHz	20 MB	8 GT/s	2	95 W	1866MHz	vPro	1136, 1137
Xeon E5-2660 v2	10	20	2.2 GHz	3 GHz	25 MB	8 GT/s	2	95 W	1866MHz	vPro	1136, 1137
Xeon E5-2667 v2	8	16	3.3 GHz	4 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro	1136, 1137
Xeon E5-2670 v2	10	20	2.5 GHz	3.3 GHz	25 MB	8 GT/s	2	115 W	1866MHz	vPro	1136, 1137
Xeon E5-2680 v2	10	20	2.8 GHz	3.6 GHz	25 MB	8 GT/s	2	115 W	1866MHz	vPro	1136, 1137
Xeon E5-2690 v2	10	20	3 GHz	3.6 GHz	25 MB	8 GT/s	2	130 W	1866MHz	vPro	1136, 1137
Xeon E5-2695 v2	12	24	2.4 GHz	3.2 GHz	30 MB	8 GT/s	2	115 W	1866MHz	vPro	1136, 1137
Xeon E5-2697 v2	12	24	2.7 GHz	3.5 GHz	30 MB	8 GT/s	2	130 W	1866MHz	vPro	1136, 1137
Xeon E5-1607 v2	4	4	3 GHz		10 MB			130 W	1600MHz	vPro	1136, 1137
Xeon E5-1620 v2	4	8	3.7 GHz	3.9 GHz	10 MB			130 W	1866MHz	vPro	1136, 1137
Xeon E5-1650 v2	6	12	3.5 GHz	3.9 GHz	12 MB			130 W	1866MHz	vPro	1136, 1137
Xeon E5-1660 v2	6	12	3.7 GHz	4 GHz	15 MB			130 W	1866MHz	vPro	1136, 1137

Notes:
1. *ThinkStation C30 support two processors. When ordering two processors, they must be the same*
2. *When using Intel Xeon E5-1600 and E5-1600 v2 series processors, max CPU configuration is 1*
3. *Intel Xeon processor numbering system is an alpha numeric representation of product line, product family and version. An 'L' suffix will be used to identify a low power processor. More details please see http://www.intel.com/products/processor_number*
4. *All information is provided by Intel and may be changed at any time without notice. The information herein is provided "as-is". Intel may update this information in non-scheduled. For latest information, please see http://ark.intel.com/products/family/59138/Intel-Xeon-Processor-E5-Family/server*

Text in red shows that these features only apply to MT type 1095 and 1097 models, text in green shows that the features are supported on other models except MT type 1095 and 1097 models

Memory

UDIMM or **RDIMM**, **ECC**, **DDR3**, 8-channel capable (4-channel per processor),
eight 240-pin DIMM sockets (four DIMM sockets per processor),
64GB max (UDIMM, 8GBx8)/256GB max (RDIMM, 32GBx8)

Additional memory disclaimers

- *Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs*
- *Over four DIMMs requires dual processors*
- *Mixing of RDIMM and UDIMM is not supported*
- *Maximum memory capacity is also limited by operating system*
- *When using processor from Xeon E5-1600 and E5-1600 v2 series, only four DIMM sockets for CPU1 are available and max memory cacpacity is 32GB (UDIMM, 8GBx4)/128GB (RDIMM, 32GBx4)*

Graphics adapters and GPU computing

Two PCI Express 3.0 x16 slots for graphics adapters and GPU computing processors,
supports NVIDIA SLI technology, NVIDIA Maximus technology,
supports the following NVIDIA Quadro, NVS graphics adapters and Tesla GPU computing processors:

	Memory Size	CUDA Processor Cores	Display Connectors	Max. Displays	# of slots	Power
NVIDIA Quadro and NVS Graphics						
Quadro K6000	12GB	2880	1 dual-link DVI-I 1 dual-link DVI-D 2 DisplayPort	4	2	225W
Quadro K5000	4GB	1536	1 dual-link DVI-I 1 dual-link DVI-D 2 DisplayPort	4	2	122W
Quadro K4000	3GB	768	1 dual-link DVI-I 2 DisplayPort	4*	1	80W
Quadro K2000	2GB	384	1 dual-link DVI-I 2 DisplayPort	4*	1	51W
Quadro K2000D	2GB	384	1 dual-link DVI-I 1 dual-link DVI-D 1 mini DisplayPort	4*	1	51W
Quadro K600	1GB	192	1 dual-link DVI-I 1 DisplayPort	2	1	41W
Quadro 410	512MB	192	1 dual-link DVI-I 1 DisplayPort	2	1	37W
Quadro 6000	6GB	448	1 dual-link DVI-I 2 DisplayPort 1 Stereo	2	2	204W
Quadro 5000	2.5GB	352	1 dual-link DVI-I 2 DisplayPort, 1 Stereo	2	2	152W
Quadro 4000	2GB	256	1 dual-link DVI-I 2 DisplayPort 1 Stereo	2	1	142W
Quadro 2000	1GB	192	1 dual-link DVI-I 2 DisplayPort	2	1	62W
Quadro 2000D	1GB	192	2 dual-link DVI-I	2	1	62W
Quadro 600	1GB	96	1 dual-link DVI-I 1 DisplayPort	2	1	40W
NVS 510	2048 MB	192	4 mini DisplayPort (with 4 mini DP to DP dongles)	4	1	35W
NVS 315	1024MB	48	DMS59 to dual single-link DVI-I or dual DisplayPort	2	1	19.5W
NVS 310	512 MB	48	2 DisplayPort	2	1	19.5W
NVS 300	512 MB	16	DMS59 to dual single-link DVI-I	2	1	17.5W
NVIDIA Tesla GPU Computing Processors (as part of NVIDIA Maximus Platform)						
Tesla K20	5GB	2496				225W
Tesla C2075	6GB	448				225W

** Quadro K4000, K2000, and K2000D are equipped with 3 onboard display connectors, 4 Displays require a supported DisplayPort 1.2 Multi-Stream capable hub or displays*

Notes:

1. *ThinkStation supports NVIDIA SLI Technology with selected NVIDIA Quadro graphics adapters, additional SLI cable is needed. For the latest Quadro SLI certified list on ThinkStation, please see www.nvidia.com/object/quadro_sli_compatible_systems.html*
2. *ThinkStation C30 support NVIDIA Maximus technology. Maximus technology combines the visualization and interactive design capability of NVIDIA Quadro graphics and the high performance computing power of NVIDIA Tesla GPU computing processors in a single workstation. For more information on the latest Maximus certifications for ThinkStation and how to build Maximus system, please see www.nvidia.com/object/maximus.html*
3. *CUDA Processor Cores cannot be compared between GPU generations due to several important architectural differences that exist between streaming multiprocessor designs.*

ThinkStation® C30 Platform Specifications - III of IV

Onboard drive controllers	• Four SATA connectors via integrated Advanced Host Controller Interface (AHCI) in chipset, two SATA 6.0Gb/s (red), two SATA 3.0Gb/s (orange), RAID 0, 1, 5 support • Three SATA connectors via integrated Storage Controller Unit (SCU) in chipset, SATA 3.0Gb/s, RAID 0, 1, 5 support
Upgrade ROM for onboard drive controllers (opt)	Optional SAS HDD Enablement Module upgrades the 3 SATA connectors on SCU to 3 SATA/SAS connectors, SATA 3.0Gb/s, SAS 3.0Gb/s, RAID 0, 1 support
Discrete drive controller (opt)	*One the following, depending on model:* LSI SAS 9240-8i: SATA 6.0Gb/s, SAS 6.0Gb/s,RAID 0, 1 support optional upgrade key for RAID 5 support LSI SAS 9260-8i: SATA 6.0Gb/s, SAS 6.0Gb/s, RAID 0, 1, 5 support
Hard drive(s)	*Supports the following:* *3.5" SATA:* SATA 6.0Gb/s, 7200 rpm, up to 4TB *3.5" Hybrid:* SATA 6.0Gb/s, 7200 rpm, integrated 8GB NAND flash *2.5" SATA:* SATA 6.0Gb/s, 10000 rpm, up to 1TB *3.5" SAS:* SAS 6.0Gb/s, 15000 rpm, up to 600GB *2.5" SAS:* SAS 6.0Gb/s, 15000 rpm, up to 300GB *2.5" SSD:* Solid State Drive (SSD), SATA 6.0Gb/s, OPAL-capable on selected models, up to 300GB *mSATA:* mSATA Solid State Drive (SSD), SATA 6.0Gb/s, up to 128GB
Optical	Supports DVD-ROM, DVD±RW, or Blu-ray Burner, SATA interface
Drive Bays	One external 5.25” bays for opticals, three internal 3.5” bays for hard drives
Media reader (opt)	None (use USB port)
Front ports	*MT type 1095 and 1097:* Two USB 2.0, microphone (3.5mm), headphone (3.5mm) *Others MT types:* Two USB 3.0, microphone (3.5mm), headphone (3.5mm)
Rear ports	Eight USB 2.0, two USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)
IEEE 1394 adptr (optional)	None. Optional FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
Onboard Ethernet	One onboard gigabit ethernet, Intel 82579
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	800 watts with 80mm side-mounted variable speed fan, universal, **Climate Savers® Computing Gold**, **80 PLUS® Gold** qualified
Security	• Security chip: *MT type 1095 and 1097:* Nuvoton NPCT421L for TPM function, TCG 1.2-compliant *Others MT types:* STMicroelectronics ST33TPM12LPC for TPM function, TCG 1.2-compliant • Side cover lock (ships with two identical keys) • Padlock loop (in rear for opt padlock; padlock prohibits side cover removal) • Security slot (in rear for optional Kensington® Microsaver® cable; prohibits side cover removal) • Power-on password • Administrator password • Boot sequence control • Boot without keyboard, mouse, diskette • Serial port I/O enable/disable • USB 2.0 ports enable/disable individually • USB 3.0 ports enable/disable concurrently • Chassis intrusion switch (optional)
Mechanical	• Rack-mountable to 3U • Raven black color; metal case • 5.1"W x 17.5"D x 16.8"H • 130mm W x 444mm D x 427mm H (without rubber feet) • 40.7 lb (18.5kg) max configuration • 24-liter
Expansion slots	Slot 1: half-length, full-height, PCIe 3.0 x16 (near CPU, x4 elec) Slot 2: full-length, full-height, PCIe 3.0 x16* Slot 3: full-length, full-height, 32-bit PCI 2.3 Slot 4: full-length, full-height, PCIe 3.0 x16* Slot 5: full-length, full-height, PCIe 2.0 x4 Slot 6: half-length, full-height, 32-bit PCI 2.3 * *Adapters >75W use auxiliary power connector(s) from PSU*
Serviceability	• Toolless side cover removal • Toolless disk and optical drive removal • Toolless adapter retention • Illuminated front icons • Rack shelf support or optional rail kit

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ThinkStation® C30 Platform Specifications - IV of IV

ISV certifications	Please visit *www.lenovo.com/support/ISV*
Environmental certifications	GREENGUARD® certified RoHS-compliant EPEAT™ Gold rating
Warranty	1 or 3-year limited warranty, parts and labor
ThinkVantage®	Supports ThinkVantage® technologies
Preloaded operating systems	*One the following, depending on model:* • Windows® 7 Professional 64 • Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit • Windows 8 Pro 64-bit
Preloaded applications (only some listed)	*For Windows 7 models:* • Rescue and Recovery® • Norton® Internet Security (30 days of virus defi nitions) • Adobe® Reader® • Adobe Flash® Player • Microsoft® Office preloaded; purchase product key to activate • Corel® WinDVD® (DVD±RW model(s)) • Ulead® DVD MovieFactory® (DVD±RW model(s)) *For Windows 8 models:* • Evernote® • Norton Internet Security (30 days of virus definitions) • Norton Studio • Skype™ • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW model(s)) • Cyberlink PowerProducer (DVD±RW model(s))

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