

**R161-340 Qualification Vender List**

**Please contact FAE support for below orange blocks**

| Intel CPU                                       |                |        |          |             |            |            |                          |                     |       |              |
|---|----------------|--------|----------|-------------|------------|------------|--------------------------|---------------------|-------|--------------|
| Product Name                                    | Code Name      | Q-Spec | Stepping | Cache       | System Bus | # of Cores | Processor Base Frequency | Max Turbo Frequency | TDP   | Memory Types |
| Purley - Intel® Xeon® Processor Scalable Family |                |        |          |             |            |            |                          |                     |       |              |
| Intel® Xeon® Processor Platinum 8153            | SKYLAKE-S      | QMS7   | H0       | 22 MB L3    | 10.4 GT/s  | 16         | 2.00 GHz                 | 2.80 GHz            | 125 W | DDR4-2666    |
| Intel® Xeon® Processor Gold 6138T               | SKYLAKE-S      | Q MS9  | H0       | 27.5 MB L3  | 10.4 GT/s  | 20         | 2.00 GHz                 | 3.70 GHz            | 125 W | DDR4-2666    |
| Intel® Xeon® Processor Gold 6138                | SKYLAKE-S      | QMS0   | H0       | 27.5 MB L3  | 10.4 GT/s  | 20         | 2.00 GHz                 | 3.70 GHz            | 125 W | DDR4-2666    |
| Intel® Xeon® Processor Gold 6130T               | SKYLAKE-S      | QN38   | H0       | 22 MB L3    | 10.4 GT/s  | 16         | 2.10 GHz                 | 3.70 GHz            | 125 W | DDR4-2666    |
| Intel® Xeon® Processor Gold 6130                | SKYLAKE-S      | QMS6   | H0       | 22 MB L3    | 10.4 GT/s  | 16         | 2.10 GHz                 | 3.70 GHz            | 125 W | DDR4-2666    |
| Intel® Xeon® Processor Gold 6128                | SKYLAKE-S      | QN34   | H0       | 19.25 MB L3 | 10.4 GT/s  | 6          | 3.40 GHz                 | 3.70 GHz            | 115 W | DDR4-2666    |
| Intel® Xeon® Processor Gold 6126T               | SKYLAKE-S      | QN39   | H0       | 19.25 MB L3 | 10.4 GT/s  | 12         | 2.60 GHz                 | 3.70 GHz            | 125 W | DDR4-2666    |
| Intel® Xeon® Processor Gold 6126                | SKYLAKE-S      | QMRV   | H0       | 19.25 MB L3 | 10.4 GT/s  | 12         | 2.60 GHz                 | 3.70 GHz            | 125 W | DDR4-2666    |
| Intel® Xeon® Processor Gold 5122                | SKYLAKE-S      | QMRN   | H0       | 16.5 MB L3  | 10.4 GT/s  | 4          | 3.60 GHz                 | 3.70 GHz            | 105 W | DDR4-2666    |
| Intel® Xeon® Processor Gold 5120T               | SKYLAKE-S      | QMXL   | M0       | 19.25 MB L3 | 10.4 GT/s  | 14         | 2.20 GHz                 | 3.20 GHz            | 105 W | DDR4-2400    |
| Intel® Xeon® Processor Gold 5120                | SKYLAKE-S      | QMXJ   | M0       | 19.25 MB L3 | 10.4 GT/s  | 14         | 2.20 GHz                 | 3.20 GHz            | 105 W | DDR4-2400    |
| Intel® Xeon® Processor Gold 5119T               | SKYLAKE-S      | QN11   | M0       | 19.25 MB L3 | 10.4 GT/s  | 14         | 1.90 GHz                 | 3.20 GHz            | 85 W  | DDR4-2400    |
| Intel® Xeon® Processor Gold 5118                | SKYLAKE-S      | QMXH   | M0       | 16.5 MB L3  | 10.4 GT/s  | 12         | 2.30 GHz                 | 3.20 GHz            | 105 W | DDR4-2400    |
| Intel® Xeon® Processor Gold 5115                | SKYLAKE-S      | QMXG   | M0       | 13.75 MB L3 | 10.4 GT/s  | 10         | 2.40 GHz                 | 3.20 GHz            | 85 W  | DDR4-2400    |
| Intel® Xeon® Processor Silver 4116T             | SKYLAKE-S      | QN7B   | M0       | 16.5 MB L3  | 9.6 GT/s   | 12         | 2.10 GHz                 | 3.00 GHz            | 85 W  | DDR4-2400    |
| Intel® Xeon® Processor Silver 4116              | SKYLAKE-S      | QN1J   | M0       | 16.5 MB L3  | 9.6 GT/s   | 12         | 2.10 GHz                 | 3.00 GHz            | 85 W  | DDR4-2400    |
| Intel® Xeon® Processor Silver 4114T             | SKYLAKE-S      | QN7A   | U0       | 13.75 MB L3 | 9.6 GT/s   | 10         | 2.20 GHz                 | 3.00 GHz            | 85 W  | DDR4-2400    |
| Intel® Xeon® Processor Silver 4114              | SKYLAKE-S      | QN0B   | U0       | 13.75 MB L3 | 9.6 GT/s   | 10         | 2.20 GHz                 | 3.00 GHz            | 85 W  | DDR4-2400    |
| Intel® Xeon® Processor Silver 4112              | SKYLAKE-S      | QN0E   | U0       | 8.25 MB L3  | 9.6 GT/s   | 4          | 2.60 GHz                 | 3.00 GHz            | 85 W  | DDR4-2400    |
| Intel® Xeon® Processor Silver 4110              | SKYLAKE-S      | QN09   | U0       | 11 MB L3    | 9.6 GT/s   | 8          | 2.10 GHz                 | 3.00 GHz            | 85 W  | DDR4-2400    |
| Intel® Xeon® Processor Silver 4109T             | SKYLAKE-S      | QN0F   | U0       | 11 MB L3    | 9.6 GT/s   | 8          | 2.00 GHz                 | 3.00 GHz            | 70 W  | DDR4-2400    |
| Intel® Xeon® Processor Silver 4108              | SKYLAKE-S      | QN0A   | U0       | 11 MB L3    | 9.6 GT/s   | 8          | 1.80 GHz                 | 3.00 GHz            | 85 W  | DDR4-2400    |
| Intel® Xeon® Processor Bronze 3106              | SKYLAKE-S      | QN0C   | U0       | 11 MB L3    | 9.6 GT/s   | 8          | 1.70 GHz                 | None                | 85 W  | DDR4-2133    |
| Intel® Xeon® Processor Bronze 3104              | SKYLAKE-S      | QN0D   | U0       | 8.25 MB L3  | 9.6 GT/s   | 6          | 1.70 GHz                 | None                | 85 W  | DDR4-2133    |
| Purley - Intel® Xeon® Processor Scalable Family |                |        |          |             |            |            |                          |                     |       |              |
| Intel® Xeon® Processor Platinum 8256            | CascadeLake SP | QRAP   | B0       | 16.5MB      | 10.4 GT/s  | 4          | 3.80 GHz                 | 3.90 GHz            | 105W  | DDR4-2933    |
| Intel® Xeon® Processor Platinum 8253            | CascadeLake SP | QRAN   | B0       | 22MB        | 10.4 GT/s  | 16         | 2.20 GHz                 | 3.00 GHz            | 125W  | DDR4-2933    |
| Intel® Xeon® Processor Gold 6238T               | CascadeLake SP | QRBW   | B0       | 30.25MB     | 10.4 GT/s  | 22         | 1.90 GHz                 | 3.70 GHz            | 125W  | DDR4-2933    |
| Intel® Xeon® Processor Gold 6230N               | CascadeLake SP | QS1X   | B1       | 27.5MB      | 10.4 GT/s  | 20         | 2.30 GHz                 | 3.50 GHz            | 125W  | DDR4-2933    |
| Intel® Xeon® Processor Gold 6230                | CascadeLake SP | QRAD   | B0       | 27.5MB      | 10.4 GT/s  | 20         | 2.10 GHz                 | 3.90 GHz            | 125W  | DDR4-2933    |
| Intel® Xeon® Processor Gold 5220                | CascadeLake SP | QRGH   | L0       | 24.75MB     | 10.4 GT/s  | 18         | 2.20 GHz                 | 3.90 GHz            | 125W  | DDR4-2666    |
| Intel® Xeon® Processor Gold 5218B               | CascadeLake SP | QRGE   | L0       | 22MB        | 10.4 GT/s  | 16         | 2.30 GHz                 | 3.90 GHz            | 125W  | DDR4-2666    |
| Intel® Xeon® Processor Gold 5218N               | CascadeLake SP | QRGD   | L0       | 22MB        | 10.4 GT/s  | 16         | 2.30 GHz                 | 3.70 GHz            | 105W  | DDR4-2666    |
| Intel® Xeon® Processor Gold 5218                | CascadeLake SP | QRA9   | L0       | 22MB        | 10.4 GT/s  | 16         | 2.30 GHz                 | 3.90 GHz            | 125W  | DDR4-2666    |
| Intel® Xeon® Processor Gold 5217                | CascadeLake SP | QRGC   | L0       | 11MB        | 10.4 GT/s  | 8          | 3.00 GHz                 | 3.70 GHz            | 115W  | DDR4-2666    |
| Intel® Xeon® Processor Gold 5215L               | CascadeLake SP | QRGB   | L0       | 13.75MB     | 10.4 GT/s  | 10         | 2.50 GHz                 | 3.40 GHz            | 85W   | DDR4-2666    |
| Intel® Xeon® Processor Silver 4216              | CascadeLake SP | QRG8   | L0       | 22MB        | 9.6 GT/s   | 16         | 2.10 GHz                 | 3.20 GHz            | 100W  | DDR4-2133    |
| Intel® Xeon® Processor Silver 4215              | CascadeLake SP | QRG7   | L0       | 11MB        | 9.6 GT/s   | 8          | 2.50 GHz                 | 3.50 GHz            | 85W   | DDR4-2133    |
| Intel® Xeon® Processor Silver 4214Y             | CascadeLake SP | QRHY   | L0       | 16.5MB      | 9.6 GT/s   | 12         | 2.20 GHz                 | 3.20 GHz            | 85W   | DDR4-2133    |
| Intel® Xeon® Processor Silver 4214              | CascadeLake SP | QRG6   | L0       | 16.5MB      | 9.6 GT/s   | 12         | 2.20 GHz                 | 3.20 GHz            | 85W   | DDR4-2133    |

|  |                     |                 |      |                 |           |         |                    |                  |             |           |
|--|---------------------|-----------------|------|-----------------|-----------|---------|--------------------|------------------|-------------|-----------|
| Intel® Xeon® Processor Silver 4210                           | CascadeLake SP      | QPJF            | R0   | 13.75MB         | 9.6 GT/s  | 10      | 2.20 GHz           | 3.20 GHz         | 85W         | DDR4-2133 |
| Intel® Xeon® Processor Silver 4209T                          | CascadeLake SP      | QPJM            | R0   | 11MB            | 9.6 GT/s  | 8       | 2.20 GHz           | 3.20 GHz         | 70W         | DDR4-2133 |
| Intel® Xeon® Processor Silver 4208                           | CascadeLake SP      | QPJG            | R0   | 11MB            | 9.6 GT/s  | 8       | 2.10 GHz           | 3.20 GHz         | 85W         | DDR4-2133 |
| Intel® Xeon® Processor Gold 6230T                            | CascadeLake SP      | QS1Y            | B1   | 27.5MB          | 10.4 GT/s | 20      | 2.10 GHz           | 3.90 GHz         | 125W        | DDR4-2933 |
| Intel® Xeon® Processor Gold 6230                             | CascadeLake SP      | QRAD            | B0   | 27.5MB          | 10.4 GT/s | 20      | 2.10 GHz           | 3.90 GHz         | 125W        | DDR4-2933 |
| Intel® Xeon® Processor Gold 6226                             | CascadeLake SP      | QS1V            | B1   | 19.25MB         | 10.4 GT/s | 12      | 2.70 GHz           | 3.70 GHz         | 125W        | DDR4-2933 |
| Intel® Xeon® Processor Gold 6222V                            | CascadeLake SP      | QS2C            | B1   | 27.5MB          | 10.4 GT/s | 20      | 1.80 GHz           | 3.60 GHz         | 115W        | DDR4-2400 |
| Intel® Xeon® Processor Gold 5220S                            | CascadeLake SP      | QS1Z            | B1   | 24.75MB         | 10.4 GT/s | 18      | 2.70 GHz           | 3.90 GHz         | 125W        | DDR4-2666 |
| Intel® Xeon® Processor Gold 5220T                            | CascadeLake SP      | QS1R            | B1   | 24.75MB         | 10.4 GT/s | 18      | 1.90 GHz           | 3.90 GHz         | 105W        | DDR4-2666 |
| Intel® Xeon® Processor Gold 5218T                            | CascadeLake SP      | QS1T            | B1   | 22MB            | 10.4 GT/s | 16      | 2.10 GHz           | 3.80 GHz         | 105W        | DDR4-2666 |
| Intel® Xeon® Processor Gold 5215M                            | CascadeLake SP      | QRGA            | L0   | 13.75MB         | 10.4 GT/s | 10      | 2.50 GHz           | 3.40 GHz         | 85W         | DDR4-2666 |
| Intel® Xeon® Processor Gold 5215                             | CascadeLake SP      | QRG9            | L0   | 13.75MB         | 10.4 GT/s | 10      | 2.50 GHz           | 3.40 GHz         | 85W         | DDR4-2666 |
| Intel® Xeon® Processor Bronze 3204                           | CascadeLake SP      | QPJK            | R0   | 8.25MB          | 9.6 GT/s  | 6       | 1.90 GHz           | 1.90 GHz         | 85W         | DDR4-2133 |
| CascadeLake refresh - Intel® Xeon® Processor Scalable Family |                     |                 |      |                 |           |         |                    |                  |             |           |
| Intel® Xeon® Processor Gold 5218R                            | CascadeLake refresh | SRGZ7           | B1   | 27.50MB         | 10.4 GT/s | 20      | 2.1 GHz            | 4.0 GHz          | 125W        | DDR4-2666 |
| Intel® Xeon® Processor Silver 4214R                          | CascadeLake refresh | QSKT            | L1   | 16.5MB          | 9.6 GT/s  | 12      | 2.4 GHz            | 3.5 GHz          | 100W        | DDR4-2400 |
| Intel® Xeon® Processor Silver 4210R                          | CascadeLake refresh | QSL1            | R1   | 13.75MB         | 9.6 GT/s  | 10      | 2.4 GHz            | 3.2 GHz          | 100W        | DDR4-2400 |
| Intel® Xeon® Processor Bronze 3206R                          | CascadeLake refresh | QSL2            | R1   | 11MB            | 9.6 GT/s  | 8       | 1.9 GHz            | 1.9 GHz          | 85W         | DDR4-2133 |
| Montage Jintide® Processor Scalable Family                   |                     |                 |      |                 |           |         |                    |                  |             |           |
| Montage Jintide® C10201                                      | Jintide             | SREUK           | H0   | 13.75MB         | 9.6 GT/s  | 10      | 2.2 GHz            | 3.0 GHz          | 85W         | DDR4      |
| Montage Jintide® C08101                                      | Jintide             | SREUL           | H0   | 11MB            | 9.6 GT/s  | 8       | 2.1 GHz            | 3.0 GHz          | 85W         | DDR4      |
| Montage Jintide® C16401                                      | Jintide             | SREUM           | H0   | 22MB            | 10.4 GT/s | 16      | 2.1 GHz            | 3.7 GHz          | 125W        | DDR4      |
| Montage Jintide® C12301                                      | Jintide             | SREUH           | H0   | 16.5MB          | 10.4 GT/s | 12      | 2.3 GHz            | 3.2 GHz          | 105W        | DDR4      |
| Montage Jintide® C14501                                      | Jintide             | SREUJ           | H0   | 19.25MB         | 10.4 GT/s | 14      | 2.2 GHz            | 3.2 GHz          | 105W        | DDR4      |
| Memory   |                     |                 |      |                 |           |         |                    |                  |             |           |
| Product Name   | Memory Type         | Module Supplier | Size | Chip Brand      | Rank      | Voltage | Data Transfer Rate | Error Correction | CAS Latency | Pins      |
| RDIMM  |                     |                 |      |                 |           |         |                    |                  |             |           |
| M393A8K40B22-CWD6Q   | DDR4                | Samsung         | 64GB | Samsung         | 2S2Rx4    | 1.2v    | 2666MHz            | ECC Registered   | 19          | 288-pin   |
| CT32G4RFD4266-2G6H1.001                                      | DDR4                | CRUCIAL         | 32GB | Micron          | 2Rx4      | 1.2v    | 2666MHz            | ECC Registered   | 19          | 288-pin   |
| MTA36ASF4G72PZ-2G6H1QG                                       | DDR4                | CRUCIAL         | 32GB | Micron          | 2Rx4      | 1.2v    | 2666MHz            | ECC Registered   | 19          | 288-pin   |
| HMA84GR7AFR4N-VKT3   | DDR4                | SKhynix         | 32GB | Skhynix-Montage | 2Rx4      | 1.2v    | 2666MHz            | ECC Registered   | 19          | 288-pin   |
| HMAA8GR7A2R4N-VNT3   | DDR4                | SKhynix         | 64GB | Skhynix         | 2S2Rx4    | 1.2v    | 2666MHz            | ECC Registered   | 19          | 288-pin   |
| KSM26RD4/32HAI   | DDR4                | Kingston        | 32GB | Skhynix-IDT     | 2Rx4      | 1.2v    | 2666MHz            | ECC Registered   | 19          | 288-pin   |
| KSM26RS4/16HAI   | DDR4                | Kingston        | 16GB | Skhynix-IDT     | 1Rx4      | 1.2v    | 2666MHz            | ECC Registered   | 19          | 288-pin   |
| M393A2K40CB2-CVFBQ   | DDR4                | Samsung         | 16GB | Samsung-IDT     | 1Rx4      | 1.2v    | 2933MHz            | ECC Registered   | 21          | 288-pin   |
| M393A4K40CB2-CVFBQ   | DDR4                | Samsung         | 32GB | Samsung-IDT     | 2Rx4      | 1.2v    | 2933MHz            | ECC Registered   | 21          | 288-pin   |

|                         |      |         |      |                      |      |      |         |                |    |         |
|-------------------------|------|---------|------|----------------------|------|------|---------|----------------|----|---------|
| CT32G4RFD4293-2G9E2.001 | DDR4 | CRUCIAL | 32GB | Micron               | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| CT32G4RFD4293.36FE2     | DDR4 | CRUCIAL | 32GB | Micron               | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA36ASF4G72PZ.2G9E2TG  | DDR4 | Micron  | 32GB | Micron-Montage       | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA36ASF4G72PZ.2G9E2VG  | DDR4 | Micron  | 32GB | Micron-IDT           | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA36ASF4G72PZ.2G9E2UG  | DDR4 | Micron  | 32GB | Micron-Rambus        | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| HMA84GR7CJR4N-WM TG     | DDR4 | SKhynix | 32GB | SKhynix-IDT          | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| CT16G4RFD8293.18FE1     | DDR4 | CRUCIAL | 16GB | Micron               | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| CT16G4RFD8293-2G9E1.001 | DDR4 | CRUCIAL | 16GB | Micron               | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA18ASF2G72PDZ.2G9E1UG | DDR4 | Micron  | 16GB | Micron-Rambus        | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA18ASF2G72PDZ.2G9E1VG | DDR4 | Micron  | 16GB | Micron-IDT           | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| M393A2K43CB2-CVFBQ      | DDR4 | Samsung | 16GB | Samsung-IDT          | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| NT16GA72D8PBX3P-IX      | DDR4 | Nanya   | 16GB | Nanya-IDT            | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| NT32GA72D4NBX3P-IX      | DDR4 | Nanya   | 32GB | Nanya-Montage or IDT | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| M393A2K40CB2-CVFBQ      | DDR4 | Samsung | 16GB | Samsung-IDT          | 1Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| CT8G4RFS8293.9FE1       | DDR4 | CRUCIAL | 8GB  | Micron               | 1Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| CT8G4RFS8293-2G9E1.001  | DDR4 | CRUCIAL | 8GB  | Micron               | 1Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA9ASF1G72PZ.2G9E1VG   | DDR4 | Micron  | 8GB  | Micron-IDT           | 1Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA9ASF1G72PZ.2G9E1UG   | DDR4 | Micron  | 8GB  | Micron-Rambus        | 1Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA9ASF1G72PZ.2G9E1TI   | DDR4 | Micron  | 8GB  | Micron-Montage       | 1Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| CT16G4RFS4293.18FE1     | DDR4 | CRUCIAL | 16GB | Micron               | 1Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |

|   |      |          |      |                 |      |      |         |                |    |         |
|---|------|----------|------|-----------------|------|------|---------|----------------|----|---------|
| CT16G4RFS4293-2G9E1.001                 | DDR4 | CRUCIAL  | 16GB | Micron          | 1Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA18ASF2G72PZ.2G9E1TK                  | DDR4 | Micron   | 16GB | Micron-Montage  | 1Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA18ASF2G72PZ.2G9E1VG                  | DDR4 | Micron   | 16GB | Micron-IDT      | 1Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| HMA81GR7CJR8N-WM TG                     | DDR4 | SKhynix  | 8GB  | SKhynix-IDT     | 1Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| KSM29RD4/32MEI                          | DDR4 | Kingston | 32GB | Micron-IDT      | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| KSM29RD8/16MEI                          | DDR4 | Kingston | 16GB | Micron-IDT      | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| HMA82GR7CJR8N-WM T4                     | DDR4 | SKhynix  | 16GB | SKhynix-Montage | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| M393A2K40DB2-CVFBQ                      | DDR4 | Samsung  | 16GB | Samsung-IDT     | 1Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| M393A4K40DB2-CVFBQ                      | DDR4 | Samsung  | 32GB | Samsung-IDT     | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA18ASF2G72PDZ-2G9J3VI                 | DDR4 | Micron   | 16GB | Micron-IDT      | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA18ASF2G72PDZ-2G9J3TI                 | DDR4 | Micron   | 16GB | Micron-Montage  | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| KSM29RD4/32HDR                          | DDR4 | Kingston | 32GB | SKhynix-Rambus  | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| M393A2K43DB2-CVFBQ                      | DDR4 | Samsung  | 16GB | Samsung-IDT     | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA36ASF4G72PZ-2G9J3TI                  | DDR4 | Micron   | 32GB | Micron-Montage  | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| KSM29RD8/16HDR                          | DDR4 | Kingston | 16GB | SKhynix-Rambus  | 2Rx8 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| <b>RDIMM (Only support CascadeLake)</b> |      |          |      |                 |      |      |         |                |    |         |
| M393A8G40MB2-CTD7Q                      | DDR4 | Samsung  | 64GB | Samsung-IDT     | 2Rx4 | 1.2v | 2666MHz | ECC Registered | 19 | 288-pin |
| M393A8G40MB2-CVFBY                      | DDR4 | Samsung  | 64GB | Samsung-IDT     | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| HMAA8GR7MJR4N-WM T4                     | DDR4 | SKhynix  | 64GB | SKhynix-Montage | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| CT64G4RFD4293-2G9B1.001                 | DDR4 | CRUCIAL  | 64GB | Micron-IDT      | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA36ASF8G72PZ-2G9B1VI                  | DDR4 | Micron   | 64GB | Micron-IDT      | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| CT64G4RFD4293-2G9B2.001                 | DDR4 | Crucial  | 64GB | Micron-IDT      | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA36ASF8G72PZ-2G9B2VI                  | DDR4 | Crucial  | 64GB | Micron-IDT      | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| MTA36ASF8G72PZ-2G9E1TI                  | DDR4 | Micron   | 64GB | Micron-Montage  | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |
| M393A8G40AB2-CVFBY                      | DDR4 | Samsung  | 64GB | Samsung-IDT     | 2Rx4 | 1.2v | 2933MHz | ECC Registered | 21 | 288-pin |

|   |      |           |             |                |          |                 |                                       |                |      |              |
|---|------|-----------|-------------|----------------|----------|-----------------|---------------------------------------|----------------|------|--------------|
| MTA9ASF2G72PZ-2G9E1UI                                   | DDR4 | Micron    | 16GB        | Micron-Rambus  | 1Rx8     | 1.2v            | 2933MHz                               | ECC Registered | 21   | 288-pin      |
| MTA18ASF4G72PDZ-2G9E1T1                                 | DDR4 | Micron    | 32GB        | Micron-Montage | 2Rx8     | 1.2v            | 2933MHz                               | ECC Registered | 21   | 288-pin      |
| LRDIMM  |      |           |             |                |          |                 |                                       |                |      |              |
| M386A8K40CM2-CVFBY                                      | DDR4 | Samsung   | 64GB        | Samsung-IDT    | 4DRx4    | 1.2v            | 2933MHz                               | ECC Registered | 21   | 288-pin      |
| HMAA8GL7AMR4N-VKTF                                      | DDR4 | SKhynix   | 64GB        | SKhynix        | 4DRx4    | 1.2v            | 2666MHz                               | ECC Registered | 17   | 288-pin      |
| M386A8K40BM2-CTD7Q                                      | DDR4 | Samsung   | 64GB        | Samsung        | 4DRx4    | 1.2v            | 2666MHz                               | ECC Registered | 17   | 288-pin      |
| <b>Seagate HDD (SAS HDD may need RAID Card support)</b> |      |           |             |                |          |                 |                                       |                |      |              |
| Product Name  | Type | Vendor    | Form Factor | Format         | Capacity | Interface Speed | Series                                | Cache          | RPM  | Encryption   |
| Seagate Enterprise Capacity 2.5 HDD                     |      |           |             |                |          |                 |                                       |                |      |              |
| ST14000NM0018   | SATA | Seagate   | 3.5"        | 512e           | 14TB     | 6Gb/s           | Exos X14 (Enterprise Capacity)        | 256MB          | 7200 | N/A          |
| ST1000NX0303  | SATA | Seagate   | 2.5"        | 4Kn            | 1TB      | 6Gb/s           | EXOS 7E2000                           | 128MB          | 7200 | N/A          |
| ST2000NX0243  | SATA | Seagate   | 2.5"        | 4Kn            | 2TB      | 6Gb/s           | Exos 7E2000 (Enterprise Capacity V.3) | 128MB          | 7200 | N/A          |
| Seagate Enterprise Capacity 3.5 HDD                     |      |           |             |                |          |                 |                                       |                |      |              |
| ST2000NM0008  | SATA | Seagate   | 3.5"        | 512n           | 2TB      | 6Gb/s           | EXOS 7E2                              | 128MB          | 7200 | N/A          |
| ST8000NM000A  | SATA | Seagate   | 3.5"        | 512e           | 8TB      | 6Gb/s           | EXOS 7E8                              | 256MB          | 7200 | N/A          |
| ST16000NM001G   | SATA | Seagate   | 3.5"        | 512e/4Kn       | 16TB     | 6Gb/s           | EXOS X16                              | 256MB          | 7200 | N/A          |
| ST10000NM017B   | SATA | Seagate   | 3.5"        | 512e           | 10TB     | 6Gb/s           | EXOS 7E10                             | 256MB          | 7200 | N/A          |
| <b>WD HDD</b>   |      |           |             |                |          |                 |                                       |                |      |              |
| Product Name  | Type | Vendor    | Form Factor | Format         | Capacity | Interface Speed | Series                                | Cache          | RPM  | Encryption   |
| Datacenter  |      |           |             |                |          |                 |                                       |                |      |              |
| WD4000FYYZ-01UL1B2                                      | SATA | WD        | 3.5"        | 512n           | 4TB      | 6Gb/s           | WD Re                                 | 64MB           | 7200 | N/A          |
| WUS721010ALE6L4   | SATA | WD        | 3.5"        | 512e           | 10TB     | 6Gb/s           | Ultrastar® DC HC330                   | 256MB          | 7200 | N/A          |
| WUH721818ALE6L4   | SATA | WD        | 3.5"        | 512e           | 18TB     | 6Gb/s           | Ultrastar DC HC550                    | 512MB          | 7200 | N/A          |
| <b>HGST HDD (SAS HDD may need RAID Card support)</b>    |      |           |             |                |          |                 |                                       |                |      |              |
| Product Name  | Type | Vendor    | Form Factor | Format         | Capacity | Interface Speed | Series                                | Cache          | RPM  | Encryption   |
| Enterprise Hard Drives                                  |      |           |             |                |          |                 |                                       |                |      |              |
| HUS726T6TALE6L4   | SATA | HGST / WD | 3.5"        | 512e           | 6TB      | 6Gb/s           | Ultrastar DC HC310 (7K6)              | 256MB          | 7200 | N/A          |
| HUS726T4TALE6L4   | SATA | HGST / WD | 3.5"        | 512e           | 4TB      | 6Gb/s           | Ultrastar DC HC310 (7K6)              | 256MB          | 7200 | N/A          |
| HUS722T2TALA604 / 1W10002                               | SATA | HGST / WD | 3.5"        | 512n           | 2TB      | 6Gb/s           | Ultrastar DC HA210 (7K2)              | 128MB          | 7200 | N/A          |
| HUS728T8TALE6L4   | SATA | HGST / WD | 3.5"        | 512e           | 8TB      | 6Gb/s           | Ultrastar® DC HC320 (7K8)             | 256MB          | 7200 | Secure Erase |
| <b>Toshiba HDD (SAS HDD may need RAID Card support)</b> |      |           |             |                |          |                 |                                       |                |      |              |
| Product Name  | Type | Vendor    | Form Factor | Format         | Capacity | Interface Speed | Series                                | Cache          | RPM  | Encryption   |
| Enterprise Hard Drives                                  |      |           |             |                |          |                 |                                       |                |      |              |
| MG07ACA14TE   | SATA | Toshiba   | 3.5"        | 512e           | 14TB     | 6Gb/s           | Capacity                              | 256MB          | 7200 | N/A          |
| MG04ACA100N   | SATA | Toshiba   | 3.5"        | 512e           | 1TB      | 6Gb/s           | Capacity                              | 128MB          | 7200 | N/A          |
| MG06ACA10TE   | SATA | Toshiba   | 3.5"        | 512e           | 10TB     | 6Gb/s           | Capacity                              | 256MB          | 7200 | N/A          |

| MG07ACA14TE                                     | SATA     | Toshiba  | 3.5"        | 512e       | 14TB          | 6Gb/s                  | MG07ACA | 256MB | 7200 | N/A |
|---|----------|----------|-------------|------------|---------------|------------------------|---------|-------|------|-----|
| <b>SATA/SAS SSD</b>                             |          |          |             |            |               |                        |         |       |      |     |
| Product Name                                    | Type     | Vendor   | Form Factor | Interface  | Capacity      | Interface Speed        | FW      | Note  |      |     |
| SATA/SAS SSD                                    |          |          |             |            |               |                        |         |       |      |     |
| SSDSC2KG019T701 (Series DC S4600)               | SSD      | Intel    | 2.5"        | SATA       | 1.92TB        | 6Gb/s                  |         |       |      |     |
| MZ7KM1T9HMJP-0005 (SM863a)                      | SSD      | Samsung  | 2.5"        | SATA       | 1.92TB        | 6Gb/s                  |         |       |      |     |
| MZ-7LH1T9NE 883 DCT Series                      | SSD      | Samsung  | 2.5"        | SATA       | 1.92TB        | 6Gb/s                  |         |       |      |     |
| XA960LE10063                                    | SSD      | Seagate  | 2.5"        | SATA       | 960GB         | 6Gb/s                  |         |       |      |     |
| XA480LE10063                                    | SSD      | Seagate  | 2.5"        | SATA       | 480GB         | 6Gb/s                  |         |       |      |     |
| SRE100-960G00210000                             | SSD      | Phison   | 2.5"        | SATA       | 960GB         | 6Gb/s                  |         |       |      |     |
| SRE100-480G00210000                             | SSD      | Phison   | 2.5"        | SATA       | 480GB         | 6Gb/s                  |         |       |      |     |
| SSDSC2KG019T8 D3-S4610 Series                   | SSD      | Intel    | 2.5"        | SATA       | 1.92TB        | 6Gb/s                  |         |       |      |     |
| SEDC500M/3840G DC500M Series                    | SSD      | Kingston | 2.5"        | SATA       | 3.84TB        | 6Gb/s                  |         |       |      |     |
| SEDC500M/1920G DC500M Series                    | SSD      | Kingston | 2.5"        | SATA       | 1.92TB        | 6Gb/s                  |         |       |      |     |
| SEDC500M/960G DC500M Series                     | SSD      | Kingston | 2.5"        | SATA       | 960GB         | 6Gb/s                  |         |       |      |     |
| SEDC500M/480G DC500M Series                     | SSD      | Kingston | 2.5"        | SATA       | 480GB         | 6Gb/s                  |         |       |      |     |
| ASR1100SS-240GT-B                               | SSD      | Adata    | 2.5"        | SATA       | 240GB         | 6Gb/s                  |         |       |      |     |
| KHK61RSE960G                                    | SSD      | Toshiba  | 2.5"        | SATA       | 960GB         | 6Gb/s                  |         |       |      |     |
| MTFDDAK3T8TDS-1AW1ZABYY (5300 PRO)              | SSD      | Micron   | 2.5"        | SATA       | 3.84TB        | 6Gb/s                  |         |       |      |     |
| MTFDDAK1T9TDS-1AW1ZABYY (5300 PRO)              | SSD      | Micron   | 2.5"        | SATA       | 1.92TB        | 6Gb/s                  |         |       |      |     |
| SSB240GTLCG-D2-SME520GBT ESM1220 Series         | SSD      | Phison   | 2.5"        | SATA       | 240GB         | 6Gb/s                  |         |       |      |     |
| SSB480GTLCG-D2-SME520GBT ESM1220 Series         | SSD      | Phison   | 2.5"        | SATA       | 480GB         | 6Gb/s                  |         |       |      |     |
| SSB960GTLCG-D2-SME520GBT ESM1220 Series         | SSD      | Phison   | 2.5"        | SATA       | 960GB         | 6Gb/s                  |         |       |      |     |
| SSB1K9GTLCG-D2-SME520GBT ESM1220 Series         | SSD      | Phison   | 2.5"        | SATA       | 1.92TB        | 6Gb/s                  |         |       |      |     |
| <b>PCIe SSD</b>                                 |          |          |             |            |               |                        |         |       |      |     |
| Product Name                                    | Type     | Vendor   | Form Factor | Interface  | Capacity      | Interface Speed        | Note    |       |      |     |
| PCIe SSD  |          |          |             |            |               |                        |         |       |      |     |
| Netlist N1951 E3 NS1951AH33T2 Gen3 x8 3.2TB     | PCIe     | Netlist  | PCI-E 3.0   | PCIe(NVMe) | 3.2TB         | -                      |         |       |      |     |
| Samsung PM1725b MZPLL3T2HAJQ PCIe Gen3 x8 3.2TB | PCIe     | Samsung  | PCI-E 3.0   | PCIe(NVMe) | 3.2TB         | -                      |         |       |      |     |
| <b>M.2</b>                                      |          |          |             |            |               |                        |         |       |      |     |
| Product Name                                    | Type     | Vendor   | Form Factor | Interface  | Capacity      | Interface Speed        | Note    |       |      |     |
| M.2   |          |          |             |            |               |                        |         |       |      |     |
| AF1TSMJA-YT1 ATP N600c Series 1TB               | M.2      | ATP      | 2280        | PCIe(NVMe) | 1TB           |                        |         |       |      |     |
| SSDPEKKA256G801 P4101 Series 256GB              | M.2      | Intel    | 2280        | PCIe(NVMe) | 256GB         |                        |         |       |      |     |
| SSDPEKKA010T801 P4101 Series 1TB                | M.2      | Intel    | 2280        | PCIe(NVMe) | 1TB           |                        |         |       |      |     |
| SSDPEKKA010T701 P3100 Series 1TB                | M.2      | Intel    | 2280        | PCIe(NVMe) | 1TB           |                        |         |       |      |     |
| SSDPEKKA256G701 P3100 Series 256GB              | M.2      | Intel    | 2280        | PCIe(NVMe) | 256GB         |                        |         |       |      |     |
| MZVPV512HDGL                                    | M.2      | Samsung  | 2280        | PCIe(NVMe) | 512GB         |                        |         |       |      |     |
| IM2P33F8-256GD                                  | M.2      | ADATA    | 2280        | PCIe(NVMe) | 256GB         | -                      |         |       |      |     |
| IM2P33F8-512GD                                  | M.2      | ADATA    | 2280        | PCIe(NVMe) | 512GB         | -                      |         |       |      |     |
| IM2P33F8-256GD1                                 | M.2      | ADATA    | 2280        | PCIe(NVMe) | 256GB         | -                      |         |       |      |     |
| IM2P33F8-512GD1                                 | M.2      | ADATA    | 2280        | PCIe(NVMe) | 512GB         | -                      |         |       |      |     |
| <b>SATA DOM</b>                                 |          |          |             |            |               |                        |         |       |      |     |
| Product Name                                    | Type     | Vendor   | Capacity    | Flash Type | Max. Channels | Max. Power Consumption | Note    |       |      |     |
| SATA III  |          |          |             |            |               |                        |         |       |      |     |
| Innodisk SATADOM-SL 3ME4 DESSL-64GM41BC1SCB     | Vertical | INNODISK | 64GB        | MLC        | 1             | 0.734 W                |         |       |      |     |

| Innodisk SATADOM-SL 3ME4 DESSL-A28M41BCADCB-D33    | Vertical                                | INNODISK                 | 128GB          | MLC  | 1              | 1.02 W                           |                       |  |  |      |
|--|---|--------------------------|----------------|--|----------------|----------------------------------|-----------------------|--|--|------|
| Innodisk SATADOM-ML 3ME4 DESML-64GM41BCADCB        | Vertical                                | INNODISK                 | 64GB           | MLC  | 2              | 0.815 W                          |                       |  |  |      |
| Innodisk SATADOM-SH 3ME4 DESSH-64GM41BC1SCB        | Horizontal                              | INNODISK                 | 64GB           | MLC  | 2              | 1.27 W                           |                       |  |  |      |
| Innodisk SATADOM-SH TYPE C 3ME4 DESSC-64GM41BC1SCB | Horizontal                              | INNODISK                 | 64GB           | MLC  | 1              | 0.626 W                          |                       |  |  |      |
| <b>RAID Cards</b>                                  |   |                          |                |  |                |                                  |                       |  |  |      |
| Model  | RAID-on-Chip Controller                 | Host Bus Type            | Internal Ports | Internal Connectors                        | External Ports | External Connectors              | Data Transfer Rates   |  |  | Note |
| <b>GIGABYTE Storage Cards</b>                      |   |                          |                |  |                |                                  |                       |  |  |      |
| CRA3338  | LSI SAS 3008                            | PCIe- x8 Gen3 x8 bus     | 8              | 2 x Mini-SAS HD for 8x SAS                 | -              | -                                | 12Gb/s ports          |  |  |      |
| CSA3548  | LSI SAS 3008                            | PCIe- x8 Gen3 x8 bus     | -              | -  | 8              | 2 x external Mini-SAS HD SFF8644 | 12Gb/s ports          |  |  |      |
| CSA4648  | LSI SAS 3008                            | PCIe- x8 Gen3 x8 bus     | 8              | 2 x internal Mini-SAS HD SFF8643           | -              | -                                | 12Gb/s ports          |  |  |      |
| CRA4648  | LSI SAS 3108                            | PCIe- x8 Gen3 x8 bus     | 8              | 2 x internal Mini-SAS HD SFF8643           | -              | -                                | 12Gb/s ports          |  |  |      |
| CRA4448  | LSI SAS 3108                            | PCIe- x8 Gen3 x8 bus     | 8              | 2 x internal Mini-SAS HD SFF8643           | -              | -                                | 12Gb/s ports          |  |  |      |
| CRA4548  | LSI SAS 3108                            | PCIe- x8 Gen3 x8 bus     | 4              | 1 x internal Mini-SAS HD SFF8643           | 4              | 1 x external Mini-SAS HD SFF8644 | 12Gb/s ports          |  |  |      |
| <b>LSI RAID Controller Cards</b>                   |   |                          |                |  |                |                                  |                       |  |  |      |
| MegaRAID SAS 9361-8i                               | LSISAS3108 dual core RAID on Chip (ROC) | x8 lane PCI Express® 3.0 | 8              | 2 x HD Mini-SAS SFF8643 (Horizontal mount) | -              | -                                | Up to 12Gb/s per port |  |  |      |
| MegaRAID SAS 9460-16i without Tri-mode             | SAS3516 dual-core RAID-on-Chip (ROC)    | x8 lane PCI Express® 3.1 | 8              | 4 x Mini-SAS HD SFF-8643                   | -              | -                                | 12Gb/s SAS 3.0        |  |  |      |
| <b>LSI Host Bus Adapters (HBAs)</b>                |   |                          |                |  |                |                                  |                       |  |  |      |
| LSI SAS 9400-16i without Tri-mode                  | SAS3416                                 | x8 lane PCI Express® 3.1 | 16             | 4 x Mini-SAS HD SFF-8643                   | -              | -                                | 12Gb/s SAS 3.0        |  |  |      |
| <b>PMC RAID Cards (Adaptec)</b>                    |   |                          |                |  |                |                                  |                       |  |  |      |
| Adaptec ASR-81605ZQ                                | -                                       | 8-lane PCIe Gen3         | 16             | 4 x internal mini SAS HD (SFF-8643)        | -              | -                                | 12Gb/s per port       |  |  |      |
| <b>Microsemi RAID Cards</b>                        |   |                          |                |  |                |                                  |                       |  |  |      |
| SmartRAID 3154-16i                                 | PM8236                                  | 8-Lane PCIe Gen3         | 16             | 4 x Internal, SFF-8643                     | -              | -                                | 12 Gb/s per port      |  |  |      |
| SmartRAID 3154-8i                                  | PM8204                                  | 8-Lane PCIe Gen3         | 8              | 2 x Internal, SFF-8643                     | -              | -                                | 12 Gb/s per port      |  |  |      |
| <b>Microsemi Host Bus Adapters</b>                 |   |                          |                |  |                |                                  |                       |  |  |      |
| SmartHBA 2100-8i                                   | PM8222                                  | 8-Lane PCIe Gen3         | 8              | 2 x Internal, SFF-8643                     | -              | -                                | 12 Gb/s per port      |  |  |      |
| HBA 1100-16i                                       | PM8242                                  | 8-Lane PCIe Gen3         | 16             | 4 x Internal, SFF-8643                     | -              | -                                | 12 Gb/s per port      |  |  |      |
| HBA 1100-24i                                       | PM8238                                  | 8-Lane PCIe Gen3         | 24             | 6 x Internal, SFF-8643                     | -              | -                                | 12 Gb/s per port      |  |  |      |

| LAN Cards   |           |                       |            |                       |                                      |      |  |  |  |
|---|-----------|-----------------------|------------|-----------------------|--------------------------------------|------|--|--|--|
| Product Name                                      | Connector | System Interface Type | # of Ports | System Interface Type | Data rate                            | Note |  |  |  |
| GIGABYTE LAN Cards                                |           |                       |            |                       |                                      |      |  |  |  |
| CLN4C42   | SFP28     | PCIe Gen3 x16         | Dual       | 25Gb/s per port       | Mellanox ConnectX-4                  |      |  |  |  |
| CLN4C44   | SFP28     | PCIe Gen3 x16         | Quad       | 25Gb/s per port       | Mellanox ConnectX-4                  |      |  |  |  |
| CLN4832   | SFP+      | PCIe x8 Gen2 x8       | Dual       | 10Gb/s per port       | INTEL 82599ES                        |      |  |  |  |
| CLN4831   | SFP+      | PCIe x8 Gen2 x8       | Single     | 10Gb/s per port       | INTEL 82599EN                        |      |  |  |  |
| CLN4752   | QSFP+     | PCIe x8 Gen3 x8       | Dual       | 40Gb/s per port       | INTEL XL710                          |      |  |  |  |
| CLN4751   | QSFP+     | PCIe x8 Gen3 x8       | Single     | 40Gb/s per port       | INTEL XL710                          |      |  |  |  |
| CLN4224   | RJ-45     | PCIe x8 Gen3 x4       | Quad       | 10Gb/s per port       | INTEL X550-AT2                       |      |  |  |  |
| CLN4312   | RJ-45     | PCIe x4 Gen2 x4       | Dual       | 10Gb/s per port       | INTEL i350-AM2                       |      |  |  |  |
| CLN4222   | RJ-45     | PCIe x4 Gen3 x4       | Dual       | 10Gb/s per port       | INTEL X550-AT2                       |      |  |  |  |
| Intel_10GbE                                       |           |                       |            |                       |                                      |      |  |  |  |
| Intel® Ethernet Converged Network Adapter X550-T2 | RJ-45     | PCIe v3.0 (8.0 GT/s)  | Dual       | 10Gb/s per port       |                                      |      |  |  |  |
| Mellanox ConnectX                                 |           |                       |            |                       |                                      |      |  |  |  |
| MCX515A-CCAT                                      | QSFP28    | PCIe Gen3 x16         | Single     | 100Gb/s per port      | Mellanox ConnectX-5 EN               |      |  |  |  |
| Mellanox VPI Adapter Cards                        |           |                       |            |                       |                                      |      |  |  |  |
| MCX556A-ECAT                                      | QSFP28    | PCIe 3.0 x16          | Dual       | 100Gb/s per port      | Mellanox ConnectX-5 VPI (InfiniBand) |      |  |  |  |
| Qlogic LAN Adapters                               |           |                       |            |                       |                                      |      |  |  |  |
| QL45611HLCU                                       | QSFP28    | PCIe x16 Gen3 x16     | Single     | 100Gb/s per port      |                                      |      |  |  |  |
| QLE3442-RJ-CK                                     | RJ-45     | PCIe x8 Gen3 x8       | Dual       | 10Gb/s per port       |                                      |      |  |  |  |
| Intel Omni-Path Host Fabric                       |           |                       |            |                       |                                      |      |  |  |  |
| Intel® Omni-Path Host Fabric Adapters 100HFA016LS | QSFP28    | PCIe 3.0 x16          | Single     | 100Gb/s per port      |                                      |      |  |  |  |
| USB Device  |           |                       |            |                       |                                      |      |  |  |  |
| Product Name                                      | Type      | Vendor                | Capacity   | Note                  |                                      |      |  |  |  |
| USB 3.0   |           |                       |            |                       |                                      |      |  |  |  |
| GoFlex STAA500305                                 | HDD       | Seagate               | 500G       |                       |                                      |      |  |  |  |
| TOSHIBA CANVIO BASIC                              | HDD       | Toshiba               | 500G       |                       |                                      |      |  |  |  |
| NA317U+   | Device    | ineo                  |            |                       |                                      |      |  |  |  |
| SST-TS13  | Device    | Silver Stone          |            |                       |                                      |      |  |  |  |
| S1-DS3-Plus                                       | Device    | CyberSLIM             |            |                       |                                      |      |  |  |  |
| MB981U3-1S  | Device    | ICYDOCK               |            |                       |                                      |      |  |  |  |
| i310-SB3(6G)                                      | Device    | STARDOM               |            |                       |                                      |      |  |  |  |