#### ThinkStation E32 Tower - Overview



Front view

- 1. External 5.25" Bay for optical
- 2. External 5.25" Bay for optical or optional 3.5" hard drive bay
- 3. Media card reader (optional) or optional mSATA SSD drive
- 4. Power Button
- 5. Front I/O: 2 USB 3.0 (blue) 1 Headphone

1 Microphone



8

1 microphone-in 2 DisplayPort (for Intel HD Graphics) 1 VGA (for Intel HD Graphics)

Rear view

6. 280 watts Power Supply, 80 PLUS Bronze

serial (9-pin)

RJ-45 (GbE) line-in

1 PCle 2.0 x1 1 PCle 2.0 x1 1 PCle 2.0 x16 (x4 elec) 1 PCl

7. Rear I/O: 2 USB 2.0 4 USB 3.0(blue)

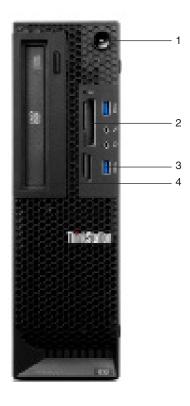
#### Internal

- One LGA1150 socket, supports one processor from Intel Xeon E3-1200 v3, Core i7-4000, and Core-i5 4000 families
- 4 DIMM sockets, supports up to 32GB ECC or non-ECC UDIMM memory
- Up to three 3.5" hard drive bays, two 3.5" hard drive bays are standard

#### Mechanical

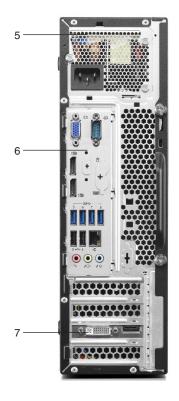
- Raven black color; metal case
- 6.9"W x 17.0"D x 16.7"H (with handle)
- 175mm W x 431mm D x 425mm H
- 27.56 lb (12.5kg) max configuration
- 25-liter

## ThinkStation E32 SFF - Overview



#### Front view

- 1. Power Button
- 2. Media card reader (optional) or optional mSATA SSD drive
- 3. Front I/O: 2 USB 3.0 (blue) Headphone 1 Microphone
- 4. 1 External 5.25" Bay for optical or optional slim optical + 3.5" hard drive bay or optional standalone 3.5" hard drive bay



#### Rear view

- 5. 240 watts Power Supply, 80 PLUS Bronze
- 6. Rear I/O: 2 USB 2.0 4 USB 3.0(blue) serial (9-pin)
  - RJ-45 (GbE) line-in
  - line-out
  - 1 microphone-in 2 DisplayPort (for Intel HD Graphics) 1 VGA (for Intel HD Graphics)
- 7.\* 1 PCle 3.0 x16 1 PCle 2.0 x10 1 PCle 2.0 x16 (x4 elec)
  - \* Discrete graphics adapter is optional

#### Internal

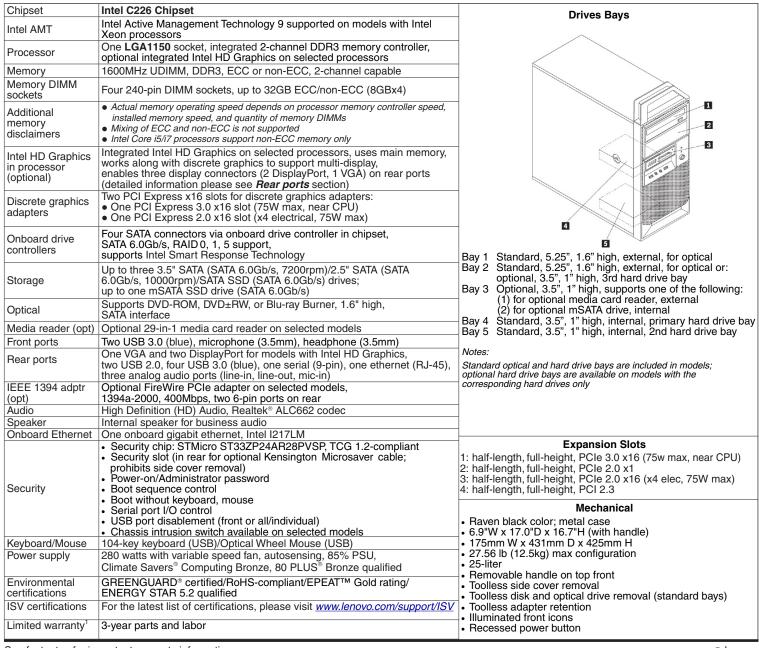
- One LGA1150 socket, supports one processor from Intel Xeon E3-1200 v3, Core i7-4000, and Core-i5 4000 families
- 4 DIMM sockets, supports up to 32GB ECC or non-ECC UDIMM memory
- Up to two 3.5" hard drive bays and one 2.5" hard drive bay, one 3.5" hard drive bay is standard

#### Mechanical

- Raven black color; metal case
- 13.35"W x 15.0"D x 3.93"H
- 338mm W x 375mm D x 102mm H
- 17.20 lb (7.8kg) max configuration
- 12.9-liter

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|--|----------------------|-----------------|----------------------|---|----------------------|-------------------|---------|----------------------------|----|--------------------------------|--|
| 30A10007US     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A10008US     | Xeon E3-1230 v3<br>(4C/3.3GHz/8MB/1600MHz) | 1600MHz<br>ECC       | 4GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A10009US     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>ECC       | 4GBx2           | Intel HD P4600       | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002JUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002KUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002LUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002MUS     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |

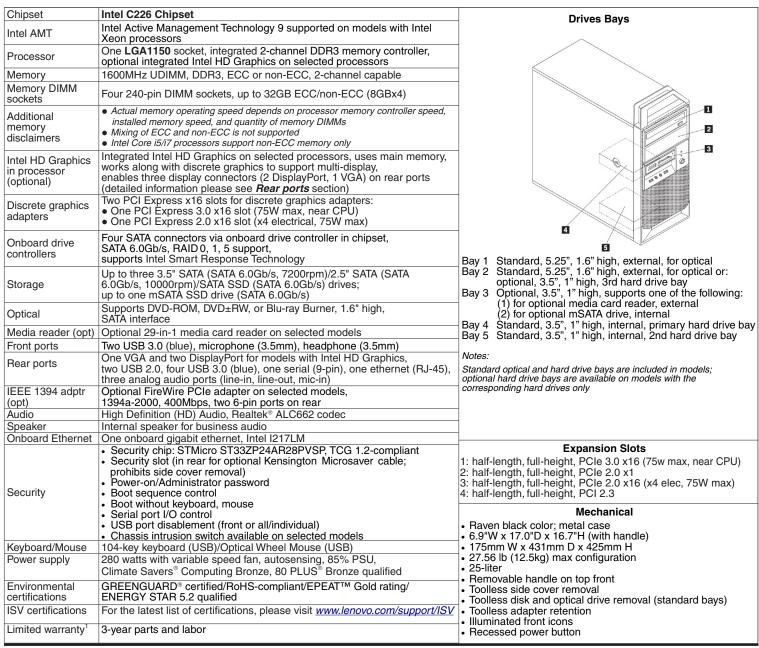
<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|--|----------------------|-----------------|----------------------|---|----------------------|-------------------|---------|----------------------------|----|--------------------------------|--|
| 30A1002NUS     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002PUS     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002QUS     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002RUS     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002SUS     | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002TUS     | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002UUS     | Xeon E3-1240 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |

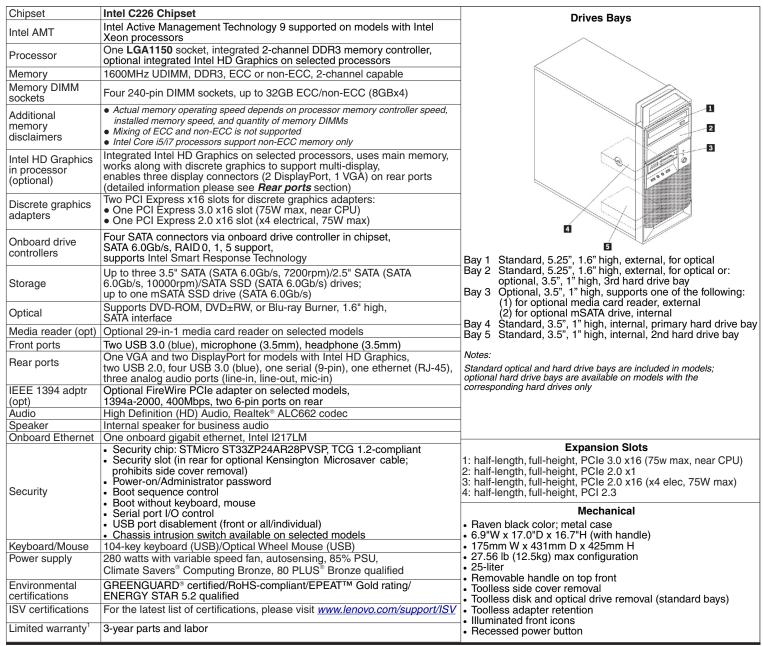
<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage          | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|--|----------------------|-----------------|----------------------|---|----------------------|------------------|---------|----------------------------|----|--------------------------------|--|
| 30A1002VUS     | Xeon E3-1240 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002XUS     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       |   | No                   | 1x180GB SATA SSD | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002YUS     | Xeon E3-1275 v3<br>(4C/3.5GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x256GB SATA SSD | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A10030US     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A10031US     | Xeon E3-1240 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x128GB SATA SSD | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A10032US     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x180GB SATA SSD | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A10033US     | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |

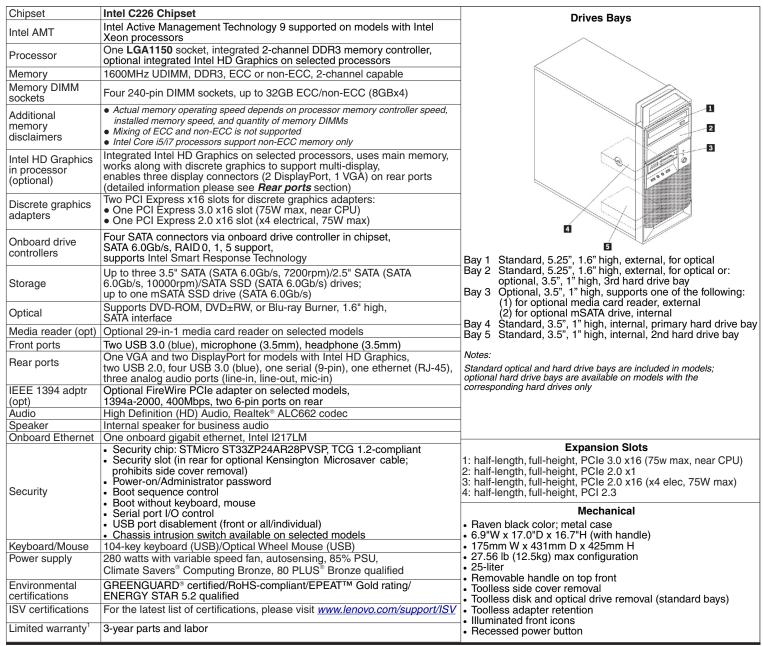
<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage                         | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|--|----------------------|-----------------|----------------------|---|----------------------|---------------------------------|---------|----------------------------|----|--------------------------------|--|
| 30A10034US     | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA                 | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A10035US     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       |   | No                   | 1x1TB 3.5" SATA                 | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A10036US     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 128GB SATA<br>SSD+1TB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1003BUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA               | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |
| 30A1003CUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA               | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |
| 30A1003DUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA               | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |
| 30A1003EUS     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA               | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |

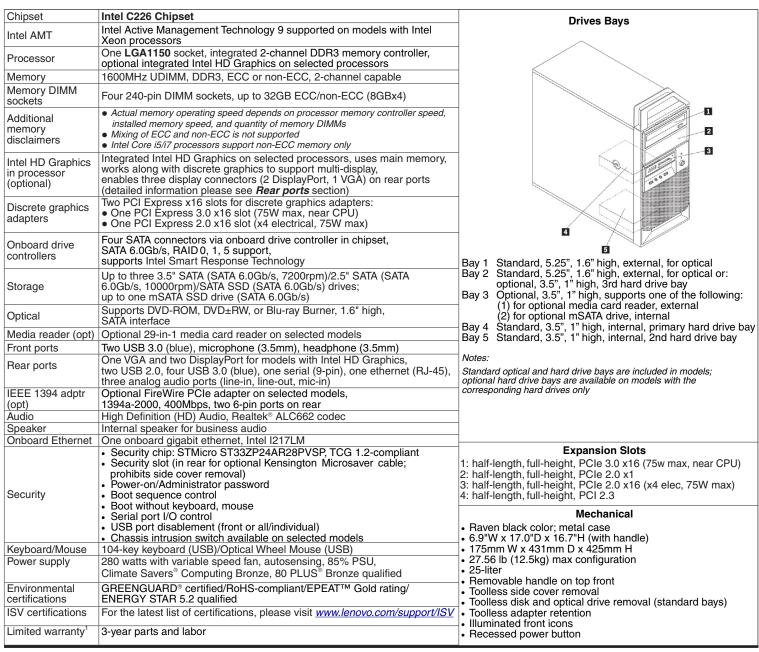
<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage          | Optical | 29-in-1<br>Media<br>reader | 1394 | Chassis<br>intrusion<br>switch | Preloaded<br>OS |
|----------------|--|----------------------|-----------------|----------------------|---|----------------------|------------------|---------|----------------------------|------|--------------------------------|-----------------|
| 130A1003EUS    | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5 SATA   | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
|                | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5 SATA | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
|                | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5 SATA | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
| 30A 1003.1US   | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5 SATA   | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
|                | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       |   | No                   | 1x500GB 3.5 SATA | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
| 30A 10031 U.S  | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5 SATA | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
|                | Xeon E3-1240 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5 SATA   | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |

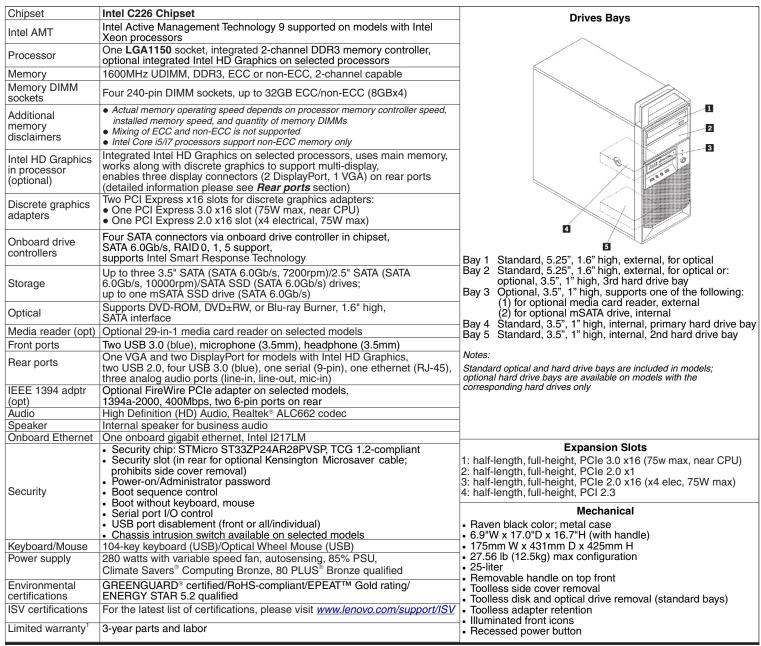
<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage          | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS |
|----------------|--|----------------------|-----------------|----------------------|---|----------------------|------------------|---------|----------------------------|----|--------------------------------|-----------------|
| 30A1003NUS     | Xeon E3-1240 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5 SATA   | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A1003QUS     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       |   | No                   | 1x180GB SATA SSD | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A1003RUS     | Xeon E3-1275 v3<br>(4C/3.5GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x256GB SATA SSD | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A1003SUS     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5 SATA   | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A1003TUS     | Xeon E3-1240 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x128GB SATA SSD | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A1003UUS     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x180GB SATA SSD | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A1003VUS     | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5 SATA   | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |

<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

## ThinkStation E32 Tower (30A1) - TopSeller (August 2013) - VII

Product Specifications Reference (PSREF)

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters <sup></sup>     | Pre-<br>conf<br>RAID | Storage                        | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS |
|----------------|--|----------------------|-----------------|----------------------|--|----------------------|--------------------------------|---------|----------------------------|----|--------------------------------|-----------------|
|                | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5 SATA                 | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
|                | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   |                 | Intel HD P4600       |  | No                   | 1x1TB 3.5 SATA                 | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A1003YUS     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 128GB SATA<br>SSD+1TB 3.5 SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |

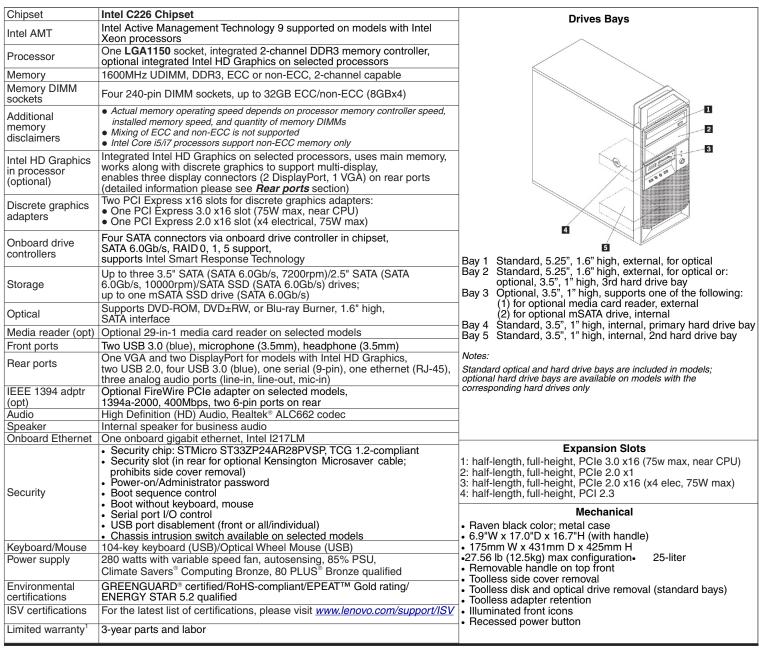
<sup>\*</sup> Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

| Chipset   | Intel C226 Chipset  | Drives Bays  |
|---|---|--|
| Intel AMT                                       | Intel Active Management Technology 9 supported on models with Intel Xeon processors   |  |
| Processor                                       | One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors   |  |
| Memory  | 1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable  |  |
| Memory DIMM sockets                             | Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)   |  |
| Additional<br>memory<br>disclaimers             | <ul> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul> | 2  |
| Intel HD Graphics<br>in processor<br>(optional) | Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see <i>Rear ports</i> section)     |  |
| Discrete graphics adapters                      | Two PCI Express x16 slots for discrete graphics adapters:  • One PCI Express 3.0 x16 slot (75W max, near CPU)  • One PCI Express 2.0 x16 slot (x4 electrical, 75W max)  |  |
| Onboard drive controllers                       | Four SATA connectors via onboard drive controller in chipset,<br>SATA 6.0Gb/s, RAID 0, 1, 5 support,<br>supports Intel Smart Response Technology  | Bay 1 Standard, 5.25", 1.6" high, external, for optical Bay 2 Standard, 5.25", 1.6" high, external, for optical or:  |
| Storage   | Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)   | optional, 3.5", 1" high, 3rd hard drive bay Bay 3 Optional, 3.5", 1" high, supports one of the following:  |
| Optical   | Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface  | (1) for optional media card reader, external (2) for optional mSATA drive, internal Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay  |
| Media reader (opt)                              | Optional 29-in-1 media card reader on selected models   | Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay  |
| Front ports Rear ports                          | Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)  One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)                | Notes: Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the  |
| IEEE 1394 adptr                                 | Optional FireWire PCIe adapter on selected models,  | corresponding hard drives only   |
| (opt)   | 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 I217LM  |  |
| Security  | Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant     Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)     Power-on/Administrator password     Boot sequence control     Boot without keyboard, mouse              | Expansion Slots  1: half-length, full-height, PCle 3.0 x16 (75w max, near CPU)  2: half-length, full-height, PCle 2.0 x1  3: half-length, full-height, PCle 2.0 x16 (x4 elec, 75W max)  4: half-length, full-height, PCl 2.3 |
|   | Serial port I/O control     USB port disablement (front or all/individual)     Chassis intrusion switch available on selected models  | • Raven black color; metal case • 6.9"W x 17.0"D x 16.7"H (with handle)  |
| Keyboard/Mouse                                  | 104-key keyboard (USB)/Optical Wheel Mouse (USB)  | • 175mm W x 431mm D x 425mm H  |
| Power supply                                    | 280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified  | 27.56 lb (12.5kg) max configuration     25-liter     Removable handle on top front   |
| Environmental certifications                    | GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/<br>ENERGY STAR 5.2 qualified   | Toolless disk and optical drive removal (standard bays)  |
| ISV certifications                              | For the latest list of certifications, please visit <u>www.lenovo.com/support/ISV</u>   | Toolless adapter retention     Illuminated front icons   |
| Limited warranty <sup>1</sup>                   | 3-year parts and labor  | Recessed power button  |

### ThinkStation E32 Tower (30A1) - TopSeller (September 2013)

| Type-<br>model | Processor                               | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|---|----------------------|-----------------|----------------------|---|----------------------|-------------------|---------|----------------------------|----|--------------------------------|--|
| 30A1000RUS     | Core i3-4130<br>(2C/3.4GHz/3MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4400        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64                             |
| 30A1000SUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | No                             | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002FUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002GUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002HUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A1002WUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x128GB SATA SSD  | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A10037US     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |

<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

| Type-<br>model       | Processor                               | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader | 1394 | Chassis<br>intrusion<br>switch | Preloaded<br>OS |
|----------------------|---|----------------------|-----------------|----------------------|---|----------------------|-------------------|---------|----------------------------|------|--------------------------------|-----------------|
|                      | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
|                      | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
|                      | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
|                      | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x128GB SATA SSD  | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
| * Model in italics s | shows that this is a Global Model       | ** DL = D            | ual Link, SL    | = Single Link        |   |                      |                   |         |                            |      |                                |                 |

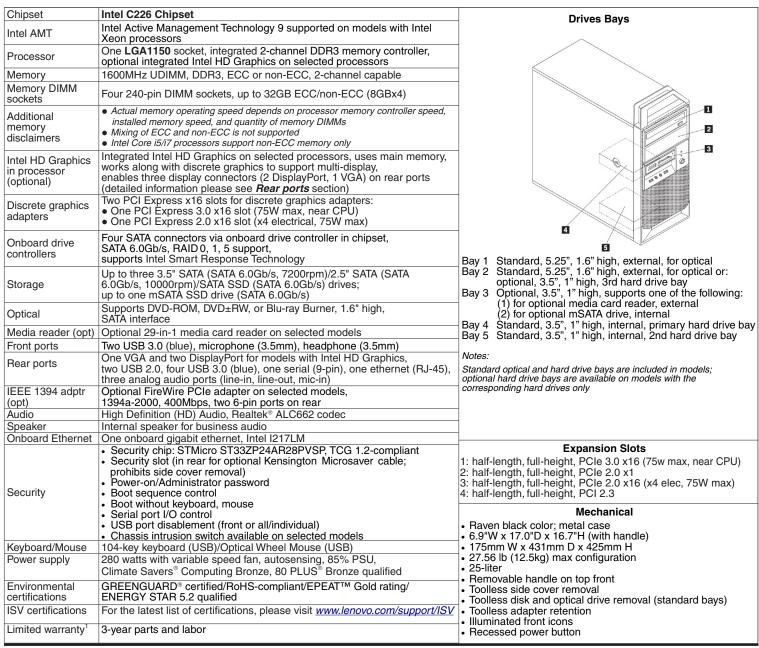
<sup>\*</sup> Model in italics shows that this is a Global Model

| Intel AMT  Intel ACtive Management Technology 9 supported on models with Intel Xeon processors  One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors  Memory 1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)  Additional memory operating speed depends on processor memory controller speed, installed memory, speed, and quantity of memory DIMMs  Additional memory operating speed depends on processor memory controller speed, installed memory, speed, and quantity of memory DIMMs  Intel HD Graphics in processors support mon-ECC memory only  Intel HD Graphics in processor enter developed in the Intel Core is 77 processor support mon-ECC memory only  Integrated Intel HD Graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see *Rear ports* section)  Discrete graphics adopters in the Port Express x 16 slots for discrete graphics adapters:  Onboard dirive controllers  You PCI Express x 3 x16 slot (75W max, near CPU)  One PCI Express x 3 x16 slot (75W max, near CPU)  One mSATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up   | s Bays   |
|--|--|
| ptional integrated Intel HID Graphics on selected processors Memory DIMM sockets Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)  **Additional memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs disclaimers  **Additional memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs disclaimers  **Additional memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs disclaimers  **Additional memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs disclaimers  **Additional of Internation on **ECC in on support and processors uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see **Rear ports** seed on **OFIC Express \$2.0 x16 slot (75W max, near CPU)  **One PCI Express \$2.0 x16 slot (x4 electrical, 75W max)  **Four SATA connectors via onboard drive controller in chipset, SATA (6.0Gbc, RAIDo, 1, 5 support, supports Intel Smart Response Technology  **Up to three 3.5' SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 1000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) drives; up to three analog audio ports (line-in, line-out, mic-in)  **The outs and the drive broad of the drive broad of the drive broptional media or standard drive bays are availe (opt)  **Securit | 5 <b>2</b> 4,5   |
| Memory DIMM sockets Additional memory operating speed depends on processor memory controller speed, installed memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs of ECC and non-ECC is not supported  * Mining of ECC and non-ECC is not supported  * Mining of ECC and non-ECC is not supported  * Mining of ECC and non-ECC is not supported  * Mining of ECC and non-ECC is not supported  * Mining of ECC and non-ECC is not supported  * Mining of ECC and non-ECC is not supported  * Mining of ECC and non-ECC is not supported  * Mining of ECC and non-ECC is not supported  * Mining of ECC and non-ECC is not supported  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is memory DIMMs  * Mining of ECC and non-ECC is non-Ecc memory DIMMs  * Mining of ECC and non-ECC is non-Ecc memory DIMMs  * Mining of ECC and non-ECC is non-Ecc memory DIMMs  * Mining of ECC and non-ECC is non-Ecc memory DIMMs  * Mining of ECC and non-ECC is non-Ecc memory DIMMs  * Mining of ECC and non-ECC in Section  * Mining of ECC and non-ECC in Section  * Mini   |  |
| Additional memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs  • Mixing of ECC and non-ECC is not supported on interpretation on the processor (optional)  Intel HD Graphics in processor support non-ECC memory only  Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see **Rear* ports** section)  Discrete graphics adapters:  • One PCI Express x16 slots for discrete graphics adapters: • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (75W max, near CPU) • One PCI Express x3.0 x16 slot (x4 electrical, 75W max)  Bay 1 Standard, 5.25", 16" h Bay 2 Standard, 5.25", 16" h Bay 3 Optional, 35", 1" high, 11 flor optional, 35", 1" high, 12 f   |  |
| installed memory speed, and quantity of memory DIMMs    Mixing of ECC and non-ECC is not supported   |  |
| works along with discrete graphics to support multi-display, and analyses three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see *Rear ports* section)  Discrete graphics adapters  • One PCI Express 2.0 x16 slot for discrete graphics adapters: • One PCI Express 2.0 x16 slot for Wax, near CPU) • One PCI Ex    | 2  |
| One PCI Express 3.0 x16 slot (75W max, near CPU) One PCI Express 2.0 x16 slot (x4 electrical, 75W max) One PCI Express 2.0 x16 slot (x4 electrical, 75W max) One PCI Express 2.0 x16 slot (x4 electrical, 75W max)  Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1, 5 support, supports Intel Smart Response Technology  Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s) Optical  Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface  Media reader (opt) Optional 29-in-1 media card reader on selected models Front ports  Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm) One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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 (opt) Optional FireWire PCle adapter on selected models  IEEE 1394 adptr (opt) Optional FireWire PCle adapter on selected models  Power-on/Administrator password  Security soli (in rear for optional Kensington Microsaver cable; prohibits side cover removal)  Power-on/Administrator password  Security of tin rear for optional Kensington Microsaver cable; prohibits side cover removal)  Power-on/Administrator password  Security of tin rear for optional Kensington Microsaver cable; prohibits side cover removal)  Power-on/Administrator password  Security of tin rear for optional Kensington Microsaver cable; prohibits side cover removal)  Power-on/Administrator password  Security of tin rear for optional Kensington Microsaver cable; prohibits side cover removal)  Power-on/Administrator password  Security of tin rear for optional Kensington Microsaver cable; prohibits side cover removal  Security of tin rear for optional Kensington Microsaver cable; prohibits side cover removal  Security of tin rear for optional Kensington Microsaver cable; prohibits side cover removal  Security of the tin tin ti    | Eve 2  |
| Onboard drive controllers  Four SATA concectors via onboard drive controller in chipset, supports Intel Smart Response Technology  Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD (SATA 6.0Gb/s)  Optical  Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface  Media reader (opt)  Optional 29-in-1 media card reader on selected models  Front ports  Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)  One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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 (opt)  1394a-2000, 400Mbps, two 6-pin ports on rear  Audio  Audio  Aligh Definition (HD) Audio, Realtek® ALC662 codec  Speaker  Onboard Ethernet  One onboard gigabit ethernet, Intel I217LM  Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)  Power-on/Administrator password  Security  Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant  Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)  Power-on/Administrator password  Security of thiout keyboard, mouse  Serial port I/O control  USB port disablement (front or all/individual)  Chassis intrusion switch available on selected models  Keyboard/Mouse  104-key keyboard (USB)/Optical Wheel Mouse (USB)  Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified  Environmental  GREENIGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  Environmental   |  |
| Storage    G.OGb/s, 10000rpm)/SÀTA SSD (SATĀ 6.0Cb/s) drives; up to one mSATĀ SSD drive (SATA 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATA 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATA 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATA 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATA 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATA 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATA 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATA 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATA 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ SSD drive (SATĀ 6.0Gb/s) drives; up to one mSATĀ Sp, "1" high, (1) for optional media (2) for optional mSATĀ Bay 4 Standard, 3.5", 1" high Bay 5 St    | high, external, for optical  |
| Optical Supports DVD-HOM, DVDEHW, of Blu-ray Burrier, 1.6 high, SATA interface  Media reader (opt) Optional 29-in-1 media card reader on selected models Front ports Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)  Rear ports One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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 (opt) 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 Onboard Ethernet One onboard gigabit ethernet, Intel I217LM  ■ Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) ■ Power-on/Administrator password ■ Boot sequence control ■ Boot without keyboard, mouse ■ Serial port I/O control ■ USB port disablement (front or all/individual) ■ Chassis intrusion switch available on selected models  Keyboard/Mouse 104-key keyboard (USB)/Optical Wheel Mouse (USB)  Power supply Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified  Environmental GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/   **Security of romodels with Intel HD Graphics, two USB Standard, 3.5", 1" high Bay 5 Standard optical and hard drive bay availate corresponding to prohibits and popular drive bay availate corresponding hard drive bay availate corresponding ha    | n, 3rd hard drive bay<br>n, supports one of the following:                   |
| Front ports  Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)  Rear ports  One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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 (opt)  Audio Optional FireWire PCle 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 I217LM  Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)  Power-on/Administrator password  Boot sequence control  Boot without keyboard, mouse Serial port I/O control  USB port disablement (front or all/individual)  Chassis intrusion switch available on selected models  Keyboard/Mouse 104-key keyboard (USB)/Optical Wheel Mouse (USB)  Power supply  Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified  Environmental GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  Tingh  Notes:  Standard, 3.5", 1" high  Notes:  Standard optical and hard drive bays are availate corresponding hard drives only  **Cortesponding hard drives only  **Cortespond    | TA drive, internal   |
| Front ports  Rear ports  Notes:  Rear ports  One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four 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 (opt) Optional FireWire PCle adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear  Audio Audio High Definition (HD) Audio, Realtek® ALC662 codec Speaker Onboard Ethernet  One onboard gigabit ethernet, Intel I217LM Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) Power-on/Administrator password Boot sequence control Boot without keyboard, mouse Serial port I/O control USB port disablement (front or all/individual) Chassis intrusion switch available on selected models  Keyboard/Mouse  Notes:  Standard optical and hard drive bay star availa corresponding hard drives only  Standard optical and hard drive bay star availa corresponding hard drives only  Standard optical and hard drive bay star availator post on rear  Notes:  Standard optical and hard drive bay star availa corresponding hard drive bays are availate corresponding hard drives only  Standard optical and hard drive bay star availator post on rear  Notes:  Standard optical and hard drive bay star availator post on rear  Notes:  Standard optical and hard drive bay star availator post on rear  Notes:  Standard optical and hard drive bay star availator post on rear  Notes:  Standard optical and hard drive bay star availators  Standard optical and hard drive bay sare availatore    | th, internal, 2nd hard drive bay   |
| Rear ports  two USB 2.0, four 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 (opt)  | ,, <u></u>   |
| Corresponding hard drives only   | bays are included in models;<br>ilable on models with the                    |
| Audio High Definition (HD) Audio, Realtek® ALC662 codec  Speaker Internal speaker for business audio  Onboard Ethernet One onboard gigabit ethernet, Intel I217LM  Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) Power-on/Administrator password Boot sequence control Boot without keyboard, mouse Serial port I/O control USB port disablement (front or all/individual) Chassis intrusion switch available on selected models  Keyboard/Mouse Power supply  Z80 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified  Environmental  CREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  Environmental  Audio  Replace  Security  Security one on onboard gigabit ethernet, Intel I217LM  Expans  1: half-length, full-height, PCle 2: half-length, full-height, PCle 4: half-length, full-height, PCle 6: half-length, full-height, PCle 6: half-length, full-height, PCle 7: half-length, full-height, PCle 8: half-length, full-height, PCle 8: half-length, full-height, PCle 9: half-length, full-height, PCle 9: h    |  |
| Onboard Ethernet One onboard gigabit ethernet, Intel I217LM  Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) Power-on/Administrator password Boot sequence control Boot without keyboard, mouse Serial port I/O control USB port disablement (front or all/individual) Chassis intrusion switch available on selected models  Keyboard/Mouse  Keyboard/Mouse  Tolimate Savers® Computing Bronze, 80 PLUS® Bronze qualified  Environmental  GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  TNEDWORD CREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  TNEDWORD CREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  Expans  1: half-length, full-height, PCle 2: half-length, full-height, PCle 4: half-length, full    |  |
| • Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant • Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal) • Power-on/Administrator password • Boot sequence control • Boot without keyboard, mouse • Serial port I/O control • USB port disablement (front or all/individual) • Chassis intrusion switch available on selected models  Keyboard/Mouse  Keyboard/Mouse  Keyboard/Mouse  Tolleass of Computing Bronze, 80 PLUS® Bronze qualified  Environmental  GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  Environmental  Security STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant  1: half-length, full-height, PCle 2: half-length, full-height, PCle 4: half-length, full-heig    |  |
| Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)     Power-on/Administrator password     Boot sequence control     Boot without keyboard, mouse     Serial port I/O control     USB port disablement (front or all/individual)     Chassis intrusion switch available on selected models  Keyboard/Mouse  Reyboard/Mouse  Power supply  280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified  Environmental  GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  Environmental  Security 1: half-length, full-height, PCle 2: half-length, full-height, PCle 3: half-length, full-height, PCle 4: half-length, full-he         |  |
| • Serial port I/O control • USB port disablement (front or all/individual) • Chassis intrusion switch available on selected models  Keyboard/Mouse  Tod-key keyboard (USB)/Optical Wheel Mouse (USB)  Power supply  280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified  Environmental  Computer Savers® Certified/RoHS-compliant/EPEAT™ Gold rating/  Serial port I/O control  Raven black color; metal case • 6.9"W x 17.0"D x 16.7"H (with the color)  175mm W x 431mm D x 425 • 27.56 lb (12.5kg) max configured to the color of the col    | le 3.0 x16 (75w max, near CPU)<br>le 2.0 x1<br>le 2.0 x16 (x4 elec, 75W max) |
| Keyboard/Mouse       104-key keyboard (USB)/Optical Wheel Mouse (USB)       • 175mm W x 431mm D x 425         Power supply       280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified       • 27.56 lb (12.5kg) max config         Environmental       GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/       • Toolless side cover removal  |  |
| Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified  Environmental GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  TNOISES side cover removal  | 25mm H   |
| Environmental GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  • Toolless side cover removal  |  |
|  |  |
| ISV certifications For the latest list of certifications, please visit <u>www.lenovo.com/support/ISV</u> • Toolless adapter retention  | , , ,  |
| Limited warranty <sup>1</sup> 3-year parts and labor • Illuminated front icons • Recessed power button   |  |

#### ThinkStation E32 Tower (30A0) - August 2013

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|--|----------------------|-----------------|----------------------|---|----------------------|-------------------|---------|----------------------------|----|--------------------------------|--|
| 30A0002TUS     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A0002UUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A0002VUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A0002WUS     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A0002XUS     | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A0002YUS     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A00030US     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |

<sup>\*</sup> Model in italics shows that this is a Global Model

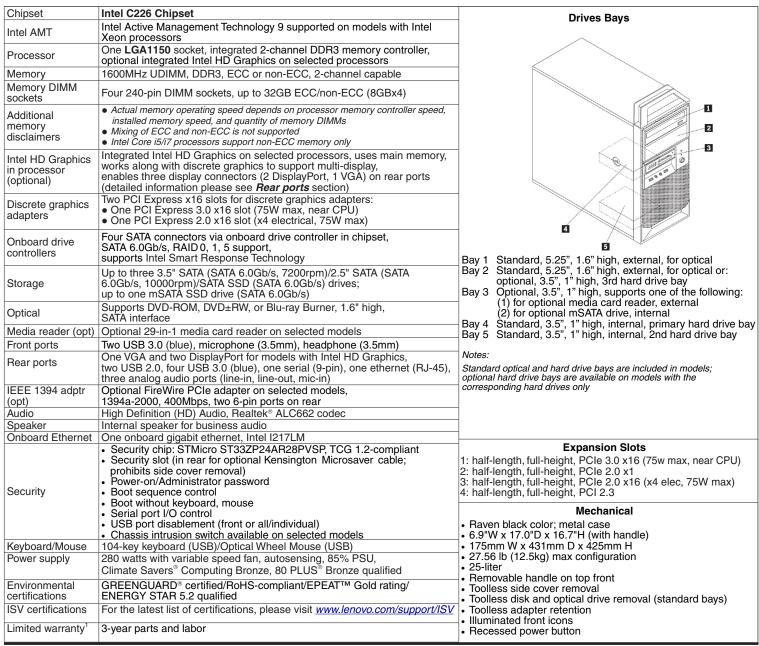


<sup>\*\*</sup> DL = Dual Link, SL = Single Link

### ThinkStation E32 Tower (30A0) - August 2013 - II

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|--|----------------------|-----------------|----------------------|---|----------------------|-------------------|---------|----------------------------|----|--------------------------------|--|
| 30A00031US     | Xeon E3-1275 v3<br>(4C/3.5GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A00032US     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x180GB SATA SSD  | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A00033US     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x180GB SATA SSD  | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A00034US     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x180GB SATA SSD  | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A00035US     | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A00039US     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |
| 30A0003AUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |

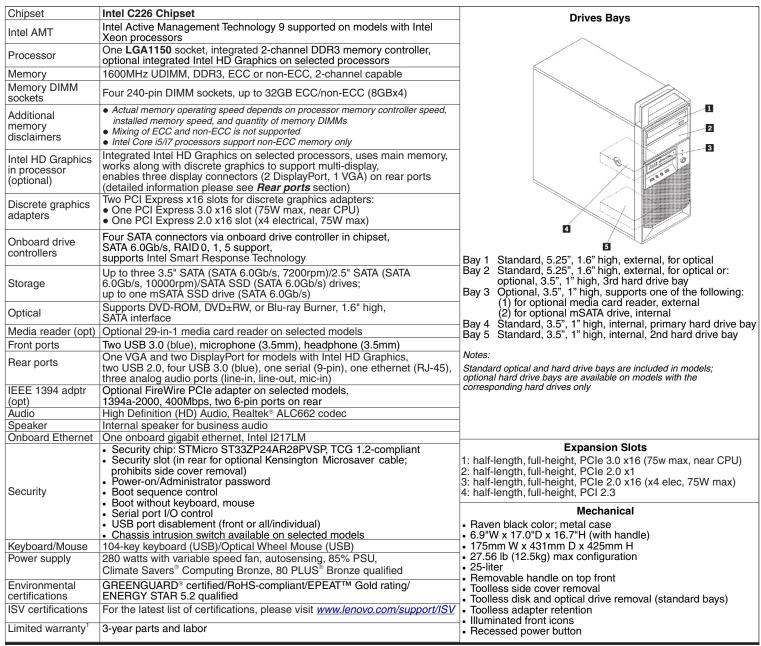
<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage          | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS |
|----------------|--|----------------------|-----------------|----------------------|---|----------------------|------------------|---------|----------------------------|----|--------------------------------|-----------------|
| 30A0003BUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA  | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A0003CUS     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A0003DUS     | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A0003EUS     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA  | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A0003FUS     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A0003GUS     | Xeon E3-1275 v3<br>(4C/3.5GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A0003HUS     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x180GB SATA SSD | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |

<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

## ThinkStation E32 Tower (30A0) - August 2013 - IV

Product Specifications Reference (PSREF)

| Type-<br>model     | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage          | Optical | 29-in-1<br>Media<br>reader | 1394 | Chassis<br>intrusion<br>switch | Preloaded<br>OS |
|--------------------|--|----------------------|-----------------|----------------------|---|----------------------|------------------|---------|----------------------------|------|--------------------------------|-----------------|
| 30A0003JUS         | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x180GB SATA SSD | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
| 30A0003KUS         | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x180GB SATA SSD | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
| 30A0003LUS         | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K2000<br>(2GB, 1xDVI-I DL,<br>2xDP, 51W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | Media                      | No   | Switch                         | Win8 Pro64      |
| * Model in italics | shows that this is a Global Model          | ** DL = D            | ual Link, SI    | = Single Link        |   |                      |                  |         |                            |      |                                |                 |

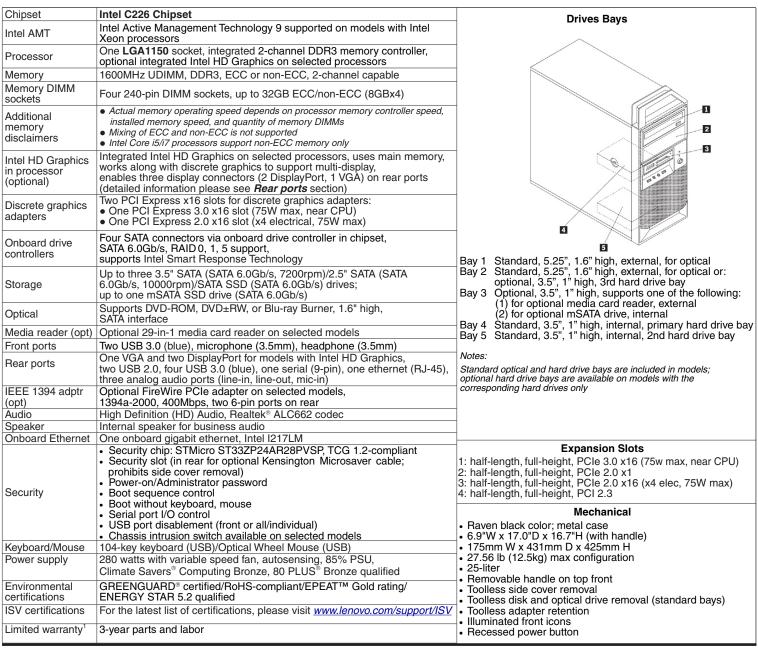
| Chipset   | Intel C226 Chipset  | Drives Bays  |
|---|---|--|
| Intel AMT                                       | Intel Active Management Technology 9 supported on models with Intel Xeon processors   | Drives bays  |
| Processor                                       | One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors   |  |
| Memory  | 1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable  |  |
| Memory DIMM sockets                             | Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)   |  |
| Additional<br>memory<br>disclaimers             | Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs  Mixing of ECC and non-ECC is not supported  Intel Core i5/17 processors support non-ECC memory only                                 | 2  |
| Intel HD Graphics<br>in processor<br>(optional) | Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see <i>Rear ports</i> section) | 0 0  |
| Discrete graphics adapters                      | Two PCI Express x16 slots for discrete graphics adapters:  • One PCI Express 3.0 x16 slot (75W max, near CPU)  • One PCI Express 2.0 x16 slot (x4 electrical, 75W max)  |  |
| Onboard drive controllers                       | Four SATA connectors via onboard drive controller in chipset,<br>SATA 6.0Gb/s, RAID 0, 1, 5 support,<br>supports Intel Smart Response Technology  | Bay 1 Standard, 5.25", 1.6" high, external, for optical  |
| Storage   | Up to three 3.5" SATA (SATA 6.0Gb/s, 7200rpm)/2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)   | Bay 2 Standard, 5.25", 1.6" high, external, for optical or: optional, 3.5", 1" high, 3rd hard drive bay  Bay 3 Optional, 3.5", 1" high, supports one of the following:   |
| Optical   | Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high, SATA interface  | (1) for optional media card reader, external (2) for optional mSATA drive, internal Bay 4 Standard, 3.5", 1" high, internal, primary hard drive bay  |
| Media reader (opt)                              | Optional 29-in-1 media card reader on selected models   | Bay 5 Standard, 3.5", 1" high, internal, 2nd hard drive bay  |
| Front ports                                     | Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)   | Day o Otandard, 6.5 , 1 mgm, mornan, 2nd nard drive bay  |
| Rear ports                                      | One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)   | Notes: Standard optical and hard drive bays are included in models; optional hard drive bays are available on models with the  |
| IEEE 1394 adptr                                 | Optional FireWire PCIe adapter on selected models,  | corresponding hard drives only   |
| (opt)   | 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 I217LM  |  |
| Security  | Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant     Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)     Power-on/Administrator password     Boot sequence control     Boot without keyboard, mouse          | Expansion Slots  1: half-length, full-height, PCle 3.0 x16 (75w max, near CPU)  2: half-length, full-height, PCle 2.0 x1  3: half-length, full-height, PCle 2.0 x16 (x4 elec, 75W max)  4: half-length, full-height, PCl 2.3 |
|   | Serial port I/O control     USB port disablement (front or all/individual)     Chassis intrusion switch available on selected models  | Mechanical Raven black color; metal case 6.9"W x 17.0"D x 16.7"H (with handle)   |
| Keyboard/Mouse                                  | 104-key keyboard (USB)/Optical Wheel Mouse (USB)  | • 175mm W x 431mm D x 425mm H  |
| Power supply                                    | 280 watts with variable speed fan, autosensing, 85% PSU, Climate Savers® Computing Bronze, 80 PLUS® Bronze qualified  | 27.56 lb (12.5kg) max configuration     25-liter   |
| Environmental certifications                    | GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/<br>ENERGY STAR 5.2 qualified   | <ul> <li>Removable handle on top front</li> <li>Toolless side cover removal</li> <li>Toolless disk and optical drive removal (standard bays)</li> </ul>  |
| ISV certifications                              | For the latest list of certifications, please visit www.lenovo.com/support/ISV  | Toolless adapter retention     Illuminated front icons   |
| Limited warranty <sup>1</sup>                   | 3-year parts and labor  | Recessed power button  |

<sup>•</sup> For detailed ThinkStation E32 Tower platform specifications, please see ThinkStation E32 Platform Specifications sheet

### ThinkStation E32 Tower (30A0) - September 2013

| Type-<br>model | Processor                               | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|---|----------------------|-----------------|----------------------|---|----------------------|-------------------|---------|----------------------------|----|--------------------------------|--|
| 30A0002QUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A0002RUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A0002SUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A00036US     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |
| 30A00037US     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |
| 30A00038US     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |

<sup>\*</sup> Model in italics shows that this is a Global Model

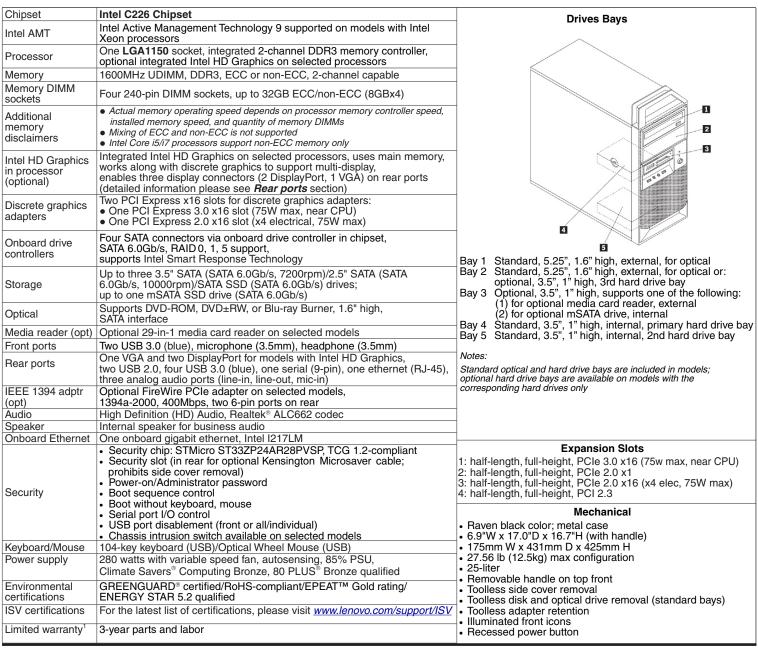


<sup>\*\*</sup> DL = Dual Link, SL = Single Link

## ThinkStation E32 Tower (30A0) - October 2013

| Type-<br>model* | Processor                                     | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"               | Pre-<br>conf<br>RAID | Storage              | Optical |       | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        | Base<br>warranty<br>(-year)*** | Ann date |
|-----------------|---|----------------------|-----------------|----------------------|---|----------------------|----------------------|---------|-------|--------------------------------|--|--------------------------------|----------|
| 30A0005RSS      | Core i5-4570<br>4C/3.2 GHz/6<br>MB/1600MHz    | 1600NHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x500GB<br>3.5" SATA | DVD±RW  |       | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)                         | 10/15/13 |
| 30A0005QSS      | Xeon E3-1245 v3<br>4C/3.4 GHz/8<br>MB/1600MHz | 1600MHz<br>ECC       | 4GBx1           | Intel HD P4600       | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x500GB<br>3.5" SATA | DVD±RW  | Media | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)                         | 10/8/13  |
| 30A0005QUS      | Xeon E3-1245 v3<br>4C/3.4 GHz/8<br>MB/1600MHz | 1600MHz<br>ECC       | 4GBx1           | Intel HD P4600       | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x500GB<br>3.5" SATA | DVD±RW  | Media | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)                         | 10/8/13  |
| 30A0005SUS      | Core i7-4770<br>4C/3.4 GHz/8<br>MB/1600MHz    | 1600NHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x500GB<br>3.5" SATA | DVD±RW  | Media | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)                         | 10/8/13  |
| 30A0005RUS      | Core i5-4570<br>4C/3.2 GHz/6<br>MB/1600MHz    | 1600NHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x500GB<br>3.5" SATA | DVD±RW  | Media | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)                         | 10/15/13 |
| 30A0005SSS      | Core i7-4770<br>4C/3.4 GHz/8<br>MB/1600MHz    | 1600NHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x500GB<br>3.5" SATA | DVD±RW  | Media | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)                         | 10/8/13  |

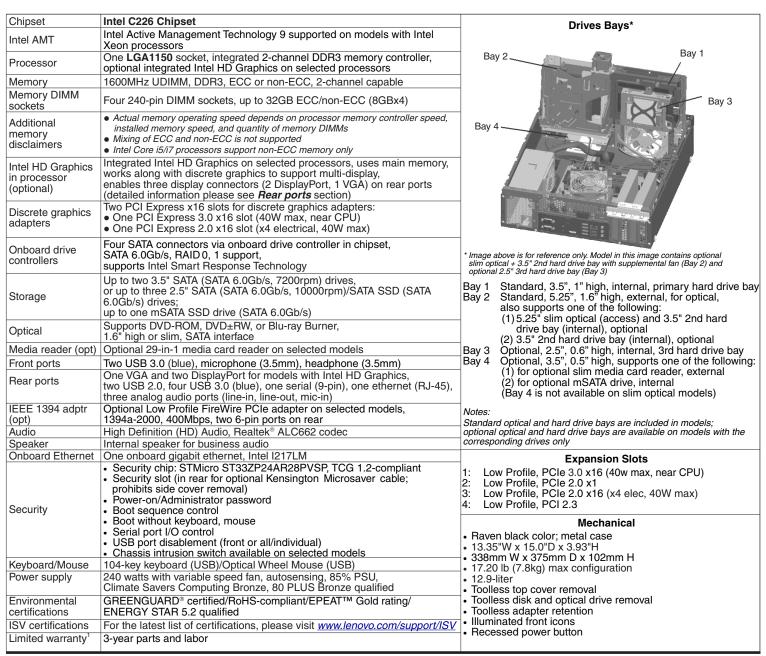
<sup>\*</sup>Model in italics shows that this is a Global Model \*DL = Dual Link, SL = Single Link \*\*\*\*IWS= International Warranty Service\*



### ThinkStation E32 SFF (30A3) - TopSeller (August 2013)

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|--|----------------------|-----------------|----------------------|---|----------------------|-------------------|---------|----------------------------|----|--------------------------------|--|
| 30A30004US     | Xeon E3-1230 v3<br>(4C/3.3GHz/8MB/1600MHz) | 1600MHz<br>ECC       | 4GBx1           |                      | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A30005US     | Xeon E3-1240 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>ECC       | 4GBx2           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A30006US     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001FUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001LUS     | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001RUS     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001SUS     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    |                      | 8GBx1           | Intel HD 4600        |   | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |

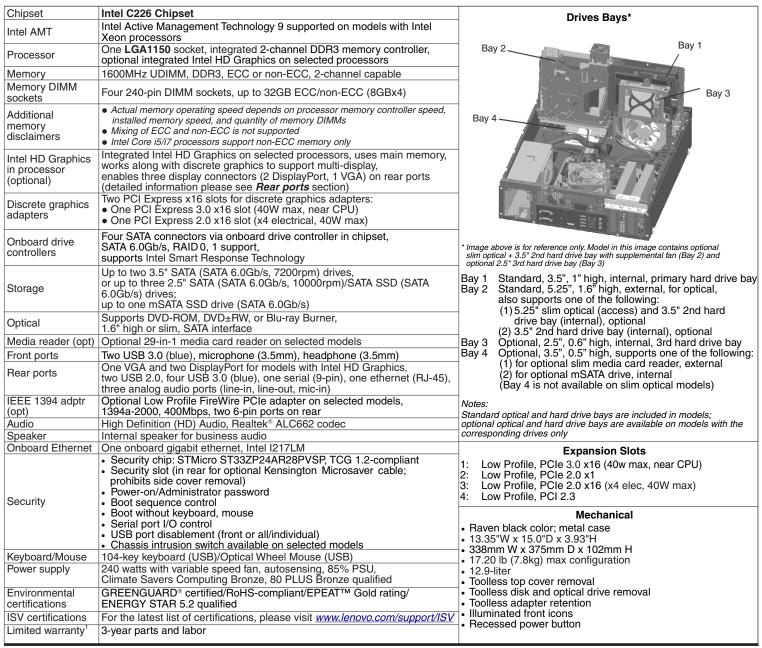
<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

| Type-<br>model <sup>*</sup> | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|-----------------------------|--|----------------------|-----------------|----------------------|--|----------------------|-------------------|---------|----------------------------|----|--------------------------------|--|
| 30A3001TUS                  | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        |  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001UUS                  | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001VUS                  | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       | 1xNVS 310<br>(512MB,<br>2xDisplayPort,19.5W)     | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001WUS                  | Xeon E3-1240 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001XUS                  | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x180GB SATA SSD  | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001YUS                  | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A30020US                  | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) |                      | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x180GB SATA SSD  | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |

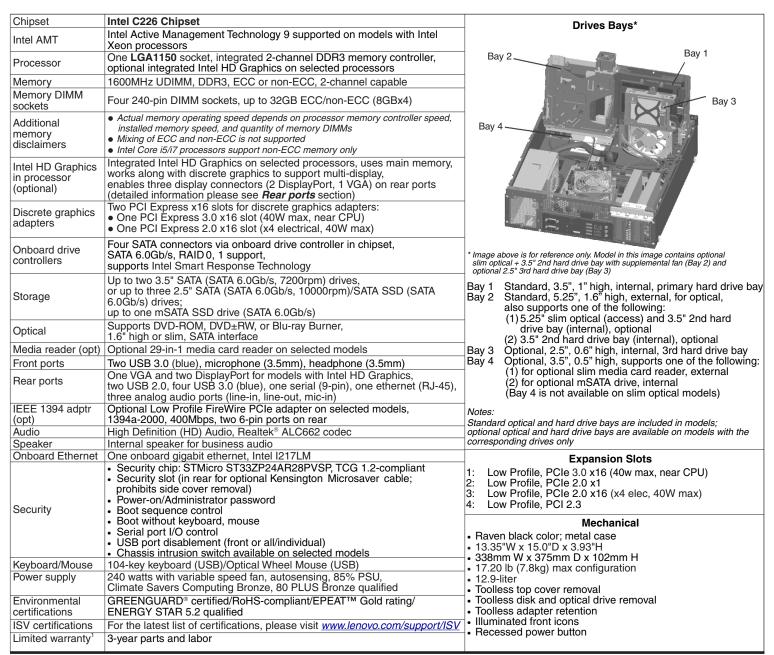
<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters <sup>…</sup>    | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS |
|----------------|--|----------------------|-----------------|----------------------|--|----------------------|-------------------|---------|----------------------------|----|--------------------------------|-----------------|
| 30A30025US     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A30026US     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A30027US     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        |  | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A30028US     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        |  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A30029US     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A3002AUS     | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       |  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |
| 30A3002BUS     | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) |                      |                 | Intel HD P4600       | 1xNVS 310<br>(512MB,<br>2xDisplayPort,19.5W)     | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64      |

<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link. SL = Single Link

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                | Pre-<br>conf<br>RAID | Storage          |        | 29-in-1<br>Media<br>reader | 1394 | Chassis<br>intrusion<br>switch | Preloaded<br>OS |
|----------------|--|----------------------|-----------------|----------------------|--|----------------------|------------------|--------|----------------------------|------|--------------------------------|-----------------|
|                | Xeon E3-1240 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW | Media                      | No   | Switch                         | Win8 Pro64      |
|                | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x180GB SATA SSD | DVD±RW | Media                      | No   | Switch                         | Win8 Pro64      |
|                | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW | Media                      | No   | Switch                         | Win8 Pro64      |
|                | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x180GB SATA SSD | DVD±RW | Media                      | No   | Switch                         | Win8 Pro64      |

<sup>\*</sup> Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

| Chipset   | Intel C226 Chipset  | Drives Bays*   |
|---|---|--|
| Intel AMT                                       | Intel Active Management Technology 9 supported on models with Intel Xeon processors   | ,  |
| Processor                                       | One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors   | Bay 2  |
| Memory  | 1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable  | F. 11.   |
| Memory DIMM sockets                             | Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)   | Bay 3  |
| Additional<br>memory<br>disclaimers             | <ul> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul> | Bay 4  |
| Intel HD Graphics<br>in processor<br>(optional) | Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see <i>Rear ports</i> section)     |  |
| Discrete graphics adapters                      | Two PCI Express x16 slots for discrete graphics adapters:  • One PCI Express 3.0 x16 slot (40W max, near CPU)  • One PCI Express 2.0 x16 slot (x4 electrical, 40W max)  |  |
| Onboard drive controllers                       | Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1 support, supports Intel Smart Response Technology   | * Image above is for reference only. Model in this image contains optional<br>slim optical + 3.5" 2nd hard drive bay with supplemental fan (Bay 2) and<br>optional 2.5" 3rd hard drive bay (Bay 3)       |
| Storage   | Up to two 3.5" SATA (SATA 6.0Gb/s, 7200rpm) drives, or up to three 2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)  | Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay Standard, 5.25", 1.6" high, external, for optical, also supports one of the following: (1) 5.25" slim optical (access) and 3.5" 2nd hard |
| Optical   | Supports DVD-ROM, DVD±RW, or Blu-ray Burner,<br>1.6" high or slim, SATA interface   | drive bay (internal), optional (2) 3.5" 2nd hard drive bay (internal), optional  |
| Media reader (opt)                              | Optional 29-in-1 media card reader on selected models   | Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay  |
| Front ports                                     | Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)   | Bay 4 Optional, 3.5", 0.5" high, supports one of the following:  |
| Rear ports                                      | One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)   | (1) for optional slim media card reader, external (2) for optional mSATA drive, internal (Bay 4 is not available on slim optical models)   |
| IEEE 1394 adptr<br>(opt)                        | Optional Low Profile FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear   | Notes:<br>Standard optical and hard drive bays are included in models;   |
| Audio   | High Definition (HD) Audio, Realtek® ALC662 codec   | optional optical and hard drive bays are available on models with the  |
| Speaker   | Internal speaker for business audio   | corresponding drives only  |
| Onboard Ethernet                                | One onboard gigabit ethernet, Intel I217LM  | Expansion Slots  |
| Security  | <ul> <li>Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant</li> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> </ul>            | 1: Low Profile, PCIe 3.0 x16 (40w max, near CPU) 2: Low Profile, PCIe 2.0 x1 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40W max) 4: Low Profile, PCI 2.3   |
|   | <ul> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>  | Mechanical  • Raven black color; metal case  • 13.35"W x 15.0"D x 3.93"H  • 338mm W x 375mm D x 102mm H  |
| Keyboard/Mouse                                  | 104-key keyboard (USB)/Optical Wheel Mouse (USB)  | • 17.20 lb (7.8kg) max configuration   |
| Power supply                                    | 240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified  | 12.9-liter     Toolless top cover removal  |
| Environmental                                   | GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  | Toolless disk and optical drive removal  |
| certifications                                  | ENERGY STAR 5.2 qualified   | Toolless adapter retention   |
| ISV certifications                              | For the latest list of certifications, please visit www.lenovo.com/support/ISV  | Illuminated front icons     Percessed power button   |
| Limited warranty <sup>1</sup>                   | 3-year parts and labor  | Recessed power button  |
| Coo footootoo fou in                            |   | O Lamaura  |

## ThinkStation E32 SFF (30A3) - TopSeller (September 2013)

| Type-<br>model | Processor                               | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters                  | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|---|----------------------|-----------------|----------------------|---|----------------------|-------------------|---------|----------------------------|----|--------------------------------|--|
| 30A3001MUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001NUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001PUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A3001QUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A30021US     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |
| 30A30022US     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |
| 30A30023US     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x500GB 3.5" SATA | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |
| 30A30024US     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHZ<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W)  | No                   | 1x1TB 3.5" SATA   | DVD±RW  | Media                      | No | Switch                         | Win8 Pro64                             |

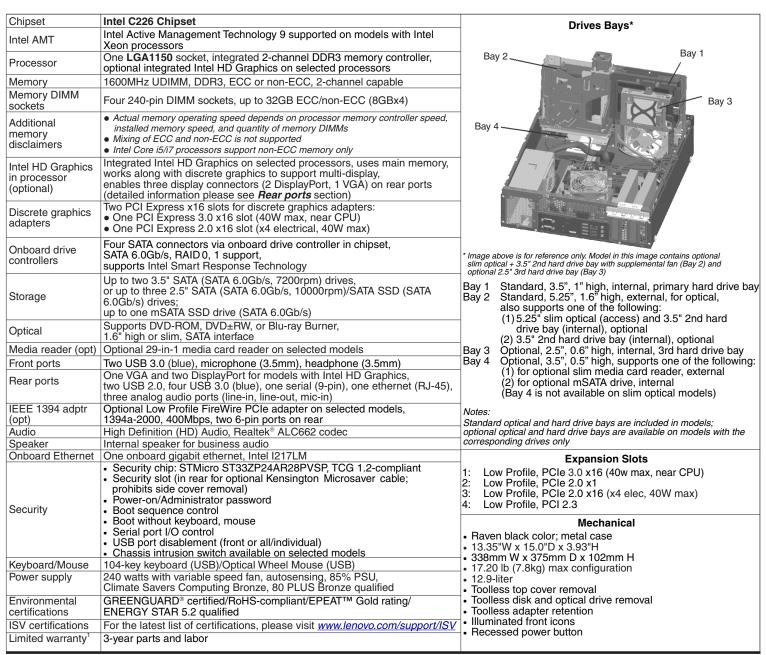
<sup>\*</sup> Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

| Chipset   | Intel C226 Chipset  | Drives Bays*   |
|---|---|--|
| Intel AMT                                       | Intel Active Management Technology 9 supported on models with Intel Xeon processors   | ,  |
| Processor                                       | One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors   | Bay 2  |
| Memory  | 1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable  | P. II.   |
| Memory DIMM sockets                             | Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)   | Bay 3  |
| Additional<br>memory<br>disclaimers             | Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs  Mixing of ECC and non-ECC is not supported  Intel Core i5/i7 processors support non-ECC memory only                                 | Bay 4  |
| Intel HD Graphics<br>in processor<br>(optional) | Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see <i>Rear ports</i> section) |  |
| Discrete graphics adapters                      | Two PCI Express x16 slots for discrete graphics adapters:  • One PCI Express 3.0 x16 slot (40W max, near CPU)  • One PCI Express 2.0 x16 slot (x4 electrical, 40W max)  | . 7 3 - 12:  |
| Onboard drive controllers                       | Four SATA connectors via onboard drive controller in chipset,<br>SATA 6.0Gb/s, RAID 0, 1 support,<br>supports Intel Smart Response Technology   | * Image above is for reference only. Model in this image contains optional<br>slim optical + 3.5" 2nd hard drive bay with supplemental fan (Bay 2) and<br>optional 2.5" 3rd hard drive bay (Bay 3) |
| Storage   | Up to two 3.5" SATA (SATA 6.0Gb/s, 7200rpm) drives, or up to three 2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)  | Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay Bay 2 Standard, 5.25", 1.6" high, external, for optical, also supports one of the following:                                       |
| Optical   | Supports DVD-ROM, DVD±RW, or Blu-ray Burner,<br>1.6" high or slim, SATA interface   | (1) 5.25" slim optical (access) and 3.5" 2nd hard drive bay (internal), optional (2) 3.5" 2nd hard drive bay (internal), optional  |
| Media reader (opt)                              | Optional 29-in-1 media card reader on selected models   | Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay  |
| Front ports                                     | Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)   | Bay 4 Optional, 3.5", 0.5" high, supports one of the following:  |
| Rear ports                                      | One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)   | (1) for optional slim media card reader, external (2) for optional mSATA drive, internal (Bay 4 is not available on slim optical models)   |
| IEEE 1394 adptr<br>(opt)                        | Optional Low Profile FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear   | Notes:<br>  Standard optical and hard drive bays are included in models;   |
| Audio   | High Definition (HD) Audio, Realtek® ALC662 codec   | optional optical and hard drive bays are available on models with the  |
| Speaker   | Internal speaker for business audio   | corresponding drives only  |
| Onboard Ethernet                                | One onboard gigabit ethernet, Intel I217LM  | Expansion Slots  |
| Security  | Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant     Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)     Power-on/Administrator password     Boot sequence control   | 1: Low Profile, PCIe 3.0 x16 (40w max, near CPU) 2: Low Profile, PCIe 2.0 x1 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40W max) 4: Low Profile, PCI 2.3   |
|   | Boot without keyboard, mouse  | Mechanical   |
|   | Serial port I/O control     USB port disablement (front or all/individual)     Chassis intrusion switch available on selected models  | Raven black color; metal case 13.35"W x 15.0"D x 3.93"H  |
| Keyboard/Mouse                                  | 104-key keyboard (USB)/Optical Wheel Mouse (USB)  | • 338mm W x 375mm D x 102mm H  |
| Power supply                                    | 240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified  | 17.20 lb (7.8kg) max configuration     12.9-liter     Toolless top cover removal   |
| Environmental certifications                    | GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/<br>ENERGY STAR 5.2 qualified   | Toolless disk and optical drive removal     Toolless adapter retention   |
|   |   |  |
| ISV certifications                              | For the latest list of certifications, please visit <u>www.lenovo.com/support/ISV</u>   | Illuminated front icons     Recessed power button  |

### ThinkStation E32 SFF (30A2) - August 2013

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters                 | Pre-<br>conf<br>RAID | Storage          | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|--|----------------------|-----------------|----------------------|--|----------------------|------------------|---------|----------------------------|----|--------------------------------|--|
| 30A2001WUS     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A2001XUS     | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A2001YUS     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A20020US     | Xeon E3-1275 v3<br>(4C/3.5GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A20021US     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A20022US     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x180GB SATA SSD | DVD±RW  | No                         | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A20023US     | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) |                      | 8GBx1           | – Single Link        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x256GB SATA SSD | DVD±RW  | No                         | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |

Model in italics shows that this is a Global Model

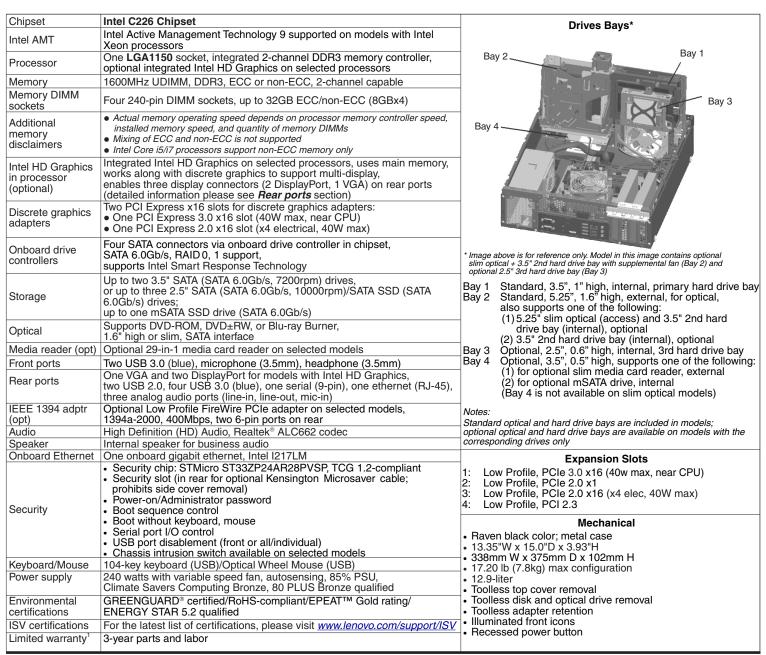


<sup>\*\*</sup> DL = Dual Link, SL = Single Link

### ThinkStation E32 SFF (30A2) - August 2013 - II

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                | Pre-<br>conf<br>RAID | Storage          | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|--|----------------------|-----------------|----------------------|--|----------------------|------------------|---------|----------------------------|----|--------------------------------|--|
| 30A20024US     | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A20027US     | Core i5-4570<br>(4C/3.2GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win8 Pro64                             |
| 30A20028US     | Xeon E3-1225 v3<br>(4C/3.2GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win8 Pro64                             |
| 30A20029US     | Xeon E3-1245 v3<br>(4C/3.4GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win8 Pro64                             |
| 30A2002AUS     | Xeon E3-1275 v3<br>(4C/3.5GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD P4600       | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win8 Pro64                             |
| 30A2002BUS     | Core i5-4670<br>(4C/3.4GHz/6MB/1600MHz)    | 1600MHz<br>Non-ECC   | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW  | No                         | No | Switch                         | Win8 Pro64                             |
| 30A2002CUS     | Core i7-4770<br>(4C/3.4GHz/8MB/1600MHz)    |                      | 8GBx1           | Intel HD 4600        | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x180GB SATA SSD | DVD±RW  | No                         | No | Switch                         | Win8 Pro64                             |

<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

| Type-<br>model | Processor                                  | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                | Pre-<br>conf<br>RAID | Storage          |        | 29-in-1<br>Media<br>reader |    |        | Preloaded<br>OS |
|----------------|--|----------------------|-----------------|----------------------|--|----------------------|------------------|--------|----------------------------|----|--------|-----------------|
|                | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   |                 |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x256GB SATA SSD | DVD±RW | No                         | No | Switch | Win8 Pro64      |
|                | Xeon E3-1280 v3<br>(4C/3.6GHz/8MB/1600MHz) | 1600MHz<br>Non-ECC   |                 |                      | 1xQuadro K600<br>(1GB, 1xDVI-I DL,<br>1xDP, 41W) | No                   | 1x1TB 3.5" SATA  | DVD±RW | No                         | No | Switch | Win8 Pro64      |

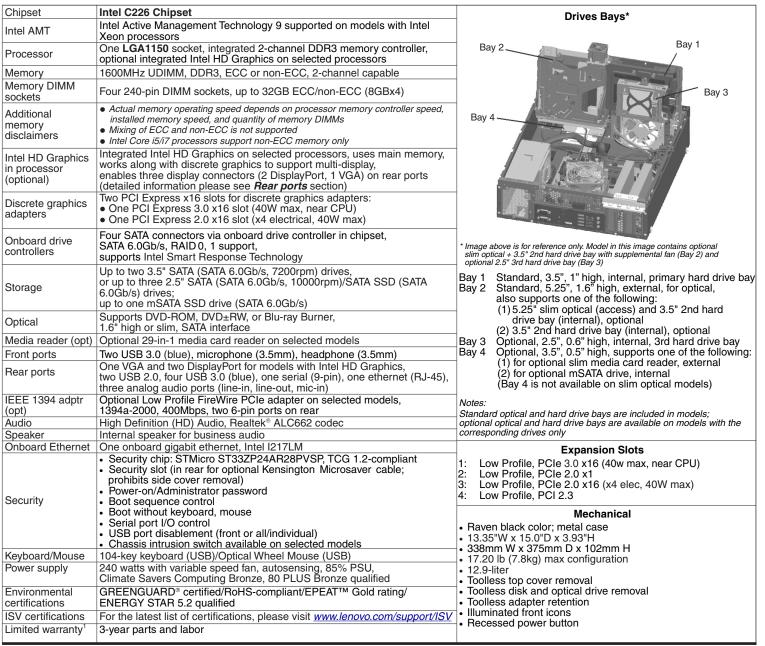
<sup>\*</sup> Model in italics shows that this is a Global Model \*\* DL = Dual Link, SL = Single Link

| Chipset   | Intel C226 Chipset  | Drives Bays*  |
|---|---|---|
| Intel AMT   | Intel Active Management Technology 9 supported on models with Intel Xeon processors   | ·   |
| Processor   | One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors   | Bay 2   |
| Memory  | 1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable  | To III  |
| Memory DIMM sockets                                 | Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)   | Bay 3   |
| Additional<br>memory<br>disclaimers                 | Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs  Mixing of ECC and non-ECC is not supported  Intel Core i5/i7 processors support non-ECC memory only                                 | Bay 4   |
| Intel HD Graphics<br>in processor<br>(optional)     | Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see <i>Rear ports</i> section) |   |
| Discrete graphics adapters                          | Two PCI Express x16 slots for discrete graphics adapters:  • One PCI Express 3.0 x16 slot (40W max, near CPU)  • One PCI Express 2.0 x16 slot (x4 electrical, 40W max)  |   |
| Onboard drive controllers                           | Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1 support, supports Intel Smart Response Technology   | * Image above is for reference only. Model in this image contains optional<br>slim optical + 3.5" 2nd hard drive bay with supplemental fan (Bay 2) and<br>optional 2.5" 3rd hard drive bay (Bay 3)        |
| Storage   | Up to two 3.5" SATA (SATA 6.0Gb/s, 7200rpm) drives, or up to three 2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)  | Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay Standard, 5.25", 1.6" high, external, for optical, also supports one of the following:  (1) 5.25" slim optical (access) and 3.5" 2nd hard |
| Optical   | Supports DVD-ROM, DVD±RW, or Blu-ray Burner,<br>1.6" high or slim, SATA interface   | drive bay (internal), optional (2) 3.5" 2nd hard drive bay (internal), optional   |
| Media reader (opt)                                  | Optional 29-in-1 media card reader on selected models   | Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay   |
| Front ports   | Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)   | Bay 4 Optional, 3.5", 0.5" high, supports one of the following: (1) for optional slim media card reader, external   |
| Rear ports  | One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)   | (2) for optional mSATA drive, internal (Bay 4 is not available on slim optical models)  |
| IEEE 1394 adptr<br>(opt)                            | Optional Low Profile FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear   | Notes: Standard optical and hard drive bays are included in models;   |
| Audio   | High Definition (HD) Audio, Realtek® ALC662 codec   | optional optical and hard drive bays are available on models with the   |
| Speaker   | Internal speaker for business audio   | corresponding drives only   |
| Onboard Ethernet                                    | One onboard gigabit ethernet, Intel I217LM  • Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant  | Expansion Slots   |
| Security  | <ul> <li>Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)</li> <li>Power-on/Administrator password</li> <li>Boot sequence control</li> </ul>  | 1: Low Profile, PCIe 3.0 x16 (40w max, near CPU) 2: Low Profile, PCIe 2.0 x1 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40W max) 4: Low Profile, PCI 2.3  |
|   | <ul> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>  | Mechanical  • Raven black color; metal case  • 13.35"W x 15.0"D x 3.93"H  • 338mm W x 375mm D x 102mm H   |
| Keyboard/Mouse                                      | 104-key keyboard (USB)/Optical Wheel Mouse (USB)  | 17.20 lb (7.8kg) max configuration  |
| Power supply  | 240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified  | 12.9-liter     Toolless top cover removal   |
| Environmental                                       | GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/  | Toolless disk and optical drive removal  Toolless adoptor retention   |
| certifications                                      | ENERGY STAR 5.2 qualified   | Toolless adapter retention     Illuminated front icons  |
| ISV certifications<br>Limited warranty <sup>1</sup> | For the latest list of certifications, please visit <u>www.lenovo.com/support/ISV</u> 3-year parts and labor  | Recessed power button   |
|   |   |   |

### ThinkStation E32 SFF (30A2) - September 2013

| Type-<br>model | Processor                               | Memory<br>(MHz/type) | Memory<br>DIMMs | Intel HD<br>Graphics | Discrete<br>graphics<br>adapters"                 | Pre-<br>conf<br>RAID | Storage           | Optical | 29-in-1<br>Media<br>reader |    | Chassis<br>intrusion<br>switch | Preloaded<br>OS                        |
|----------------|---|----------------------|-----------------|----------------------|---|----------------------|-------------------|---------|----------------------------|----|--------------------------------|--|
| 30A2001UUS     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | No                         | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
|                | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | No                         | No | Switch                         | Win7 Pro64<br>(Downgrade<br>from Win8) |
| 30A20025US     | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        |   | No                   | 1x500GB 3.5" SATA | DVD±RW  | No                         | No | Switch                         | Win8 Pro64                             |
|                | Core i3-4330<br>(2C/3.5GHz/4MB/1600MHz) | 1600MHz<br>Non-ECC   | 4GBx1           | Intel HD 4600        | 1xQuadro 410<br>(512MB, 1xDVI-I DL,<br>1xDP, 37W) | No                   | 1x500GB 3.5" SATA | DVD±RW  | No                         | No | Switch                         | Win8 Pro64                             |

<sup>\*</sup> Model in italics shows that this is a Global Model



<sup>\*\*</sup> DL = Dual Link, SL = Single Link

## ThinkStation E32 SFF (30A2) - October 2013

| Туре-      |   | 1                  | Memory | Intel HD      | Discrete<br>graphics                            | Pre- |                     |         |        | Chassis intrusion | Preloaded                              | Base<br>warranty | Ann date   |
|------------|---|--------------------|--------|---------------|---|------|---------------------|---------|--------|-------------------|--|------------------|------------|
| model*     | Processor                                     | (MHz/type)         | DIMMs  | Graphics      | adapters"                                       | RAID | Storage             | Optical | reader | switch            | os                                     | (-year)***       | (mm/dd/yy) |
| 30A2001TUS | Xeon E3-1230 v3<br>4C/3.3 GHz/8<br>MB/1600MHz | 1600MHz<br>ECC     | 4GBx1  | No            | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No   | 1x1TB<br>3.5" SATA  | DVD±RW  | Media  | Switch            | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)           | 10/8/13    |
| 30A2002QUS | Core i5-4570<br>4C/3.2 GHz/6<br>MB/1600MHz    | 1600NHz<br>Non-ECC | 4GBx1  | Intel HD 4600 | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No   | 1x1TB<br>3.5" SATA  | DVD±RW  | No     | Switch            | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)           | 10/8/13    |
| 30A2002PSS | Core i7-4770<br>4C/3.4 GHz/8<br>MB/1600MHz    | 1600NHz<br>Non-ECC | 8GBx1  | Intel HD 4600 | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No   | 1x180GB<br>SATA SSD | DVD±RW  | No     | Switch            | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)           | 10/15/13   |
| 30A2002QSS | Core i5-4570<br>4C/3.2 GHz/6<br>MB/1600MHz    | 1600NHz<br>Non-ECC | 4GBx1  | Intel HD 4600 | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No   | 1x1TB<br>3.5" SATA  | DVD±RW  | No     | Switch            | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)           | 10/8/13    |
| 30A2002PUS | Core i7-4770<br>4C/3.4 GHz/8<br>MB/1600MHz    | 1600NHz<br>Non-ECC | 8GBx1  | Intel HD 4600 | 1xQuadro K600<br>1GB, 1xDVI-I DL,<br>1xDP, 41W) | No   | 1x180GB<br>SATA SSD | DVD±RW  | No     | Switch            | Win7 Pro64<br>(Downgrade<br>from Win8) | 3(IWS)           | 10/8/13    |

<sup>\*</sup>Model in italics shows that this is a Global Model \*DL = Dual Link, SL = Single Link \*\*\*\*IWS= International Warranty Service9

| Chipset   | Intel C226 Chipset  | Drives Bays*  |  |  |  |  |  |
|---|---|---|--|--|--|--|--|
| Intel AMT                                       | Intel Active Management Technology 9 supported on models with Intel Xeon processors   | ,   |  |  |  |  |  |
| Processor                                       | One LGA1150 socket, integrated 2-channel DDR3 memory controller, optional integrated Intel HD Graphics on selected processors   | Bay 2   |  |  |  |  |  |
| Memory  | 1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable  |   |  |  |  |  |  |
| Memory DIMM sockets                             | Four 240-pin DIMM sockets, up to 32GB ECC/non-ECC (8GBx4)   | Bay 3   |  |  |  |  |  |
| Additional<br>memory<br>disclaimers             | <ul> <li>Actual memory operating speed depends on processor memory controller speed, installed memory speed, and quantity of memory DIMMs</li> <li>Mixing of ECC and non-ECC is not supported</li> <li>Intel Core i5/i7 processors support non-ECC memory only</li> </ul> | Bay 4   |  |  |  |  |  |
| Intel HD Graphics<br>in processor<br>(optional) | Integrated Intel HD Graphics on selected processors, uses main memory, works along with discrete graphics to support multi-display, enables three display connectors (2 DisplayPort, 1 VGA) on rear ports (detailed information please see <i>Rear ports</i> section)     |   |  |  |  |  |  |
| Discrete graphics adapters                      | Two PCI Express x16 slots for discrete graphics adapters:  • One PCI Express 3.0 x16 slot (40W max, near CPU)  • One PCI Express 2.0 x16 slot (x4 electrical, 40W max)  |   |  |  |  |  |  |
| Onboard drive controllers                       | Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1 support, supports Intel Smart Response Technology   | * Image above is for reference only. Model in this image contains optional<br>slim optical + 3.5* 2nd hard drive bay with supplemental fan (Bay 2) and<br>optional 2.5* 3rd hard drive bay (Bay 3)        |  |  |  |  |  |
| Storage   | Up to two 3.5" SATA (SATA 6.0Gb/s, 7200rpm) drives, or up to three 2.5" SATA (SATA 6.0Gb/s, 10000rpm)/SATA SSD (SATA 6.0Gb/s) drives; up to one mSATA SSD drive (SATA 6.0Gb/s)  | Bay 1 Standard, 3.5", 1" high, internal, primary hard drive bay Standard, 5.25", 1.6" high, external, for optical, also supports one of the following:  (1) 5.25" slim optical (access) and 3.5" 2nd hard |  |  |  |  |  |
| Optical   | Supports DVD-ROM, DVD±RW, or Blu-ray Burner, 1.6" high or slim, SATA interface  | drive bay (internal), optional  (2) 3.5" 2nd hard drive bay (internal), optional  |  |  |  |  |  |
| Media reader (opt)                              | Optional 29-in-1 media card reader on selected models   | Bay 3 Optional, 2.5", 0.6" high, internal, 3rd hard drive bay   |  |  |  |  |  |
| Front ports                                     | Two USB 3.0 (blue), microphone (3.5mm), headphone (3.5mm)   | Bay 4 Optional, 3.5", 0.5" high, supports one of the following:   |  |  |  |  |  |
| Rear ports                                      | One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)   | (1) for optional slim media card reader, external (2) for optional mSATA drive, internal (Bay 4 is not available on slim optical models)  |  |  |  |  |  |
| IEEE 1394 adptr<br>(opt)                        | Optional Low Profile FireWire PCIe adapter on selected models, 1394a-2000, 400Mbps, two 6-pin ports on rear   | <br>  Notes:<br>  Standard optical and hard drive bays are included in models;  |  |  |  |  |  |
| Audio   | High Definition (HD) Audio, Realtek® ALC662 codec   | optional optical and hard drive bays are available on models with the   |  |  |  |  |  |
| Speaker   | Internal speaker for business audio   | corresponding drives only   |  |  |  |  |  |
| Onboard Ethernet                                | One onboard gigabit ethernet, Intel I217LM  | Expansion Slots   |  |  |  |  |  |
| Security  | Security chip: STMicro ST33ZP24AR28PVSP, TCG 1.2-compliant     Security slot (in rear for optional Kensington Microsaver cable; prohibits side cover removal)     Power-on/Administrator password     Boot sequence control   | 1: Low Profile, PCIe 3.0 x16 (40w max, near CPU) 2: Low Profile, PCIe 2.0 x1 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40W max) 4: Low Profile, PCI 2.3  |  |  |  |  |  |
| ,   | <ul> <li>Boot without keyboard, mouse</li> <li>Serial port I/O control</li> <li>USB port disablement (front or all/individual)</li> <li>Chassis intrusion switch available on selected models</li> </ul>  | Mechanical  • Raven black color; metal case  • 13.35"W x 15.0"D x 3.93"H  • 338mm W x 375mm D x 102mm H   |  |  |  |  |  |
| Keyboard/Mouse                                  | 104-key keyboard (USB)/Optical Wheel Mouse (USB)  | 17.20 lb (7.8kg) max configuration  |  |  |  |  |  |
| Power supply                                    | 240 watts with variable speed fan, autosensing, 85% PSU, Climate Savers Computing Bronze, 80 PLUS Bronze qualified  | 12.9-liter     Toolless top cover removal   |  |  |  |  |  |
| Environmental certifications                    | GREENGUARD® certified/RoHS-compliant/EPEAT™ Gold rating/<br>ENERGY STAR 5.2 qualified   | Toolless disk and optical drive removal     Toolless adapter retention  |  |  |  |  |  |
| ISV certifications                              | For the latest list of certifications, please visit www.lenovo.com/support/ISV  | Illuminated front icons     Recessed power button   |  |  |  |  |  |
| Limited warranty <sup>1</sup>                   | 3-year parts and labor  | - necessed power button   |  |  |  |  |  |

## ThinkStation E32 Platform Specifications - I of III

| From factor   |   | ThinkSta  | ition E32                               | Tower                           |  |              |                                | Think                   | Station E32 SFF  |                |  |
|---|---|---|---|---------------------------------|--|--------------|--------------------------------|-------------------------|--|----------------|--|
| Chipset   | Intel C226 Chipse   | t   |   |                                 |  |              |                                |                         | Otation 202 Of 1   |                |  |
| Intel AMT<br>Processor  | Intel Active Manag<br>One LGA1150 soc<br>supports one proc<br>integrated 2-chann  | ket,<br>essor from I  | ntel Xeon                               | E3-1200                         | v3, Core i7  | '-4000, (    | Core-i5 4000,                  | Core-i3 4000,           | and Pentium G3   | 000 families   |  |
|   | The following proc  | essors are s  | supported                               | l:                              |  |              |                                |                         | ·  |                |  |
|   | Processor Number  | # of<br>Cores   | # of<br>Threads                         | Clock<br>Speed                  | Max Turbo<br>Frequency                             | Cache        | Memory<br>speed                | ECC Memory<br>Supported | Processor Graphi   | cs             |  |
|   | Xeon E3-1220 v3   | 4   | 4                                       | 3.1 GHz                         | 3.5 GHz  | 8 MB         | DDR3-1600                      | Yes                     |  |                |  |
|   | Xeon E3-1225 v3   | 4   | 4                                       | 3.2 GHz                         | 3.6 GHz  | 8 MB         | DDR3-1600                      | Yes                     | Intel HD Graphics  | P4600          |  |
|   | Xeon E3-1230 v3   | 4   | 8                                       | 3.3 GHz                         | 3.7 GHz  | 8 MB         | DDR3-1600                      | Yes                     |  |                |  |
|   | Xeon E3-1240 v3   | 4   | 8                                       | 3.4 GHz                         | 3.8 GHz  | 8 MB         | DDR3-1600                      | Yes                     |  |                |  |
|   | Xeon E3-1245 v3   | 4   | 8                                       | 3.4 GHz                         | 3.8 GHz  | 8 MB         | DDR3-1600                      | Yes                     | Intel HD Graphics  | P4600          |  |
|   | Xeon E3-1270 v3   | 4   | 8                                       | 3.5 GHz                         | 3.9 GHz  | 8 MB         | DDR3-1600                      | Yes                     |  |                |  |
|   | Xeon E3-1275 v3   | 4   | 8                                       | 3.5 GHz                         | 3.9 GHz  | 8 MB         | DDR3-1600                      | Yes                     | Intel HD Graphics  | P4600          |  |
|   | Xeon E3-1280 v3   | 4   | 8                                       | 3.6 GHz                         | 4 GHz  | 8 MB         | DDR3-1600                      | Yes                     |  |                |  |
|   | Core i5-4670  | 4   | 4                                       | 3.4 GHz                         | 3.8 GHz  | 6 MB         | DDR3-1600                      |                         | Intel HD Graphics  | 4600           |  |
|   | Core i5-4570  | 4   | 4                                       | 3.2 GHz                         | 3.6 GHz  | 6 MB         | DDR3-1600                      |                         | Intel HD Graphics  | 4600           |  |
|   | Core i7-4770  | 4   | 8                                       | 3.4 GHz                         | 3.9 GHz  | 8 MB         | DDR3-1600                      |                         | Intel HD Graphics  | 4600           |  |
|   | Core i3-4340  | 2   | 4                                       | 3.6 GHz                         |  | 4 MB         | DDR3-1600                      | Yes                     | Intel HD Graphics  |                |  |
|   | Core i3-4330  | 2   | 4                                       | 3.5 GHz                         |  | 4 MB         | DDR3-1600                      | Yes                     | Intel HD Graphics  | 4600           |  |
|   | Core i3-4130  | 2   | 4                                       | 3.4 GHz                         |  | 3 MB         | DDR3-1600                      | Yes                     | Intel HD Graphics  |                |  |
|   | Pentium G3430   | 2   | 2                                       | 3.3 GHz                         |  | 3 MB         | DDR3-1600                      | Yes                     | Intel HD Graphics  |                |  |
|   | Pentium G3420   | 2   | 2                                       | 3.2 GHz                         |  | 3 MB         | DDR3-1600                      | Yes                     | Intel HD Graphics  |                |  |
|   | Pentium G3220   | 2   | 2                                       | 3 GHz                           |  | 3 MB         | DDR3-1333                      | Yes                     | Intel HD Graphics  |                |  |
| Memory type   | Notes: All processors 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 <a href="http://ark.intel.com/">http://ark.intel.com/</a> 1600MHz UDIMM, DDR3, ECC or non-ECC, 2-channel capable |   |   |                                 |  |              |                                |                         |  |                |  |
| Memory DIMM sockets   | Four 240-pin DIMM   | /I sockets  |   |                                 |  |              |                                |                         |  |                |  |
| Memory capacity   | Up to 32GB ECC/r  | non-ECC (8  | GBx4)                                   |                                 |  |              |                                |                         |  |                |  |
| Additional<br>memory disclaimers<br>Intel HD Graphics<br>in processor<br>(optional) | Actual memory op     Mixing of ECC and Integrated Intel HE uses main memory enables three disp  | non-ECC is in the contract of | not support<br>on Pentiur<br>ng with di | ted<br>n, Core i3<br>screte gra | 3, i5, i7 and aphics to su                         | Xeon Ea      | 3-12x5 v3 poculti-display,     | essors,                 |  |                |  |
| Discrete Graphics adapters  | Two PCI Express > • One PCI Expres • One PCI Expres   | s 3.0 x16 sl  | ot (75W n                               | nax, near                       | CPU)   |              | <ul> <li>One PCI Ex</li> </ul> | press 3.0 x16           | for discrete graph<br>slot (40W max, r<br>slot (x4 electrica | near CPU)      |  |
|   | Supports the follow   | ving NVIDIA   | Quadro,                                 | NVS gra                         | phics adapte                                       | ers:         |                                |                         |  |                |  |
|   |   | Memory<br>Size  | CUD<br>Processor                        |                                 | Display Conn                                       | ectors       | Max. Displays                  | Power                   | Supported or<br>E32 Tower                                    | ThinkStatio    |  |
|   | Quadro K2000  | 2GB   | 384                                     | 1                               | 1 dual-link DV<br>2 DisplayPort                    | ′I-I         | 4*                             | 51W                     | •  | 202 OI         |  |
|   | Quadro K2000D   | 2GB   | 384                                     | 1                               | 1 dual-link DV<br>1 dual-link DV<br>1 mini Display | ′I-I<br>′I-D | 4*                             | 51W                     | •  |                |  |
|   | Quadro K600   | 1GB   | 192                                     | 2                               | 1 dual-link DV<br>1 DisplayPort                    | /1-1         | 2                              | 41W                     | •  | •              |  |
|   | Quadro 410  | 512MB   | 192                                     | 2                               | 1 dual-link DV<br>1 DisplayPort                    | 1-1          | 2                              | 37W                     | •  | •              |  |
|   | NVS 510   | 2GB   | 192                                     | 2                               | 4 mini Display<br>(with 4 mini D<br>DP dongles)    | Port<br>P to | 4                              | 35W                     | •  | •              |  |
|   | * Quadro K2000 and Qu   | adro K2000D aı  | e equipped i                            |                                 |  | ectors, 4 E  | Displays require a s           | upported DisplayP       | ort 1.2 Multi-Stream ca                                      | pable hub or o |  |

## ThinkStation E32 Platform Specifications - II of III

| From factor                          |   | ThinkS   | tation E32 Tower   |   | ThinkStation E32 SFF  |  |   |  |        |  |  |
|--------------------------------------|---|--|--|---|---|--|---|--|--------|--|--|
|                                      |   | Momony   | CUDA   |   |   |  | Supported of  | n ThinkStation   |        |  |  |
|                                      |   | Memory<br>Size   | Processor Cores  | Display Connectors  | Max. Displays   | Power  | E32 Tower   | E32 SFF  | +      |  |  |
| Discrete Graphics adapters           | NVS 315   | 1024MB   | 48   | DMS59 to dual<br>single-link DVI-I or<br>dual DisplayPort | 2   | 19.5W  | •   | •  |        |  |  |
|                                      | NVS 310   | 512 MB   | 48   | 2 DisplayPort   | 2   | 19.5W  | •   | •  |        |  |  |
| Onboard drive controllers            | Four SATA conne<br>SATA 6.0Gb/s, R<br>supports Intel Sr   | AID 0, 1, 5 s  | lboard drive contro<br>support,<br>se Technology   | ller in chipset,  | Four SATA connectors via onboard drive controller in chipset, SATA 6.0Gb/s, RAID 0, 1 support, supports Intel Smart Response Technology   |  |   |  |        |  |  |
| Drive Bays                           | Bay 2 Standard<br>optional,<br>Bay 3 Optional   | d, 5.25", 1.6"<br>3.5", 1" high<br>, 3.5", 1" higl                                 | high, external, for high, external, for n, 3rd hard drive bah, supports one of   | optical or<br>ay<br>the following:                        | Image above is for reference only. Model in this image contains optional slim of 3.5" 2nd hard drive bay with supplemental fan (Bay 2) and optional 2.5" 3rd hard drive bay (Bay 3)  Bay 1 Standard, 3.5", 1" high, internal, primary hard drive Bay 2 Standard, 5.25", 1.6" high, external, for optical, also supports one of the following:  (1) 5.25" slim optical (access) and 3.5" 2nd hard drive bay (internal), optional  (2) 3.5" 2nd hard drive bay (internal), optional |  |   |  |        |  |  |
|                                      | (2) for of Bay 4 Standard Bay 5 Standard Notes:   | otional mSATd, 3.5", 1" high, 3.5", 1" high<br>and hard drive lesses bays are avai | a card reader, exte IA drive, internal gh, internal, primar gh, internal, 2nd ha bays are included in n lable on models with | y hard drive bay<br>ard drive bay<br>nodels:              | Bay 3 Option Bay 4 Option (1) for (2) for (Bay 4)  Notes: Standard optical  | al, 2.5", 0.6" hi<br>al, 3.5", 0.5" hi<br>optional slim r<br>optional mSAI<br>is not availabl<br>and hard drive band hard drive band | re bay (Internal) gh, internal, 3rc gh, internal, 3rc gh, supports on nedia card read A drive, interna e on slim optica pays are included by are available of | I hard drive bay<br>e of the followi<br>er, external<br>I<br>I models) | ng:    |  |  |
| Hard drive(s)                        | Supports the follow<br>3.5" SATA:<br>2.5" SATA:<br>2.5" SSD:<br>mSATA:  | SATA 6.0<br>SATA 6.0<br>Solid Sta<br>(128GB/<br>mSATA 9                            | 0Gb/s, 10000 rpm,<br>ate Drive (SSD), S.<br>/180GB/240GB/25<br>SSD, SATA 6.0Gb/  |   | 00GB/1TB/2TB/3<br>500GB/1TB)<br>capable on sele   | 3TB)   |   |  |        |  |  |
| Optical                              | Supports DVD-R<br>SATA interface  |  | RW, or Blu-ray Burr  |   | Supports DVD-<br>1.6" high or sli   | -ROM, DVD±R<br>m, SATA interfa   | W, or Blu-ray B   |  |        |  |  |
| Media reader (opt)                   |   |  | reader on selected   |   | Optional 29-in-   | 1 media card   | reader (slim) on  | selected mode  | els    |  |  |
| Front ports                          |   |  | one (3.5mm), head  |   |   |  |   |  |        |  |  |
| Rear ports                           | One VGA and two DisplayPort for models with Intel HD Graphics, two USB 2.0, four USB 3.0 (blue), one serial (9-pin), one ethernet (RJ-45), three analog audio ports (line-in, line-out, mic-in)  Slot 1: half-length, full-height, PCle 3.0 x16 (75w max, near CPU) Slot 2: half-length, full-height, PCle 2.0 x1  Slot 2: Low Profile, PCle 2.0 x1 |  |  |   |   |  |   |  |        |  |  |
| Expansion slots                      | Slot 3: half-lengt<br>Slot 4: half-lengt  | th, full-height<br>th, full-height   | t, PCIe 2.0 x16 (x4<br>t, PCI 2.3  | ,   | Slot 3: Low Pro   | ofile, PCIe 2.0<br>ofile, PCI 2.3  | x16 (x4 elec, 40  | ,  | 4.1    |  |  |
| EEE 1394 adptr<br>optional)<br>Audio | 1394a-2000, 400<br>High Definition (I   | OMbps, two 6<br>HD) Audio, F   | oter on selected mo<br>6-pin ports on rear<br>Realtek® ALC662 c  |   | Optional Low F<br>1394a-2000, 4   | oombps, two 6  | e PCIe adapter o<br>3-pin ports on re   | on selected mo<br>ar   | odels, |  |  |
| Speaker                              | Internal speaker  |  |  |   |   |  |   |  |        |  |  |
| Onboard Ethernet                     | One onboard gig   |  |  |   |   |  |   |  |        |  |  |
| Keyboard<br>Mouse                    |   |  | I (USB connector)<br>neel (USB connect   | or)   |   |  |   |  |        |  |  |
| Power supply                         | 280 watts with va   | ariable spee   | d fan, autosensing<br>Bronze, 80 PLUS  | , 85% PSU,  |   |  | d fan, autosensi<br>ronze, 80 PLUS  |  | ied    |  |  |

## ThinkStation E32 Platform Specifications - III of III

|                                | ThinkStation E  | 32 Tower   |                          | ThinkStation E32 SFF   |  |  |  |
|--------------------------------|---|--|--------------------------|--|--|--|--|
| Security                       | Security chip: STMicro ST33ZP24.     Security slot (in rear for optional Kither Power-on/Administrator password Boot sequence control     Boot without keyboard, mouse Serial port I/O control     USB port disablement (front or all/or Chassis intrusion switch available   | ensington® Microsa<br>individual)  | aver® cable; prof        | nibits side cover removal)   |  |  |  |
| Mechanical                     | Raven black color; metal case 6.9"W x 17.0"D x 16.7"H (with han 175mm W x 431mm D x 425mm H 27.56 lb (12.5kg) max configuration 25-liter  | dle)   | • F<br>• 1<br>• 3<br>• 1 | Raven black color; metal case<br>3.35"W x 15.0"D x 3.93"H<br>38mm W x 375mm D x 102mm H<br>7.20 lb (7.8kg) max configuration<br>2.9-liter  |  |  |  |
| Serviceability                 | Removable handle on top front     Toolless side cover removal     Toolless disk and optical drive rem     Toolless adapter retention     Illuminated front icons     Recessed power button  | <ul> <li>Toolless disk and optical drive removal</li> <li>Toolless disk and optical drive removal</li> <li>Toolless adapter retention</li> <li>Illuminated front icons</li> <li>Recessed power button</li> </ul> |                          |  |  |  |  |
| Environmental certifications   | GREENGUARD® certified     RoHS-compliant     EPEAT™ Gold rating     ENERGY STAR 5.2-compliant   |  |                          |  |  |  |  |
| Warranty                       | 1 or 3-year limited warranty, parts an  | nd labor   |                          |  |  |  |  |
| ThinkVantage <sup>®</sup>      | Supports ThinkVantage technologies  | 3  |                          |  |  |  |  |
| Preloaded operating<br>systems | One the following, depending on model:  Windows 7 Professional 64  Windows 7 Professional 64 preinst  Windows 8 Pro 64-bit  | talled through dow   | ngrade rights in         | Windows 8 Pro 64-bit   |  |  |  |
|                                |   | Preloa   | ded OS                   |  |  |  |  |
|                                | III   |  |                          | NI-1-  |  |  |  |
|                                |   | Windows 7  | Windows 8                | Note   |  |  |  |
|                                | Intel AppUp   | Windows 7  | Windows 8                | Note   |  |  |  |
|                                | Intel AppUp PC Device Stage   |  |                          | Note   |  |  |  |
|                                |   | •  | •                        | Note   |  |  |  |
|                                | PC Device Stage   | •  | •                        | Note   |  |  |  |
|                                | PC Device Stage Evernote  | •  | •                        | Note   |  |  |  |
|                                | PC Device Stage Evernote Lenovo Companion   | •  | •                        | Note   |  |  |  |
| Preloaded                      | PC Device Stage Evernote Lenovo Companion Lenovo Solution Center  | •  | •                        | Note   |  |  |  |
| applications                   | PC Device Stage  Evernote  Lenovo Companion  Lenovo Solution Center  Lenovo Support  Norton Internet Security   | •  | •                        | Note   |  |  |  |
|                                | PC Device Stage Evernote Lenovo Companion Lenovo Solution Center Lenovo Support Norton Internet Security (30 days of virus definitions)   | •  | •                        | Note Note  |  |  |  |
| applications                   | PC Device Stage  Evernote  Lenovo Companion  Lenovo Solution Center  Lenovo Support  Norton Internet Security (30 days of virus definitions)  Norton Studio   | •  | •                        | On models with DVD ROM, DVD±RW and BluRay  |  |  |  |
| applications                   | PC Device Stage Evernote Lenovo Companion Lenovo Solution Center Lenovo Support Norton Internet Security (30 days of virus definitions) Norton Studio Skype   | •  | •                        |  |  |  |  |
| applications                   | PC Device Stage Evernote Lenovo Companion Lenovo Solution Center Lenovo Support Norton Internet Security (30 days of virus definitions) Norton Studio Skype Cyberlink PowerDVD  | •  | •                        | On models with DVD ROM, DVD±RW and BluRay  |  |  |  |
| applications                   | PC Device Stage Evernote Lenovo Companion Lenovo Solution Center Lenovo Support Norton Internet Security (30 days of virus definitions) Norton Studio Skype Cyberlink PowerDVD Cyberlink PowerDVD Create  | •  | •                        | On models with DVD ROM, DVD±RW and BluRay On models with DVD±RW  |  |  |  |
| applications                   | PC Device Stage  Evernote  Lenovo Companion  Lenovo Solution Center  Lenovo Support  Norton Internet Security (30 days of virus definitions)  Norton Studio  Skype  Cyberlink PowerDVD  Cyberlink PowerDVD Create  Cyberlink Power2Go   | •  | •                        | On models with DVD ROM, DVD±RW and BluRay On models with DVD±RW On models with DVD±RW  |  |  |  |
| applications                   | PC Device Stage  Evernote  Lenovo Companion  Lenovo Solution Center  Lenovo Support  Norton Internet Security (30 days of virus definitions)  Norton Studio  Skype  Cyberlink PowerDVD  Cyberlink PowerDVD Create  Cyberlink Power2Go  Cyberlink Power Producer   | •  | •                        | On models with DVD ROM, DVD±RW and BluRay On models with DVD±RW On models with DVD±RW On models with DVD±RW  |  |  |  |
| applications                   | PC Device Stage  Evernote  Lenovo Companion  Lenovo Solution Center  Lenovo Support  Norton Internet Security (30 days of virus definitions)  Norton Studio  Skype  Cyberlink PowerDVD  Cyberlink PowerDVD Create  Cyberlink Power2Go  Cyberlink Power Producer  Cyberlink PowerDVD Create  | •  | •                        | On models with DVD ROM, DVD±RW and BluRay On models with DVD±RW On models with DVD±RW On models with DVD±RW On models with Blu-Ray   |  |  |  |
| applications                   | PC Device Stage  Evernote  Lenovo Companion  Lenovo Solution Center  Lenovo Support  Norton Internet Security (30 days of virus definitions)  Norton Studio  Skype  Cyberlink PowerDVD  Cyberlink PowerDVD Create  Cyberlink Power2Go  Cyberlink Power Producer  Cyberlink PowerDVD Create  Cyberlink PowerDVD Create  Cyberlink PowerPVD Create  Cyberlink PowerPVD Create  Cyberlink PowerPVD Create  Cyberlink PowerDVD Create | •  | •                        | On models with DVD ROM, DVD±RW and BluRay On models with DVD±RW On models with DVD±RW On models with DVD±RW On models with Blu-Ray On models with Blu-Ray On models with Blu-Ray |  |  |  |

## **ThinkStation E32 Optional Configurations**

Partial list of core options supported on ThinkStation E32 Tower and SFF

| Memory   |            | ThinkStation E32 Tower | ThinkStation E32 SFF |
|--|------------|------------------------|----------------------|
| 2GB DDR3 1600 (PC3 12800) UDIMM Memory                               | 0A65728    | Yes                    | Yes                  |
| 4GB DDR3 1600 (PC3 12800) UDIMM Memory                               | 0A65729    | Yes                    | Yes                  |
| 2GB DDR3 1333 (PC3 10600) ECC UDIMM Memory                           | 43R2033    | Yes                    | Yes                  |
| 4GB DDR3 1333 (PC3 10600) ECC UDIMM Memory                           | 57Y4138    | Yes                    | Yes                  |
| 8GB DDR3 1333 (PC3 10600) ECC UDIMM Memory                           | 0A65718    | Yes                    | Yes                  |
| 2GB DDR3 1600 (PC3 12800) ECC UDIMM Workstation Memory               | 0B47376    | Yes                    | Yes                  |
| 4GB DDR3 1600 (PC3 12800) ECC UDIMM Workstation Memory               | 0B47377    | Yes                    | Yes                  |
| 8GB DDR3 1600 (PC3 12800) ECC UDIMM Workstation Memory               | 0B47378    | Yes                    | Yes                  |
| Disk Drive   |            |                        |                      |
| Lenovo 250GB 7200 rpm Serial ATA Hard Drive                          | 41N3015    | Yes                    | Yes                  |
| Lenovo 500GB 7200 rpm Serial ATA Hard Drive                          | 43R1990    | Yes                    | Yes                  |
| Lenovo 1TB 7200 rpm Serial ATA Hard Drive                            | 45J7918    | Yes                    | Yes                  |
| ThinkStation 180GB Solid State Drive                                 | 0B47308    | Yes                    | Yes                  |
| ThinkStation 128GB SATA 2.5" SSD                                     | 4XB0F18670 | Yes                    | Yes                  |
| ThinkStation 256GB SATA 2.5" SSD                                     | 4XB0F18671 | Yes                    | Yes                  |
| ThinkStation 256GB SATA 2.5" SSD - OPAL                              | 4XB0F22432 | Yes                    | Yes                  |
| Graphics   |            |                        |                      |
| NVIDIA NVS 310 512MB Dual DisplayPort Adapter (SFF, Tower)           | 0B47074    | Yes                    | Yes                  |
| NVIDIA NVS 510 2GB Quad Mini-DisplayPort Graphics (SFF, Tower)       | 0B47077    | Yes                    | Yes                  |
| NVIDIA Quadro 410 512MB Single DVI & Single DisplayPort (SFF, Tower) | 0B47075    | Yes                    | Yes                  |
| NVIDIA Quadro K600 1GB Single DVI & Single DisplayPort (Tower Only)  | 0B47394    | Yes                    |                      |
| NVIDIA Quadro K2000 2GB Single DVI & Dual DisplayPort (Tower Only)   | 0B47392    | Yes                    |                      |

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