

## ZENITH EXTREME ALPHA

### DDR4 2133 Qualified Vendors List (QVL)

| Vendors           | Part No.                         | Size    | SS/DS | Chip Brand | Chip NO.       | Timing      | Voltage | IM socket support (Options) |        |        |
|-------------------|----------------------------------|---------|-------|------------|----------------|-------------|---------|-----------------------------|--------|--------|
|                   |                                  |         |       |            |                |             |         | 2 DIMM                      | 4 DIMM | 8 DIMM |
| Apacer            | 78.B1GM3.AF00B                   | 4x 4GB  | SS    | SK Hynix   | H5AN4G8NMFRFC  | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| Apacer            | 78.C1GM3.AF10B                   | 4x 8GB  | DS    | SK Hynix   | H5AN4G8NMFRFC  | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| Apacer            | AHU08GGB13CGT7G                  | 4x 8GB  | DS    | Apacer     | AM6F60080THMA1 | 15-15-15-36 | 1.2     | ●                           |        |        |
| Apacer            | AU04GGB13CDWBGH                  | 4GB     | DS    | Micron     | PPE05-075E     | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| Apacer            | AU08GGB13CDYBGH                  | 8GB     | SS    | Micron     | AM6F6308BTHSB2 | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| CENTURY MICRO INC | CD8G-D4U2133                     | 8GB     | DS    | SK Hynix   | H5AN4G8NMFRFC  | 15-15-15-36 | -       | ●                           | ●      | ●      |
| CENTURY MICRO INC | CK8GX4-D4U2133                   | 4x 8GB  | DS    | SK hynix   | H5AN4G8NMFRFC  | 15-15-15-35 | 1.2     | ●                           | ●      | ●      |
| CORSAIR           | CMK16GX4M4A2133C13(Ver4.23)(XMP) | 4x 4GB  | SS    | -          | -              | 13-15-15-28 | 1.2     | ●                           |        |        |
| CORSAIR           | CMK32GX4M2A2133C13(Ver4.31)(XMP) | 2x 16GB | DS    | -          | -              | 15-15-15-36 | 1.2     | ●                           |        |        |
| CORSAIR           | CMK32GX4M4A2133C13(Ver4.23)(XMP) | 4x 8GB  | DS    | -          | -              | 13-15-15-28 | 1.2     | ●                           | ●      |        |
| CORSAIR           | CMK32GX4M4A2133C15(Ver3.20)      | 4x 8GB  | DS    | -          | -              | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| CORSAIR           | CMK32GX4M4A2133C15(Ver5.29)      | 4x 8GB  | DS    | -          | -              | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| CORSAIR           | CMK64GX4M8A2133C13(Ver5.39)(XMP) | 8x 8GB  | SS    | SK Hynix   | -              | 14-15-15-28 | 1.2     | ●                           | ●      |        |
| CORSAIR           | CMV16GX4M1A2133C15               | 16GB    | DS    | -          | -              | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| CORSAIR           | CMV16GX4M1A2133C15               | 16GB    | DS    | -          | -              | 15-15-15-36 | -       | ●                           | ●      |        |
| CORSAIR           | CMV4GX4M1A2133C15                | 4GB     | SS    | -          | -              | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| CORSAIR           | CMV8GX4M1A2133C15                | 8GB     | DS    | -          | -              | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| crucial           | CT4G4DFS8213.8FA2                | 4GB     | SS    | Micron     | D9RGQ          | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| crucial           | CT4G4DFS8213.8FB1                | 4GB     | SS    | Micron     | -              | 15-15-15-36 | 1.2     | ●                           | ●      | ●      |
| crucial           | CT8G4DFS8213.8FB1                | 8GB     | SS    | Micron     | -              | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| G.SKILL           | F4-2133C15Q-16GRR                | 4x 4GB  | SS    | Micron     | -              | 15-15-15-35 | 1.2     | ●                           | ●      |        |
| G.SKILL           | F4-2133C15Q2-128GVK              | 8x 16GB | DS    | SK Hynix   | -              | 15-15-15-36 | 1.2     | ●                           | ●      | ●      |
| G.SKILL           | F4-2133C15Q2-64GRR               | 8x 8GB  | DS    | SpecTek    | -              | 15-15-15-35 | 1.2     | ●                           | ●      |        |
| G.SKILL           | F4-2133C15Q-32GRR                | 4x 8GB  | DS    | Micron     | -              | 15-15-15-35 | -       | ●                           | ●      |        |
| GeIL              | GPR416GB2133C15QC                | 4x 4GB  | SS    | Micron     | -              | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| Hyper X           | HX421C13SB/4(XMP)                | 4GB     | SS    | SK Hynix   | -              | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| Hyper X           | HX421C13SB/8(XMP)                | 8GB     | DS    | SK Hynix   | -              | 15-15-15-36 | 1.2     | ●                           |        |        |
| Hyper X           | HX421C13SBK2/16(XMP)             | 2x 8GB  | DS    | SK Hynix   | -              | 15-15-15-36 | 1.2     | ●                           |        |        |
| Hyper X           | HX421C13SBK2/8(XMP)              | 2x 4GB  | SS    | SK Hynix   | -              | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| Hyper X           | HX421C13SBK4/16(XMP)             | 4x 4GB  | SS    | SK Hynix   | -              | 15-15-15-36 | 1.2     | ●                           | ●      |        |
| Hyper X           | HX421C13SBK4/32(XMP)             | 4x 8GB  | DS    | SK Hynix   | -              | 15-15-15-36 | 1.2     | ●                           |        |        |
| Hyper X           | HX421C14FB/4                     | 4GB     | SS    | SK Hynix   | -              | 14-14-14-35 | 1.2     | ●                           |        |        |
| Hyper X           | HX421C14FB/8                     | 8GB     | DS    | SK Hynix   | -              | 14-14-14-35 | 1.2     | ●                           |        |        |
| Hyper X           | HX421C14FB2K4/32(XMP)            | 4x 8GB  | SS    | Micron     | -              | 14-14-14-35 | 1.2     | ●                           | ●      |        |

|               |                              |         |    |          |               |             |     |       |
|---------------|------------------------------|---------|----|----------|---------------|-------------|-----|-------|
| Hyper X       | HX421C14FBK2/16              | 2x 8GB  | DS | SK Hynix | -             | 14-14-14-35 | 1.2 | ●     |
| Hyper X       | HX421C14FBK2/8               | 2x 4GB  | SS | SK Hynix | -             | 14-14-14-35 | 1.2 | ●     |
| Hyper X       | HX421C14FBK4/16              | 4x 4GB  | SS | SK Hynix | -             | 14-14-14-35 | 1.2 | ●     |
| Hyper X       | HX421C14FBK4/32              | 4x 8GB  | DS | SK Hynix | -             | 14-14-14-35 | 1.2 | ●     |
| Hyper X       | HX421C14FBK4/64              | 4x 16GB | DS | Micron   | -             | 15-15-15-35 | 1.2 | ● ●   |
| Hyper X       | HX421C14FBK8/64              | 8x 8GB  | DS | SK Hynix | -             | 14-14-14-35 | 1.2 | ●     |
| Kingston      | KVR21N15D8/16                | 16GB    | DS | Micron   | D9VHP         | 15-15-15-36 | 1.2 | ● ● ● |
| Kingston      | KVR21N15D8/8                 | 8GB     | DS | SK Hynix | H5AN4G8NAFR   | 15-15-15-36 | 1.2 | ●     |
| Kingston      | KVR21N15D8/8                 | 8GB     | DS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-37 | 1.2 | ● ●   |
| Kingston      | KVR21N15S8/4                 | 4GB     | SS | SK Hynix | H5AN4G8NAFRFC | 15-15-15-36 | 1.2 | ●     |
| Klevv         | IM44GU48N21-FFFHAB(XMP)      | 4GB     | SS | SK Hynix | -             | 15-15-15-35 | 1.2 | ● ●   |
| Klevv         | IM48GU88N21-FFFHMB(XMP)      | 8GB     | SS | SK Hynix | -             | 15-15-15-35 | 1.2 | ● ●   |
| Klevv         | IM4AGU88N21-FFFHMB(XMP)      | 16GB    | DS | SK Hynix | -             | 15-15-15-35 | 1.2 | ●     |
| Klevv         | KM4C4GX4N-2133-15-15-15-35-0 | 4GB     | SS | SK Hynix | -             | 15-15-15-35 | 1.2 | ●     |
| Klevv         | KM4C4GX4N-2133-15-15-15-35-1 | 4x 4GB  | SS | SK Hynix | -             | 15-15-15-35 | 1.2 | ●     |
| Klevv         | KM4C8GX4N-2133-15-15-15-35-0 | 8GB     | DS | SK Hynix | -             | 15-15-15-35 | 1.2 | ● ● ● |
| Klevv         | KM4C8GX4N-2133-15-15-15-35-1 | 4x 8GB  | DS | SK Hynix | -             | 15-15-15-35 | 1.2 | ● ●   |
| Micron        | MTA16ATF2G64AZ-2G1B1         | 16GB    | DS | Micron   | D9TBH         | 15-15-15-36 | 1.2 | ●     |
| Micron        | MTA8ATF1G64AZ-2G1B1          | 8GB     | SS | Micron   | -             | 15-15-15-36 | 1.2 | ● ●   |
| Micron        | MTA8ATF51264AZ-2G1A2         | 4GB     | SS | Micron   | D9RG0         | 15-15-15-36 | -   | ● ●   |
| panram        | W4U2133PS-8G                 | 8GB     | SS | SK Hynix | DTCCH872HA2   | 16-16-16-36 | -   | ● ●   |
| SanMax        | SMD-4G28HP-21P               | 4GB     | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-37 | -   | ● ●   |
| SanMax        | SMD-8G28HP-21P               | 8GB     | DS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-37 | -   | ● ● ● |
| Silicon Power | SP004GBLFU213N01             | 4GB     | SS | Samsung  | K4A4G085WD    | 15-15-15-37 | -   | ● ●   |
| Silicon Power | SP008GBLFU213N01             | 8GB     | DS | Samsung  | K4A4G085WD    | 15-15-15-37 | -   | ● ●   |
| SK Hynix      | HMA41GU7AFR8N-TF             | 8GB     | DS | SK Hynix | H5AN4G8NAFRFC | 15-15-15-36 | -   | ●     |
| SK Hynix      | HMA451U7AFR8N-TF             | 4GB     | SS | SK Hynix | H5AN4G8NAFR   | 15-15-15-36 | -   | ● ●   |
| SK Hynix      | HMA82GU6MFR8N-TF             | 16GB    | DS | SK Hynix | H5AN8G8NMFRFC | 15-15-15-36 | -   | ● ●   |
| SK Hynix      | HMA82GU7MFR8N-TF             | 16GB    | DS | SK Hynix | H5AN8G8NMFR   | 15-15-15-36 | -   | ●     |
| Team          | TED416G2133C15BK             | 16GB    | DS | Micron   | T4D10248MT-24 | 15-15-15-36 | 1.2 | ●     |
| Team          | TED416G2133C1501             | 16GB    | DS | Micron   | T4D10248MT-24 | 15-15-15-36 | 1.2 | ●     |
| Team          | TED432G2133C15DC01           | 2x 16GB | DS | Micron   | T4D10248MT-24 | 15-15-15-36 | 1.2 | ●     |
| Team          | TPD416G2133HC1501            | 16GB    | DS | Micron   | T4D10248MT-24 | 15-15-15-36 | 1.2 | ●     |
| Team          | TPRD416G2133HC1501           | 16GB    | DS | Micron   | T4D10248MT-24 | 15-15-15-36 | 1.2 | ●     |
| Team          | TPD432G2133HC15DC01          | 2x 16GB | DS | Micron   | T4D10248MT-24 | 15-15-15-36 | 1.2 | ●     |
| Team          | TPRD432G2133HC15DC01         | 2x 16GB | DS | Micron   | T4D10248MT-24 | 15-15-15-36 | 1.2 | ●     |
| Team          | TED44GM2133C15ABK            | 4GB     | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-36 | 1.2 | ● ●   |
| Team          | TED44G2133C1501              | 4GB     | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-36 | 1.2 | ● ●   |
| Team          | TED48G2133C15DC01            | 2x 4GB  | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-36 | 1.2 | ● ●   |

|                |                        |        |    |          |               |             |     |   |   |
|----------------|------------------------|--------|----|----------|---------------|-------------|-----|---|---|
| <b>Team</b>    | TED416G2133C15QC01     | 4x 4GB | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-36 | 1.2 | ● | ● |
| <b>Team</b>    | TPD44G2133HC1501       | 4GB    | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-36 | 1.2 | ● | ● |
| <b>Team</b>    | TPRD44G2133HC1501      | 4GB    | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-36 | 1.2 | ● | ● |
| <b>Team</b>    | TPD48G2133HC15DC01     | 2x 4GB | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-36 | 1.2 | ● |   |
| <b>Team</b>    | TPRD48G2133HC15DC01    | 2x 4GB | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-36 | 1.2 | ● |   |
| <b>Team</b>    | TPD416G2133HC15QC01    | 4x 4GB | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-36 | 1.2 | ● | ● |
| <b>Team</b>    | TPRD416G2133HC15QC01   | 4x 4GB | SS | SK Hynix | H5AN4G8NMFRFC | 15-15-15-36 | 1.2 | ● | ● |
| <b>UMAX</b>    | 84G44G93MC-21OMCALGF15 | 4GB    | SS | Micron   | D9RGQ         | 15-15-15-36 | -   | ● | ● |
| <b>UMAX</b>    | 84G48G93MC-21OMCGNGF15 | 8GB    | DS | Micron   | D9RGQ         | 15-15-15-36 | -   | ● | ● |
| <b>V-color</b> | TC48G21S815-IMS        | 8GB    | SS | Micron   | -             | 15-15-15-36 | 1.2 | ● |   |

#### 8-DIMM

- **4 DIMM:** Supports 4 modules inserted into both the A1, B1, C1, and D1 slots as one set of DIMMs operating in a quad-channel memory configuration
- **8 DIMM:** Supports 8 modules inserted into all slots as two sets DIMMs operating in a quad-channel memory configuration

- Do not combine DIMMs from multiple kits—even ones of the same make and model. Mixing and matching DIMMs can result in failure to boot.
- Purchasing single DIMMs is not recommended because compatibility cannot be guaranteed. For the best results, please ensure all memory modules are of the same version or have the same date code (D/C) from the same vendor. Check with the memory vendor to get the correct memory modules.
- The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.
- The stability and compatibility of memory modules with XMP profiles that operate beyond the JEDEC memory standard are not guaranteed. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

## ZENITH EXTREME ALPHA

### DDR4 2400 Qualified Vendors List (QVL)

| Vendors | Part No.                          | Size    | SS/DS | Chip Brand | Chip NO.         | Timing      | Voltage | IM socket support (Option) |        |        |
|---------|-----------------------------------|---------|-------|------------|------------------|-------------|---------|----------------------------|--------|--------|
|         |                                   |         |       |            |                  |             |         | 2 DIMM                     | 4 DIMM | 8 DIMM |
| ADATA   | AD4U2400316G17                    | 16GB    | DS    | Nanya      | NT5AD1024M8A3-GZ | 17-17-17-39 | 1.2     | ●                          |        |        |
| ADATA   | AD4U2400W4G17                     | 4GB     | SS    | PSC        | -                | 17-17-17-39 | 1.2     | ●                          | ●      | ●      |
| ADATA   | AD4U2400W8G17                     | 8GB     | DS    | SK Hynix   | H5AN8G8NBJRUHC   | 17-17-17-39 | 1.2     | ●                          |        |        |
| ADATA   | AD4X240038G17                     | 8GB     | SS    | SpecTech   | PS023-093 TP     | 17-17-17-39 | 1.2     | ●                          |        |        |
| ADATA   | AD4X2400W4G17                     | 4GB     | SS    | SK Hynix   | H5AN4G8NBJRUHC   | 17-17-17-39 | 1.2     | ●                          | ●      |        |
| Antec   | AMD4UZ124001508G-3S               | 8GB     | SS    | Samsung    | K4A8G085WBBCPB   | 15-15-15-39 | 1.2     | ●                          | ●      |        |
| Antec   | AMD4UZ124001608G-5S               | 8GB     | SS    | Micron     | -                | 16-16-16-36 | 1.2     | ●                          | ●      |        |
| Apacer  | 78.C1GMS.4010B                    | 4x 8GB  | DS    | Samsung    | K4A4G085WD       | 17-17-17-39 | -       | ●                          | ●      |        |
| Apacer  | AHU08GGB24CDU7G(XMP)              | 8GB     | SS    | -          | -                | 16-16-16-36 | 1.2     | ●                          | ●      |        |
| Apacer  | AU04GGB24CETBGH                   | 4GB     | SS    | Micron     | AM6F67080THSB2   | 17-17-17-39 | 1.2     | ●                          | ●      |        |
| Apacer  | AU04GGB24CEWBGH                   | 4GB     | DS    | SK Hynix   | H5AN4G6NAFRUHC   | 17-17-17-39 | -       | ●                          | ●      |        |
| Apacer  | AU08GGB24CEYBGH                   | 8GB     | SS    | Apacer     | AM6F63080HJMB2   | 17-17-17-39 | -       | ●                          | ●      |        |
| Apacer  | EL.08G2T.GFM                      | 8GB     | SS    | SK Hynix   | AM6F6308MHHSB2   | 17-17-17-39 | -       | ●                          | ●      |        |
| Asgard  | VML41UE-MIC1U22Q1                 | 2GB     | SS    | Micron     | -                | 17-17-17-39 | 1.2     | ●                          | ●      |        |
| CORSAIR | CMK128GX4M8A2400C14(Ver3.31)(XMP) | 8x 16GB | DS    | Micron     | -                | 15-16-16-31 | 1.2     | ●                          | ●      | ●      |
| CORSAIR | CMK16GX4M2A2400C16(Ver3.31)(XMP)  | 2x 8GB  | DS    | Micron     | -                | 15-15-15-36 | 1.2     | ●                          |        |        |
| CORSAIR | CMK16GX4M2D2400C14(Ver4.21)(XMP)  | 2x 8GB  | DS    | Samsung    | -                | 14-16-16-31 | 1.2     | ●                          |        |        |
| CORSAIR | CMK16GX4M2Z2400C16(Ver3.31)       | 2x 8GB  | SS    | Micron     | -                | 16-16-16-39 | 1.2     | ●                          |        |        |
| CORSAIR | CMK16GX4M4A2400C14(Ver4.23)(XMP)  | 4x 4GB  | SS    | -          | -                | 14-16-16-31 | 1.2     | ●                          | ●      |        |
| CORSAIR | CMK16GX4M4A2400C14(Ver5.20)(XMP)  | 4x 4GB  | SS    | SK Hynix   | -                | 14-16-16-31 | 1.2     | ●                          | ●      |        |
| CORSAIR | CMK32GX4M4A2400C14(Ver3.31)(XMP)  | 4x 8GB  | SS    | Micron     | -                | 14-16-16-31 | 1.2     | ●                          | ●      |        |
| CORSAIR | CMK32GX4M4A2400C14(Ver4.23)(XMP)  | 4x 8GB  | DS    | -          | -                | 14-16-16-31 | 1.2     | ●                          | ●      |        |
| CORSAIR | CMK32GX4M4A2400C16(Ver3.31)(XMP)  | 4x 8GB  | SS    | Micron     | -                | 15-15-15-36 | 1.2     | ●                          | ●      |        |
| CORSAIR | CMK64GX4M4A2400C14(Ver3.31)(XMP)  | 4x 16GB | DS    | Micron     | -                | 15-15-15-36 | 1.2     | ●                          | ●      |        |
| CORSAIR | CMK64GX4M4A2400C14(Ver4.31)(XMP)  | 4x 16GB | DS    | Samsung    | -                | 15-15-15-36 | 1.2     | ●                          | ●      |        |
| CORSAIR | CMK64GX4M4A2400C16(Ver3.32)(XMP)  | 4x 16GB | DS    | Micron     | -                | 16-16-16-39 | 1.2     | ●                          |        |        |
| CORSAIR | CMK8GX4M2D2400C14(Ver3.11)(XMP)   | 2x 4GB  | DS    | Micron     | -                | 14-16-16-31 | 1.2     | ●                          |        |        |
| crucial | BLS16G4D240FSB.16FBD(XMP)         | 16GB    | DS    | Micron     | -                | 16-16-16-39 | 1.2     | ●                          | ●      |        |
| crucial | BLS4G4D240FSB.8FBD(XMP)           | 4GB     | SS    | Micron     | -                | 16-16-16-39 | 1.2     | ●                          | ●      |        |
| crucial | BLS8G4D240FSBK.8FBD(XMP)          | 8GB     | SS    | Micron     | -                | 16-16-16-39 | 1.2     | ●                          | ●      |        |
| crucial | CT16G4DFD824A.C16FDR1             | 16GB    | DS    | Micron     | C9BGV            | 17-17-17-39 | 1.2     | ●                          |        |        |
| G.SKILL | F4-2400C14Q2-128GRK(XMP)          | 8x 16GB | DS    | Samsung    | -                | 14-14-14-34 | 1.2     | ●                          | ●      | ●      |

|         |                           |         |    |          |                  |             |      |   |   |   |
|---------|---------------------------|---------|----|----------|------------------|-------------|------|---|---|---|
| G.SKILL | F4-2400C14Q2-128GRK(XMP)  | 8x 16GB | DS | Samsung  | -                | 15-15-15-36 | 1.2  | ● | ● | ● |
| G.SKILL | F4-2400C14Q2-128GRK(XMP)  | 8x 16GB | DS | SK Hynix | -                | 14-14-14-34 | 1.2  | ● | ● | ● |
| G.SKILL | F4-2400C15Q-16GRR(XMP)    | 4x 4GB  | SS | Micron   | -                | 15-15-15-35 | 1.2  | ● | ● |   |
| G.SKILL | F4-2400C15Q2-128GRK(XMP)  | 8x 16GB | DS | Samsung  | -                | 15-15-15-35 | 1.2  | ● | ● |   |
| G.SKILL | F4-2400C15Q2-128GVK(XMP)  | 8x 16GB | DS | SK Hynix | -                | 15-15-15-36 | 1.2  | ● |   |   |
| G.SKILL | F4-2400C15Q2-64GRK(XMP)   | 8x 8GB  | DS | Samsung  | -                | 15-15-15-35 | 1.2  | ● | ● |   |
| G.SKILL | F4-2400C15Q-32GRR(XMP)    | 4x 8GB  | DS | Micron   | -                | 15-15-15-35 | 1.2  | ● |   |   |
| GALAX   | Gamer Aurira Vision (XMP) | 8GB     | SS | Micron   | -                | 17-16-16-36 | 1.2  | ● | ● |   |
| GelL    | GASB416GB2400C16QC(XMP)   | 4GB     | SS | Micron   | -                | 16-16-16-36 | 1.2  | ● | ● |   |
| GelL    | GASB432GB2400C16QC(XMP)   | 8GB     | SS | Micron   | -                | 16-16-16-36 | 1.2  | ● | ● |   |
| GelL    | GEL416GB2400C17SC         | 16GB    | DS | GelL     | CG4L1GM88BA093AH | 17-17-17-39 | -    | ● | ● |   |
| GelL    | GEL48GB2400C17SC          | 8GB     | SS | GelL     | GEL48GB2400C17SC | 17-17-17-39 | -    | ● | ● |   |
| GelL    | GFR416GB2400C16S(XMP)     | 16GB    | SS | Micron   | -                | 16-16-16-36 | 1.2  | ● |   |   |
| GelL    | GFR432GB2400C16D(XMP)     | 16GB    | SS | Micron   | -                | 16-16-16-36 | 1.2  | ● | ● |   |
| GelL    | GLR464GB2400C14QC(XMP)    | 4x 16GB | DS | Micron   | -                | 14-14-14-35 | 1.2  | ● | ● |   |
| GelL    | GLS48GB2400C16DC(XMP)     | 4GB     | SS | Micron   | -                | 16-16-16-36 | 1.2  | ● |   |   |
| GelL    | GPR416GB2400C15QC(XMP)    | 4x 4GB  | SS | -        | -                | 15-15-15-35 | 1.2  | ● | ● |   |
| GelL    | GPR432GB2400C15QC(XMP)    | 4x 8GB  | DS | SK Hynix | -                | 15-15-15-35 | 1.2  | ● | ● |   |
| GelL    | GPR432GB2400C16QC(XMP)    | 4x 8GB  | SS | Micron   | -                | 16-16-16-36 | 1.2  | ● | ● |   |
| GLOWAY  | TYP4U2400D17021C          | 2GB     | SS | Micron   | -                | 17-17-17-39 | 1.2  | ● | ● |   |
| Hyper X | HX424C12PB2K4/16(XMP)     | 4x 4GB  | SS | SK Hynix | -                | 12-13-13-35 | 1.2  | ● | ● |   |
| Hyper X | HX424C12SB2/4(XMP)        | 4GB     | SS | SK Hynix | -                | 15-15-15-36 | 1.35 | ● | ● |   |
| Hyper X | HX424C12SB2/8(XMP)        | 8GB     | DS | SK Hynix | -                | 15-15-15-36 | 1.35 | ● | ● |   |
| Hyper X | HX424C12SB2K2/16(XMP)     | 2x 8GB  | DS | SK Hynix | -                | 15-15-15-36 | 1.35 | ● |   |   |
| Hyper X | HX424C12SB2K2/16(XMP)     | 2x 8GB  | DS | Nanya    | NT5AD512M8B1-GN  | 15-15-15-36 | 1.35 | ● |   |   |
| Hyper X | HX424C12SB2K4/16(XMP)     | 4x 4GB  | SS | SK Hynix | -                | 15-15-15-36 | 1.35 | ● | ● |   |
| Hyper X | HX424C12SB2K4/32(XMP)     | 4x 8GB  | DS | SK Hynix | -                | 15-15-15-36 | 1.35 | ● | ● |   |
| Hyper X | HX424C12SB2K4/32(XMP)     | 4x 8GB  | DS | Nanya    | NT5AD512M8B1-GN  | 15-15-15-36 | 1.35 | ● |   |   |
| Hyper X | HX424C15B2K4/32(XMP)      | 4x 8GB  | SS | Micron   | -                | 15-15-15-35 | 1.2  | ● | ● |   |
| Hyper X | HX424C15FB/4              | 4GB     | SS | SK Hynix | -                | 15-15-15-35 | 1.2  | ● | ● |   |
| Hyper X | HX424C15FB/8(XMP)         | 8GB     | SS | SK Hynix | -                | 14-14-14-32 | 1.2  | ● |   |   |
| Hyper X | HX424C15FBK2/8            | 2x 4GB  | SS | SK Hynix | -                | 15-15-15-35 | 1.2  | ● |   |   |
| Hyper X | HX424C15FBK4/16           | 4x 4GB  | SS | SK Hynix | -                | 15-15-15-35 | 1.2  | ● | ● |   |
| Hyper X | HX424C15FBK4/16           | 4x4GB   | SS | SK Hynix | -                | 14-14-14-32 | 1.2  | ● | ● |   |
| Hyper X | HX424C15FBK4/32           | 4x 8GB  | DS | SK Hynix | -                | 15-15-15-35 | 1.2  | ● |   |   |
| Hyper X | HX424C15FBK4/64           | 4x 16GB | DS | Micron   | -                | 15-15-15-35 | 1.2  | ● | ● |   |
| J&A     | AD4U24001716-16M          | 16GB    | DS | SK Hynix | -                | 17-17-17-39 | -    | ● | ● |   |

|          |                         |        |    |          |                |             |     |   |   |
|----------|-------------------------|--------|----|----------|----------------|-------------|-----|---|---|
| J&A      | JAD4U24001708-04M       | 4GB    | SS | SK Hynix | -              | 17-17-17-39 | -   | ● | ● |
| J&A      | JAD4U24001708-08M       | 8GB    | SS | -        | -              | 17-17-17-39 | -   | ● | ● |
| KINGMAX  | GLLF62F-DAKZIG-CLBU     | 4GB    | SS | KINGMAX  | KGDACZ-CU      | 17-17-17-39 | -   | ● | ● |
| KINGMAX  | GLLF62F-DAKZIG-CLBU     | 4GB    | SS | KINGMAX  | PS029-093-TP   | 17-17-17-39 | -   | ● | ● |
| KINGMAX  | GLLH22F-18KIIA-CFBU2    | 16GB   | DS | KINGMAX  | PS0223-093-TP  | 17-17-17-39 | -   | ● | ● |
| Kingston | KVR24N17D8/16           | 16GB   | DS | Micron   | D9SRJ          | 17-17-17-39 | 1.2 | ● | ● |
| Kingston | KVR24N17D8/8            | 8GB    | DS | Micron   | D9TGG          | 17-17-17-39 | 1.2 | ● |   |
| Kingston | KVR24N17S6/4            | 4GB    | SS | Micron   | -              | 17-17-17-39 | 1.2 | ● | ● |
| Kingston | KVR24N17S8/4            | 4GB    | SS | Micron   | D9TGG          | 17-17-17-39 | 1.2 | ● | ● |
| Kingston | KVR24N17S8/8            | 8GB    | SS | Micron   | D9TBH          | 17-17-17-39 | 1.2 | ● | ● |
| Klevv    | IM44GU48N24-FFFHAB(XMP) | 4GB    | SS | SK Hynix | -              | 15-15-15-35 | 1.2 | ● | ● |
| Klevv    | IM44GU48N24-FFFHAZ(XMP) | 4GB    | SS | SK Hynix | -              | 15-15-15-35 | 1.2 | ● |   |
| Klevv    | IM48GU88N24-FFFHMB(XMP) | 8GB    | SS | SK Hynix | -              | 15-15-15-35 | 1.2 | ● |   |
| Klevv    | IM48GU88N24-FFFHMZ(XMP) | 8GB    | SS | SK Hynix | -              | 15-15-15-35 | 1.2 | ● |   |
| Klevv    | IM4AGU88N24-FFFHMB(XMP) | 16GB   | DS | SK Hynix | -              | 15-15-15-35 | 1.2 | ● |   |
| Klevv    | IM4AGU88N24-FFFHMZ(XMP) | 16GB   | DS | SK Hynix | -              | 15-15-15-35 | 1.2 | ● |   |
| Micron   | MTA16ATF2G64AZ-2G3B1    | 16GB   | DS | Micron   | D9TBH          | 17-17-17-39 | 1.2 | ● | ● |
| panram   | W4U2400PS-8G            | 8GB    | SS | SK Hynix | DTCCCH912G2    | 14-14-14-31 | -   | ● | ● |
| PATRIOT  | PSD416G24002            | 16GB   | DS | Samsung  | K4A8G085WB     | 17-17-17-39 | 1.2 | ● |   |
| PATRIOT  | PSD44G240081            | 4GB    | SS | Samsung  | K4A4G085WE     | 16-16-16-39 | 1.2 | ● | ● |
| PATRIOT  | PSD48G240081            | 8GB    | SS | Samsung  | K4A8G085WB     | 17-17-17-39 | 1.2 | ● | ● |
| PATRIOT  | PSD48G240082            | 8GB    | DS | -        | N/A            | 17-17-17-39 | 1.2 | ● |   |
| PATRIOT  | PVE416G240C5KRD(XMP)    | 2x 8GB | SS | -        | -              | 15-15-15-35 | -   | ● |   |
| PATRIOT  | PVE48G240C5KRD(XMP)     | 2x 4GB | SS | -        | -              | 15-15-15-35 | -   | ● |   |
| SK Hynix | HMA81GU6AFR8N-UH        | 8GB    | SS | SK Hynix | H5AN8GBNAFRUHC | 17-17-17-39 | -   | ● | ● |
| SK Hynix | HMA851U6AFR6N-UH        | 4GB    | SS | SK Hynix | H5AN8G6NAFRUHC | 17-17-17-39 | -   | ● | ● |
| Team     | TCD44G2400C14BK(XMP)    | 4GB    | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● |   |
| Team     | TDRED44G2400HC1401      | 4GB    | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● | ● |
| Team     | TDGED44G2400HC1401      | 4GB    | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● | ● |
| Team     | TDRED48G2400HC14DC01    | 2x 4GB | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● |   |
| Team     | TDGED48G2400HC14DC01    | 2x 4GB | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● |   |
| Team     | TDRED416G2400HC14QC01   | 4x 4GB | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● | ● |
| Team     | TDGED416G2400HC14QC01   | 4x 4GB | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● | ● |
| Team     | TLRED44G2400HC1401      | 4GB    | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● | ● |
| Team     | TLGD44G2400HC1401       | 4GB    | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● | ● |
| Team     | TLRED48G2400HC14DC01    | 2x 4GB | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● |   |
| Team     | TLGD48G2400HC14DC01     | 2x 4GB | SS | SK Hynix | H5AN4GBNAFRFC  | 14-16-16-31 | 1.2 | ● |   |

|         |                             |         |    |          |                |             |     |   |   |
|---------|-----------------------------|---------|----|----------|----------------|-------------|-----|---|---|
| Team    | TLRED416G2400HC14QC01       | 4x 4GB  | SS | SK Hynix | H5AN4GBNAFRTFC | 14-16-16-31 | 1.2 | ● | ● |
| Team    | TLGD416G2400HC14QC01        | 4x 4GB  | SS | SK Hynix | H5AN4GBNAFRTFC | 14-16-16-31 | 1.2 | ● | ● |
| Team    | TCD48G2400C14BK(XMP)        | 8GB     | SS | -        | T4D10248MT-24  | 15-16-16-31 | 1.2 | ● | ● |
| Team    | TED416G2400C16BK            | 16GB    | DS | Micron   | T4D10248MT-24  | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TED416G2400C1601            | 16GB    | DS | Micron   | T4D10248MT-24  | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TED432G2400C16DC01          | 2x 16GB | DS | Micron   | T4D10248MT-24  | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TPD416G2400HC1601           | 16GB    | DS | Micron   | T4D10248MT-24  | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TPRD416G2400HC1601          | 16GB    | DS | Micron   | T4D10248MT-24  | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TPD432G2400HC16DC01         | 2x 16GB | DS | Micron   | T4D10248MT-24  | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TPRD432G2400HC16DC01        | 2x 16GB | DS | Micron   | T4D10248MT-24  | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TED48G2400C16BK             | 8GB     | DS | SK Hynix | T4D5128HT-24   | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TED48G2400C1601             | 8GB     | DS | SK Hynix | T4D5128HT-24   | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TED416G2400C16DC01          | 2x 8GB  | DS | SK Hynix | T4D5128HT-24   | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TED432G2400C16QC01          | 4x 8GB  | DS | SK Hynix | T4D5128HT-24   | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TPD48G2400HC1601            | 8GB     | DS | SK Hynix | T4D5128HT-24   | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TPRD48G2400HC1601           | 8GB     | DS | SK Hynix | T4D5128HT-24   | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TPD416G2400HC16DC01         | 2x 8GB  | DS | SK Hynix | T4D5128HT-24   | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TPRD416G2400HC16DC01        | 2x 8GB  | DS | SK Hynix | T4D5128HT-24   | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TPD432G2400HC16QC01         | 4x 8GB  | DS | SK Hynix | T4D5128HT-24   | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TPRD432G2400HC16QC01        | 4x 8GB  | DS | SK Hynix | T4D5128HT-24   | 16-16-16-39 | 1.2 | ● | ● |
| Team    | TF3D48G2400HC15BBK(XMP)     | 8GB     | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| Team    | TF3D48G2400HC15B01          | 8GB     | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| Team    | TF3D416G2400HC15BDC01       | 2x 8GB  | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| Team    | TF3D48G2400HC15B01          | 8GB     | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| Team    | TF3D416G2400HC15BDC01       | 2x 8GB  | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| Team    | TF4D48G2400HC15BBK(XMP)     | 8GB     | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| Team    | TF4D48G2400HC15B01          | 8GB     | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| Team    | TF4D416G2400HC15BDC01       | 2x 8GB  | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| Team    | TF3D48G2400HC15B01          | 8GB     | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| Team    | TF3D416G2400HC15BDC01       | 2x 8GB  | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| Team    | TLTYD416G2400HC14DC01(XMP)  | 2x 8GB  | SS | SK Hynix | -              | 14-16-16-31 | 1.2 | ● | ● |
| Team    | TLTYD432G2400HC15BDC01(XMP) | 2x 16GB | SS | SK Hynix | -              | 15-17-17-35 | 1.2 | ● | ● |
| V-color | TD4G8C17-UH                 | 4GB     | SS | SK Hynix | DW3J0460HM     | 15-15-15-36 | 1.2 | ● | ● |

## ZENITH EXTREME ALPHA

### DDR4 2666 Qualified Vendors List (QVL)

| Vendors  | Part No.                          | Size    | SS/DS | Chip Brand | Chip NO.         | Timing      | Voltage | DIMM socket support (Option) |        |        |
|----------|-----------------------------------|---------|-------|------------|------------------|-------------|---------|------------------------------|--------|--------|
|          |                                   |         |       |            |                  |             |         | 2 DIMM                       | 4 DIMM | 8 DIMM |
| ADATA    | AD4U2666316G19-B                  | 16GB    | DS    | SpecTek    | -                | 19-19-19-43 | 1.2     | ●                            | ●      |        |
| ADATA    | AD4U266638G19                     | 8GB     | SS    | Nanya      | NT5AD1024MBA3-GZ | 19-19-19-43 | 1.2     | ●                            | ●      |        |
| ADATA    | AD4U266638G19-B                   | 8GB     | SS    | SpecTek    | -                | 19-19-19-43 | 1.2     | ●                            | ●      |        |
| ADATA    | AD4U2666W4G19                     | 4GB     | SS    | SpecTek    | -                | 19-19-19-43 | 1.2     | ●                            | ●      |        |
| ADATA    | AX4U266638G16-BRS(XMP)            | 8GB     | SS    | SK Hynix   | -                | 16-16-16-39 | 1.2     | ●                            | ●      |        |
| ADATA    | AX4U266638G16-BRS(XMP)            | 8GB     | SS    | Nanya      | -                | 16-16-16-39 | 1.2     | ●                            | ●      |        |
| ADATA    | AX4U266638G16-BRZ(XMP)            | 8GB     | SS    | Nanya      | -                | 16-16-16-39 | 1.2     | ●                            | ●      |        |
| ADATA    | AX4U266638G16-DRZ(XMP)            | 2x 8GB  | SS    | SK Hynix   | -                | 16-16-16-39 | 1.2     | ●                            |        |        |
| ADATA    | AX4U2666W4G16-BRZ(XMP)            | 4GB     | SS    | SK Hynix   | -                | 16-16-16-39 | 1.2     | ●                            |        |        |
| ANACOMDA | ANA826D400R                       | 8GB     | SS    | ANACOMDA   | X018MP0DM5A      | N/A         | 1.2     | ●                            | ●      |        |
| Apacer   | AHU08GGB26CDU7G(XMP)              | 8GB     | SS    | SK Hynix   | -                | 16-16-16-36 | 1.2     | ●                            | ●      |        |
| Apacer   | AU04GGB26CQWBGH                   | 4GB     | DS    | Micron     | PPE05-075E       | 19-19-19-43 | 1.2     | ●                            | ●      |        |
| Apacer   | AU08GGB26CQYBGH                   | 8GB     | SS    | Apacer     | AM6F63080HJMF5   | 19-19-19-43 | -       | ●                            | ●      |        |
| Apacer   | AU16GGB26CQYBGH                   | 16GB    | DS    | Apacer     | AM6F6308BRHSF5   | 19-19-19-43 | 1.2     | ●                            |        |        |
| CORSAIR  | CMD128GX4M8A2666C15(Ver4.31)(XMP) | 8x 16GB | DS    | Samsung    | -                | 15-15-15-36 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMD16GX4M2A2666C15(Ver4.23)(XMP)  | 2x 8GB  | DS    | -          | -                | 15-17-17-35 | 1.2     | ●                            |        |        |
| CORSAIR  | CMD16GX4M4A2666C15(Ver4.23)(XMP)  | 4x 4GB  | SS    | -          | -                | 15-17-17-35 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMD16GX4M4A2666C16(Ver4.23)(XMP)  | 4x 4GB  | SS    | -          | -                | 16-18-18-35 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMD16GX4M4A2666C16(Ver5.29)(XMP)  | 4x 4GB  | SS    | -          | -                | 16-18-18-35 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMD32GX4M4A2666C15(Ver4.23)(XMP)  | 4x 8GB  | DS    | -          | -                | 15-17-17-35 | 1.2     | ●                            |        |        |
| CORSAIR  | CMD32GX4M4A2666C15(Ver5.29)(XMP)  | 4x 8GB  | DS    | -          | -                | 15-17-17-35 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMD32GX4M4A2666C16(Ver4.23)(XMP)  | 4x 8GB  | DS    | -          | -                | 16-18-18-35 | 1.2     | ●                            |        |        |
| CORSAIR  | CMD64GX4M8A2666C15(Ver4.24)(XMP)  | 8x 8GB  | DS    | Samsung    | -                | 15-15-15-36 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMD64GX4M8A2666C15(Ver5.32)(XMP)  | 8x 8GB  | SS    | Hynix      | -                | 15-17-17-35 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMD8GX4M2A2666C15(Ver4.23)(XMP)   | 2x 4GB  | DS    | -          | -                | 15-17-17-35 | 1.2     | ●                            |        |        |
| CORSAIR  | CMD8GX4M2A2666C15(Ver4.23)(XMP)   | 2x 4GB  | DS    | -          | -                | 15-17-17-35 | 1.2     | ●                            |        |        |
| CORSAIR  | CMK128GX4M8A2666C16(Ver3.31)(XMP) | 8x 16GB | DS    | Micron     | -                | 16-18-18-35 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMK128GX4M8A2666C16(Ver5.39)(XMP) | 8x 16GB | DS    | SK Hynix   | -                | 16-18-18-35 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMK16GX4M2A2666C16(Ver5.30)(XMP)  | 2x 8GB  | SS    | SK Hynix   | -                | 16-18-18-35 | 1.2     | ●                            |        |        |
| CORSAIR  | CMK16GX4M2D2666C16(Ver4.21)(XMP)  | 2x 8GB  | DS    | Samsung    | -                | 16-18-18-35 | 1.2     | ●                            |        |        |
| CORSAIR  | CMK16GX4M4A2666C16(Ver3.21)(XMP)  | 4x 4GB  | SS    | Micron     | -                | 16-18-18-35 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMK16GX4M4A2666C16(Ver3.21)(XMP)  | 4x 4GB  | SS    | Micron     | -                | 16-18-18-35 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMK16GX4M4A2666C16(Ver4.23)(XMP)  | 4x 4GB  | SS    | -          | -                | 16-18-18-35 | 1.2     | ●                            | ●      |        |
| CORSAIR  | CMK32GX4M2A2666C16(Ver4.31)(XMP)  | 2x 16GB | DS    | -          | -                | 16-18-18-35 | 1.2     | ●                            |        |        |

|         |                                   |         |    |          |       |             |      |       |
|---------|-----------------------------------|---------|----|----------|-------|-------------|------|-------|
| CORSAIR | CMK32GX4M2A2666C16R(Ver3.31)(XMP) | 2x 16GB | DS | Micron   | -     | 15-15-15-36 | 1.2  | ●     |
| CORSAIR | CMK32GX4M4A2666C15(Ver4.23)(XMP)  | 4x 8GB  | DS | -        | -     | 15-17-17-35 | 1.2  | ● ●   |
| CORSAIR | CMK32GX4M4A2666C16(Ver3.20)(XMP)  | 4x 8GB  | DS | Micron   | -     | 15-15-15-36 | 1.2  | ● ●   |
| CORSAIR | CMK32GX4M4A2666C16(Ver3.21)(XMP)  | 4x 8GB  | DS | Micron   | -     | 16-18-18-35 | 1.2  | ● ●   |
| CORSAIR | CMK32GX4M4A2666C16(Ver5.30)(XMP)  | 4x 8GB  | SS | SK Hynix | -     | 16-18-18-35 | 1.2  | ● ●   |
| CORSAIR | CMK32GX4M4A2666C16(Ver5.30)(XMP)  | 4x 8GB  | SS | SK Hynix | -     | 16-18-18-35 | 1.2  | ● ●   |
| CORSAIR | CMK32GX4M4A2666C16(Ver5.30)(XMP)  | 4x 8GB  | SS | SK Hynix | -     | 16-18-18-35 | 1.2  | ● ●   |
| CORSAIR | CMK32GX4M4A2666C16(Ver5.39)(XMP)  | 4x 8GB  | SS | SK Hynix | -     | 16-18-18-35 | 1.2  | ●     |
| CORSAIR | CMK32GX4M4A2666C16R(Ver4.23)(XMP) | 4x 8GB  | DS | -        | -     | 16-18-18-35 | 1.2  | ● ●   |
| CORSAIR | CMK64GX4M4A2666C16(Ver3.31)(XMP)  | 4x 16GB | DS | Micron   | -     | 16-18-18-35 | 1.2  | ● ●   |
| CORSAIR | CMK64GX4M4A2666C16(Ver4.31)(XMP)  | 4x 16GB | DS | Samsung  | -     | 15-15-15-36 | 1.2  | ● ●   |
| CORSAIR | CMK8GX2M2D2666C16(Ver3.21)(XMP)   | 2x 4GB  | SS | Micron   | -     | 16-18-18-35 | 1.2  | ●     |
| CORSAIR | CMK8GX4M2D2666C16(Ver3.11)(XMP)   | 2x 4GB  | DS | Micron   | -     | 16-18-18-35 | 1.2  | ●     |
| CORSAIR | CMR16GX4M2A2666C16(Ver5.30)(XMP)  | 2x 8GB  | SS | SK Hynix | -     | 16-18-18-35 | 1.2  | ●     |
| CORSAIR | CMR64GX4M8A2666C16(Ver5.30)(XMP)  | 8x 8GB  | SS | SK Hynix | -     | 16-18-18-35 | 1.2  | ● ● ● |
| CORSAIR | CMU32GX4M4A2666C16(Ver5.30)(XMP)  | 4x 8GB  | SS | SK Hynix | -     | 16-18-18-35 | 1.2  | ● ● ● |
| CORSAIR | CMV16GX4M1A2666C18                | 16GB    | DS | Micron   | -     | 18-18-18-43 | 1.2  | ●     |
| CORSAIR | CMV4GX4M1A2666C18                 | 4GB     | SS | Micron   | -     | 18-18-18-43 | 1.2  | ● ●   |
| CORSAIR | CMV8GX4M1A2666C18                 | 8GB     | SS | Micron   | -     | 18-18-18-43 | 1.2  | ● ●   |
| crucial | BLE4G4D26AFAE.8FAD (XMP)          | 4GB     | SS | Micron   | -     | 16-17-17-36 | 1.2  | ● ●   |
| crucial | BLE8G4D26AFAE.16FAD(XMP)          | 8GB     | DS | Micron   | -     | 16-17-17-36 | 1.2  | ●     |
| crucial | BLS16G4D26BFSC.16FBD(XMP)         | 16GB    | DS | Micron   | -     | 16-18-18-38 | 1.2  | ●     |
| crucial | BLS4G4D26BFSC.8FBR2(XMP)          | 4GB     | SS | Micron   | -     | 16-18-18-38 | 1.2  | ● ●   |
| crucial | BLS8G4D26BFSC.16FBR2(XMP)         | 8GB     | DS | Micron   | -     | 16-18-18-38 | 1.2  | ● ●   |
| crucial | BLS8G4D26BFSC.K.8FBR(XMP)         | 8GB     | SS | Micron   | -     | 16-18-18-38 | 1.2  | ● ●   |
| crucial | BLT4G4D26AFTA.8FADG(XMP)          | 4GB     | SS | Micron   | -     | 16-16-16-39 | 1.2  | ● ●   |
| crucial | BLT4G4D26AFTA.8FADG(XMP)          | 4x4GB   | SS | Micron   | -     | 16-17-17-36 | 1.2  | ● ●   |
| crucial | BLT8G4D26AFTA.16FAD(XMP)          | 4x 8GB  | DS | Micron   | -     | 16-17-17-36 | 1.2  | ● ●   |
| crucial | BLT8G4D26AFTA.16FAD(XMP)          | 8GB     | DS | Micron   | -     | 16-16-16-39 | 1.2  | ● ●   |
| Crucial | CT16G4DFD8266.M16FE               | 16GB    | DS | Micron   | D9VPP | 19-19-19-43 | 1.2  | ● ●   |
| crucial | CT8G4DFS8266.8FE1                 | 8GB     | SS | Micron   | -     | 19-19-19-43 | 1.2  | ● ●   |
| G.SKILL | F4-2666C15Q-16GRR(XMP)            | 4x 4GB  | SS | SK Hynix | -     | 15-15-15-35 | 1.2  | ● ●   |
| G.SKILL | F4-2666C15Q-32GRR(XMP)            | 4x 8GB  | DS | SK Hynix | -     | 15-15-15-35 | 1.2  | ● ●   |
| G.SKILL | F4-2666C16Q2-128GVK(XMP)          | 8x 16GB | DS | SK Hynix | -     | 16-16-16-36 | 1.2  | ● ●   |
| GelL    | GREXR432GB2666C16QC(XMP)          | 4x 8GB  | SS | Micron   | -     | 16-18-18-36 | 1.35 | ● ●   |
| GelL    | GREXR464GB2666C16QC(XMP)          | 4x 16GB | DS | Micron   | -     | 16-18-18-36 | 1.35 | ● ●   |
| Hyper X | HX426C13PB3/16(XMP)               | 16GB    | DS | SK Hynix | -     | 13-15-15-35 | 1.35 | ●     |
| Hyper X | HX426C13PB3K2/32(XMP)             | 2x 16GB | DS | SK Hynix | -     | 13-15-15-35 | 1.35 | ●     |

|          |                         |         |    |          |                 |             |      |     |
|----------|-------------------------|---------|----|----------|-----------------|-------------|------|-----|
| Hyper X  | HX426C13PB3K4/64(XMP)   | 4x 16GB | DS | SK Hynix | -               | 13-15-15-35 | 1.35 | •   |
| Hyper X  | HX426C13SB2/4(XMP)      | 4GB     | SS | SK Hynix | -               | 15-15-15-36 | 1.35 | •   |
| Hyper X  | HX426C13SB2K2/16(XMP)   | 2x 8GB  | DS | Nanya    | NT5AD512M8B1-GN | 15-15-15-36 | 1.35 | •   |
| Hyper X  | HX426C13SB2K2/8(XMP)    | 2x 4GB  | SS | SK Hynix | -               | 15-15-15-36 | 1.35 | •   |
| Hyper X  | HX426C13SB2K4/16(XMP)   | 4x 4GB  | SS | SK Hynix | -               | 15-15-15-36 | 1.35 | •   |
| Hyper X  | HX426C13SB2K4/32(XMP)   | 4x 8GB  | DS | Nanya    | NT5AD512M8B1-GN | 15-15-15-36 | 1.35 | • • |
| Hyper X  | HX426C15FB/4            | 4GB     | SS | SK Hynix | -               | 15-17-17-35 | 1.2  | • • |
| Hyper X  | HX426C15FB/4            | 4GB     | SS | Micron   | -               | 15-17-17-35 | 1.2  | • • |
| Hyper X  | HX426C15FB/8            | 8GB     | DS | SK Hynix | -               | 15-17-17-35 | 1.2  | •   |
| Hyper X  | HX426C15FB/8            | 8GB     | DS | Micron   | -               | 15-17-17-35 | 1.2  | •   |
| Hyper X  | HX426C15FBK2/16         | 2x 8GB  | DS | SK Hynix | -               | 15-15-17-35 | 1.2  | •   |
| Hyper X  | HX426C15FBK2/16         | 2x 8GB  | DS | SK Hynix | -               | 15-17-17-35 | 1.2  | •   |
| Hyper X  | HX426C15FBK2/16         | 2x 8GB  | DS | Micron   | -               | 15-17-17-35 | 1.2  | •   |
| Hyper X  | HX426C15FBK2/8          | 2x 4GB  | SS | SK Hynix | -               | 15-17-17-35 | 1.2  | •   |
| Hyper X  | HX426C15FBK2/8          | 2x 4GB  | SS | Micron   | -               | 15-17-17-35 | 1.2  | •   |
| Hyper X  | HX426C15FBK4/16         | 4x 4GB  | SS | SK Hynix | -               | 15-17-17-35 | 1.2  | • • |
| Hyper X  | HX426C15FBK4/16         | 4x 4GB  | SS | SK Hynix | -               | 15-17-17-35 | 1.2  | • • |
| Hyper X  | HX426C15FBK4/16         | 4x 4GB  | SS | Micron   | -               | 15-17-17-35 | 1.2  | • • |
| Hyper X  | HX426C15FBK4/32         | 4x 8GB  | DS | SK Hynix | -               | 15-15-17-35 | 1.2  | • • |
| Hyper X  | HX426C15FBK4/32         | 4x 8GB  | DS | SK Hynix | -               | 15-17-17-35 | 1.2  | •   |
| Hyper X  | HX426C15FBK4/32         | 4x 8GB  | DS | Micron   | -               | 15-17-17-35 | 1.2  | •   |
| Hyper X  | HX426C15SBK4/64(XMP)    | 4x 16GB | DS | SK Hynix | -               | 15-15-15-35 | 1.2  | •   |
| Hyper X  | HX426C16FB/16           | 16GB    | DS | SK Hynix | -               | 16-18-18-39 | 1.2  | • • |
| Hyper X  | HX426C16FB2/8(XMP)      | 8GB     | SS | SK Hynix | -               | 16-18-18-39 | 1.2  | •   |
| Hyper X  | HX426C16FB2K2/16(XMP)   | 2x 8GB  | SS | SK Hynix | -               | 16-18-18-39 | 1.2  | •   |
| Hyper X  | HX426C16FB2K4/32(XMP)   | 4x 8GB  | SS | SK Hynix | -               | 16-18-18-39 | 1.2  | •   |
| Hyper X  | HX426C16FBK2/32         | 2x 16GB | DS | SK Hynix | -               | 16-18-18-39 | 1.2  | •   |
| Hyper X  | HX426C16FBK4/64         | 4x 16GB | DS | SK Hynix | -               | 16-18-18-39 | 1.2  | • • |
| Hyper X  | HX426C16FBK4/64         | 4x 16GB | DS | SK Hynix | -               | 16-18-18-39 | -    | • • |
| Hyper X  | HX426C16FW/16           | 16GB    | DS | SK Hynix | -               | 16-18-18-39 | 1.2  | • • |
| Hyper X  | HX426C16FWK2/32         | 2x 16GB | DS | SK Hynix | -               | 16-18-18-39 | 1.2  | •   |
| Hyper X  | HX426C16FWK4/64         | 4x 16GB | DS | SK Hynix | -               | 16-18-18-39 | 1.2  | • • |
| Kingston | KVR26N19D8/16           | 16GB    | DS | Micron   | D9TZV           | 19-19-19-43 | 1.2  | •   |
| Kingston | KVR26N19D8/16           | 16GB    | DS | Micron   | D9VHP           | 19-19-19-43 | 1.2  | • • |
| Kingston | KVR26N19S8/8            | 8GB     | SS | Micron   | D9TZV           | 19-19-19-43 | 1.2  | •   |
| Kingston | KVR26N19S8/8            | 8GB     | SS | Micron   | -               | 19-19-19-43 | 1.2  | • • |
| Klevv    | IM44GU48N26-FFFHAZ(XMP) | 4GB     | SS | SK Hynix | -               | 15-15-15-35 | 1.2  | •   |
| Klevv    | IM48GU88N26-FFFHZ(XMP)  | 8GB     | SS | SK Hynix | -               | 15-15-15-35 | 1.2  | • • |

|                |                         |         |    |          |                |             |     |     |
|----------------|-------------------------|---------|----|----------|----------------|-------------|-----|-----|
| <b>Klevv</b>   | IM4AGU88N26-FFFHMZ(XMP) | 16GB    | DS | SK Hynix | -              | 15-15-15-35 | 1.2 | ●   |
| <b>Micron</b>  | MTA16ATF2G64AZ-2G6E1    | 16GB    | DS | Micron   | D9VPP          | 19-19-19-43 | 1.2 | ● ● |
| <b>Micron</b>  | MTA16ATF2G64AZ-2G6E1    | 16GB    | DS | Micron   | D9WFL          | 19-19-19-43 | -   | ● ● |
| <b>Micron</b>  | MTA8ATF1G64AZ-2G6E1     | 8GB     | SS | Micron   | D9VPP          | 19-19-19-43 | 1.2 | ● ● |
| <b>Micron</b>  | MTA8ATF1G64AZ-2G6E1     | 8GB     | SS | Micron   | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Micron</b>  | MTA8ATF1G64AZ-2G6H1     | 8GB     | SS | Micron   | D9VHP          | 19-19-19-43 | -   | ●   |
| <b>panram</b>  | W4U2666PS-16G           | 2x 16GB | DS | SK Hynix | DDR4-1GM8-26   | 16-18-18-35 | 1.2 | ●   |
| <b>panram</b>  | W4U2666PS-8G            | 2x 8GB  | SS | SK Hynix | DDR4-1GM8-26   | 16-18-18-35 | 1.2 | ●   |
| <b>Patriot</b> | PVR416G266C5K(XMP)      | 2x 8GB  | SS | Micron   | -              | 15-17-17-35 | 1.2 | ●   |
| <b>Team</b>    | TCD44G2666C15BBK(XMP)   | 4GB     | SS | SK Hynix | T4D5128HT-266  | 15-17-17-35 | 1.2 | ●   |
| <b>Team</b>    | TED416G2666C1901        | 16GB    | DS | Micron   | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TED416G2666C19DC01      | 2x 8GB  | SS | Micron   | -              | 19-19-19-43 | 1.2 | ●   |
| <b>Team</b>    | TED416G2666C19QC01      | 4x 4GB  | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TED432G2666C19QC01      | 4x 8GB  | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TED44G2666C1901         | 4GB     | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TED48G2666C1901         | 8GB     | SS | Micron   | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TED48G2666C19DC01       | 2x 4GB  | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ●   |
| <b>Team</b>    | TFRD416G2666C15BBK(XMP) | 16GB    | DS | Samsung  | K4ABG085WBBCPB | 15-17-17-35 | 1.2 | ● ● |
| <b>Team</b>    | TPD416G2666HC19DC01     | 2x 8GB  | SS | Micron   | -              | 19-19-19-43 | 1.2 | ●   |
| <b>Team</b>    | TPD416G2666HC19QC01     | 4x 4GB  | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TPD432G2666HC19QC01     | 4x 8GB  | SS | Micron   | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TPD44G2666HC1901        | 4GB     | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TPD44G2666HC19BK        | 4GB     | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TPD48G2666HC1901        | 8GB     | SS | Micron   | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TPD48G2666HC19BK        | 8GB     | SS | Micron   | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TPD48G2666HC19DC01      | 2x 4GB  | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ●   |
| <b>Team</b>    | TPRD416G2666HC19DC01    | 2x 8GB  | SS | Micron   | -              | 19-19-19-43 | 1.2 | ●   |
| <b>Team</b>    | TPRD416G2666HC19QC01    | 4x 4GB  | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TPRD432G2666HC19QC01    | 4x 8GB  | SS | Micron   | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TPRD44G2666HC1901       | 4GB     | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TPRD48G2666HC1901       | 8GB     | SS | Micron   | -              | 19-19-19-43 | 1.2 | ● ● |
| <b>Team</b>    | TPRD48G2666HC19DC01     | 2x 4GB  | SS | SK Hynix | -              | 19-19-19-43 | 1.2 | ●   |

## ZENITH EXTREME ALPHA

### DDR4 2800 Qualified Vendors List (QVL)

| Vendors   | Part No.                        | Size    | SS/DS | Chip Brand | Chip NO. | Timing      | Voltage | IM socket support (Option) |        |        |
|-----------|---------------------------------|---------|-------|------------|----------|-------------|---------|----------------------------|--------|--------|
|           |                                 |         |       |            |          |             |         | 2 DIMM                     | 4 DIMM | 8 DIMM |
| ADATA     | AX4U2800W8G15(XMP)              | 8GB     | DS    | SK Hynix   | -        | 15-15-15-36 | 1.25    | •                          |        |        |
| ADATA     | AX4U2800W8G17-BRD(XMP)          | 8GB     | DS    | Samsung    | -        | 17-17-17-36 | 1.2     | •                          | •      | •      |
| Apacer    | 78.BAGM8.AF20B(XMP)             | 4x 4GB  | SS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          | •      | •      |
| Apacer    | 78.CAGM8.AF30B(XMP)             | 4x 8GB  | DS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          | •      | •      |
| G.SKILL   | F4-2800C14Q-64GVK(XMP)          | 4x 16GB | DS    | Samsung    | -        | 14-14-14-35 | 1.35    | •                          |        |        |
| G.SKILL   | F4-2800C15Q2-128GRKD(XMP)       | 8x 16GB | DS    | Samsung    | -        | 15-15-15-36 | 1.35    | •                          | •      | •      |
| G.SKILL   | F4-2800C15Q2-64GRK(XMP)         | 8x 8GB  | DS    | SK Hynix   | -        | 15-16-16-35 | 1.25    | •                          | •      | •      |
| G.SKILL   | F4-2800C15Q2-64GRK(XMP)         | 8x 8GB  | DS    | SK Hynix   | -        | 15-15-15-35 | 1.25    | •                          | •      | •      |
| G.SKILL   | F4-2800C16Q-16GRR(XMP)          | 4x 4GB  | SS    | SK Hynix   | -        | 16-16-16-36 | 1.2     | •                          |        |        |
| G.SKILL   | F4-2800C16Q-32GRR(XMP)          | 4x 8GB  | DS    | SK Hynix   | -        | 16-16-16-36 | 1.2     | •                          |        |        |
| GeIL      | GPR416GB2800C16QC(XMP)          | 4x 4GB  | SS    | SK Hynix   | -        | 16-16-16-36 | 1.2     | •                          | •      |        |
| GeIL      | GPR432GB2800C16QC(XMP)          | 4x 8GB  | DS    | SK Hynix   | -        | 16-16-16-36 | 1.2     | •                          |        |        |
| Hyper X   | HX428C14PBK8/64(XMP)            | 8x 8GB  | DS    | SK Hynix   | -        | 14-15-15-39 | 1.35    | •                          | •      |        |
| KINGMAX   | GLMG42F-18KIIA-CJBR4(XMP)       | 8GB     | SS    | KINGMAX    | -        | 17-17-17-39 | 1.2     | •                          | •      |        |
| Klevv     | IMA451U6MFR8N-DG0(Ver1.05)(XMP) | 4GB     | SS    | SK Hynix   | -        | 16-16-16-36 | 1.2     | •                          |        |        |
| NEO FORZA | NFMUD416E8-2800EB2A(XMP)        | 16GB    | DS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          | •      |        |
| NEO FORZA | NFMUD416E8-2800EB3A(XMP)        | 16GB    | DS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          | •      |        |
| NEO FORZA | NFMUD416E8-2800EC2A(XMP)        | 16GB    | DS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          | •      |        |
| NEO FORZA | NFMUD416E8-2800EC3A(XMP)        | 16GB    | DS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          | •      |        |
| NEO FORZA | NFMUD416E8-2800ED2A(XMP)        | 16GB    | DS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          | •      |        |
| NEO FORZA | NFMUD416E8-2800EH2A(XMP)        | 16GB    | DS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          | •      |        |
| NEO FORZA | NFMUD416E8-2800EH2A(XMP)        | 16GB    | DS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          | •      |        |
| NEO FORZA | NFMUD480E8-2800DB2A(XMP)        | 8GB     | SS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          |        |        |
| NEO FORZA | NFMUD480E8-2800DB3A(XMP)        | 8GB     | SS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          |        |        |
| NEO FORZA | NFMUD480E8-2800DC2A(XMP)        | 8GB     | SS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          |        |        |
| NEO FORZA | NFMUD480E8-2800DC3A(XMP)        | 8GB     | SS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          |        |        |
| NEO FORZA | NFMUD480E8-2800DD2A(XMP)        | 8GB     | SS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          |        |        |
| NEO FORZA | NFMUD480E8-2800DD3A(XMP)        | 8GB     | SS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          |        |        |
| NEO FORZA | NFMUD480E8-2800DH2A(XMP)        | 8GB     | SS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          |        |        |
| NEO FORZA | NFMUD480E8-2800DH2A(XMP)        | 8GB     | SS    | SK Hynix   | -        | 17-17-17-36 | -       | •                          |        |        |

## ZENITH EXTREME ALPHA

### DDR4 3000 Qualified Vendors List (QVL)

| Vendors | Part No.                          | Size    | SS/DS | Chip Brand | Chip NO. | Timing      | Voltage | DIMM socket support (Optional) |        |        |
|---------|-----------------------------------|---------|-------|------------|----------|-------------|---------|--------------------------------|--------|--------|
|         |                                   |         |       |            |          |             |         | 2 DIMM                         | 4 DIMM | 8 DIMM |
| ADATA   | AX4U300038G16-BBG(XMP)            | 8GB     | SS    | SK Hynix   | -        | 16-18-18-36 | 1.35    | ●                              | ●      |        |
| ADATA   | AX4U300038G16-BRS(XMP)            | 8GB     | SS    | SK Hynix   | -        | 16-18-18-36 | 1.35    | ●                              | ●      |        |
| ADATA   | AX4U300038G16-BRS(XMP)            | 8GB     | SS    | Nanya      | -        | 16-16-18-36 | 1.35    | ●                              | ●      |        |
| ADATA   | AX4U300038G16-SB41(XMP)           | 8GB     | SS    | SK Hynix   | -        | 16-18-18-36 | 1.35    | ●                              | ●      |        |
| Antec   | AMD4UZ130001608G-5S(XMP)          | 8GB     | SS    | Micron     | -        | 16-18-18-36 | 1.35    | ●                              | ●      |        |
| Apacer  | EK.16GAW.KFBK2(XMP)               | 8GB     | DS    | SK Hynix   | -        | 16-18-18-38 | -       | ●                              | ●      |        |
| CORSAIR | CMD16GX4M2B3000C15(Ver4.23)(XMP)  | 2x 8GB  | DS    | -          | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMD16GX4M2B3000C15(Ver5.30)(XMP)  | 2x 8GB  | SS    | SK Hynix   | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMD16GX4M4B3000C15(Ver4.23)(XMP)  | 4x 4GB  | SS    | -          | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMD16GX4M4B3000C15(Ver4.24)(XMP)  | 4x 4GB  | SS    | SAMSUNG    | -        | 15-17-17-35 | 1.35    | ●                              | ●      |        |
| CORSAIR | CMD32GX4M2B3000C15(Ver5.31)(XMP)  | 2x 16GB | DS    | SK Hynix   | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMD32GX4M4B3000C15(Ver4.23)(XMP)  | 4x 8GB  | DS    | -          | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMD32GX4M4C3000C15(Ver3.32)(XMP)  | 4x 8GB  | DS    | SK Hynix   | -        | 15-17-17-35 | 1.35    | ●                              | ●      |        |
| CORSAIR | CMD32GX4M4C3000C15(Ver5.32)(XMP)  | 4x 8GB  | SS    | SK Hynix   | -        | 15-17-17-35 | 1.35    | ●                              | ●      |        |
| CORSAIR | CMK16GX4M1B3000C15(Ver3.32)(XMP)  | 16GB    | DS    | Micron     | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMK16GX4M2B3000C15(Ver3.32)(XMP)  | 2x 8GB  | SS    | Micron     | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMK16GX4M2B3000C15(Ver4.23)(XMP)  | 2x 8GB  | DS    | -          | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMK16GX4M2B3000C15(Ver5.30)(XMP)  | 2x 8GB  | SS    | SK Hynix   | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMK16GX4M2B3000C15(Ver5.30)(XMP)  | 2x 8GB  | SS    | SK Hynix   | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMK16GX4M2C3000C16(Ver3.31)(XMP)  | 2x 8GB  | DS    | -          | -        | 15-15-15-36 | 1.35    | ●                              |        |        |
| CORSAIR | CMK16GX4M2C3000C16(Ver3.31)(XMP)  | 2x 8GB  | SS    | Micron     | -        | 16-18-18-36 | 1.35    | ●                              |        |        |
| CORSAIR | CMK16GX4M4B3000C15(Ver5.20)(XMP)  | 4x 4GB  | SS    | SK Hynix   | -        | 15-17-17-35 | 1.35    | ●                              | ●      |        |
| CORSAIR | CMK32GX4M2B3000C15(Ver4.31)(XMP)  | 2x 16GB | DS    | -          | -        | 15-15-15-36 | 1.35    | ●                              |        |        |
| CORSAIR | CMK32GX4M4B3000C15(Ver4.24)(XMP)  | 4x 8GB  | DS    | Samsung    | -        | 15-17-17-35 | 1.35    | ●                              | ●      |        |
| CORSAIR | CMK64GX4M4B3000C15(Ver4.31)(XMP)  | 4x 16GB | DS    | -          | -        | 15-17-17-35 | 1.35    | ●                              | ●      |        |
| CORSAIR | CMK8GX4M2B3000C15(Ver4.23)(XMP)   | 2x 4GB  | DS    | -          | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMR128GX4M8C3000C16(Ver4.31)(XMP) | 8x 16GB | DS    | Samsung    | -        | 16-18-18-36 | 1.35    | ●                              | ●      | ●      |
| CORSAIR | CMR16GX4M2C3000C15(Ver4.31)(XMP)  | 2x 8GB  | SS    | SK Hynix   | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMR16GX4M2C3000C15(Ver5.30)(XMP)  | 2x 8GB  | SS    | SK Hynix   | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMR32GX4M2C3000C15(Ver4.31)(XMP)  | 2x 16GB | DS    | Samsung    | -        | 15-17-17-35 | 1.35    | ●                              |        |        |
| CORSAIR | CMR32GX4M4C3000C15(Ver3.32)(XMP)  | 4x 8GB  | SS    | Micron     | -        | 15-17-17-35 | 1.35    | ●                              | ●      |        |
| CORSAIR | CMR32GX4M4C3000C15(Ver5.39)(XMP)  | 4x 8GB  | SS    | SK Hynix   | -        | 15-17-17-35 | 1.35    | ●                              | ●      |        |
| CORSAIR | CMR64GX4M4C3000C15(Ver3.32)(XMP)  | 4x 16GB | DS    | Micron     | -        | 15-17-17-35 | 1.35    | ●                              | ●      |        |

|         |                                  |         |    |          |   |             |      |       |
|---------|----------------------------------|---------|----|----------|---|-------------|------|-------|
| CORSAIR | CMU16GX4M2C3000C15(Ver3.21)(XMP) | 2x 8GB  | DS | Micron   | - | 15-15-15-36 | 1.35 | ●     |
| CORSAIR | CMW32GX4M4C3000C15(Ver5.32)(XMP) | 4x 8GB  | SS | SK Hynix | - | 15-17-17-35 | 1.35 | ● ●   |
| CORSAIR | CMW64GX4M8C3000C15(Ver5.32)(XMP) | 8x 8GB  | SS | SK Hynix | - | 15-17-17-35 | 1.35 | ● ● ● |
| crucial | BLE4G4D30AEEA.K8FE(XMP)          | 4GB     | SS | Samsung  | - | 15-16-16-35 | 1.35 | ● ●   |
| crucial | BLE8G4D30AEEA.K16FE(XMP)         | 8GB     | DS | Samsung  | - | 15-16-16-35 | 1.35 | ● ●   |
| crucial | BLT4G4D30AETA.K8FE(XMP)          | 4GB     | SS | Samsung  | - | 15-16-16-35 | 1.35 | ● ●   |
| crucial | BLT8G4D30AETA.K16FE(XMP)         | 8GB     | DS | Samsung  | - | 15-16-16-35 | 1.35 | ● ●   |
| Crucial | BLT8G4D30BET4K.C8FD(XMP)         | 8GB     | SS | Micron   | - | 16-18-18-38 | 1.35 | ●     |
| G.SKILL | F4-3000C14Q2-128GVK(XMP)         | 8x 16GB | DS | Samsung  | - | 15-15-15-36 | 1.35 | ● ●   |
| G.SKILL | F4-3000C15D-8GTZB(XMP)           | 2x 4GB  | SS | Samsung  | - | 15-16-16-35 | 1.35 | ●     |
| G.SKILL | F4-3000C15Q-16GRK(XMP)           | 4x 4GB  | SS | Samsung  | - | 15-15-15-35 | 1.35 | ● ●   |
| G.SKILL | F4-3000C15Q-16GRR(XMP)           | 4x 4GB  | SS | SK Hynix | - | 15-15-15-35 | 1.35 | ● ●   |
| G.SKILL | F4-3000C15Q-32GRK(XMP)           | 4x 8GB  | DS | Samsung  | - | 15-15-15-35 | 1.35 | ●     |
| G.SKILL | F4-3000C16D-16GTZR(XMP)          | 2x 8GB  | SS | SK Hynix | - | 16-18-18-38 | 1.35 | ●     |
| G.SKILL | F4-3000C16Q2-128GVKB(XMP)        | 8x 16GB | DS | SK Hynix | - | 16-18-18-38 | 1.35 | ● ●   |
| GeIL    | GEXB432GB3000C15AQC(XMP)         | 4x 8GB  | SS | Samsung  | - | 15-17-17-35 | 1.35 | ● ●   |
| GeIL    | GLR416GB3000C15ADC(XMP)          | 8GB     | SS | SK Hynix | - | 15-17-17-35 | 1.35 | ●     |
| GeIL    | GLR416GB3000C16QC(XMP)           | 4x 4GB  | SS | Samsung  | - | 16-16-16-36 | 1.35 | ● ●   |
| Hyper X | HX430C15PB2K4/16(XMP)            | 4x 4GB  | SS | SK Hynix | - | 15-16-16-39 | 1.35 | ● ●   |
| Hyper X | HX430C15PB3/16(XMP)              | 16GB    | DS | SK Hynix | - | 15-17-17-36 | 1.35 | ● ●   |
| Hyper X | HX430C15PB3/8(XMP)               | 8GB     | SS | SK Hynix | - | 15-17-17-36 | 1.2  | ● ●   |
| Hyper X | HX430C15PB3K2/16(XMP)            | 2x 8GB  | SS | SK Hynix | - | 15-17-17-36 | 1.35 | ●     |
| Hyper X | HX430C15PB3K2/16(XMP)            | 2x 8GB  | SS | SK Hynix | - | 15-17-17-36 | 1.2  | ●     |
| Hyper X | HX430C15PB3K2/32(XMP)            | 2x 16GB | DS | SK Hynix | - | 15-17-17-36 | 1.35 | ●     |
| Hyper X | HX430C15PB3K2/32(XMP)            | 2x 16GB | DS | SK Hynix | - | 15-17-17-36 | 1.35 | ●     |
| Hyper X | HX430C15PB3K2/8(XMP)             | 2x 4GB  | SS | SK Hynix | - | 15-17-17-36 | 1.35 | ●     |
| Hyper X | HX430C15PB3K4/16(XMP)            | 4x 4GB  | SS | SK Hynix | - | 15-17-17-36 | 1.35 | ● ●   |
| Hyper X | HX430C15PB3K4/32(XMP)            | 4x 8GB  | SS | SK Hynix | - | 15-17-17-36 | 1.35 | ● ●   |
| Hyper X | HX430C15PB3K4/64(XMP)            | 4x 16GB | DS | SK Hynix | - | 15-17-17-36 | 1.35 | ●     |
| Hyper X | HX430C15PB3K4/64(XMP)            | 4x 16GB | DS | SK Hynix | - | 15-17-17-36 | 1.35 | ●     |
| Hyper X | HX430C15PB3K8/128(XMP)           | 8x 16GB | DS | SK Hynix | - | 15-17-17-36 | 1.35 | ●     |
| Hyper X | HX430C15SB2/4(XMP)               | 4GB     | SS | SK Hynix | - | 15-15-15-36 | 1.35 | ●     |
| Hyper X | HX430C15SB2K2/8(XMP)             | 2x 4GB  | SS | SK Hynix | - | 15-15-15-36 | 1.35 | ●     |
| Hyper X | HX430C15SB2K4/16(XMP)            | 4x 4GB  | SS | SK Hynix | - | 15-15-15-36 | 1.35 | ●     |
| Hyper X | HX430C15SB2K4/32(XMP)            | 4x 8GB  | DS | SK Hynix | - | 15-17-17-39 | 1.35 | ●     |

|                  |                             |         |    |          |              |             |      |     |
|------------------|-----------------------------|---------|----|----------|--------------|-------------|------|-----|
| Hyper X          | HX430C16PBK4/64(XMP)        | 4x 16GB | DS | SK Hynix | -            | 16-16-16-39 | 1.35 | ●   |
| <b>INNO3D</b>    | RCX2-16G3000A(XMP)          | 2x 8GB  | SS | Micron   | -            | 16-18-18-36 | 1.35 | ●   |
| <b>Klevv</b>     | IM44GU48A30-FGGHAZ(XMP)     | 4GB     | SS | SK Hynix | -            | 15-15-16-36 | 1.35 | ● ● |
| <b>Klevv</b>     | IM44GU48A30-GIIHMC(XMP)     | 4GB     | SS | SK Hynix | -            | 16-18-18-36 | 1.35 | ● ● |
| <b>Klevv</b>     | IM44GU48N30-FFFHAB(XMP)     | 4GB     | SS | SK Hynix | -            | 15-15-16-36 | 1.2  | ●   |
| <b>Klevv</b>     | IM48GU48A30-GIIHMC(XMP)     | 8GB     | DS | SK Hynix | -            | 15-15-15-35 | 1.35 | ●   |
| <b>Klevv</b>     | IM48GU88A30-FGGHMZ(XMP)     | 8GB     | DS | SK Hynix | -            | 15-15-16-36 | 1.35 | ● ● |
| <b>Klevv</b>     | IM48GU88N30-FFFHMB(XMP)     | 8GB     | SS | SK Hynix | -            | 15-15-16-36 | 1.2  | ●   |
| <b>Klevv</b>     | IM4AGU88A30-FGGHMZ(XMP)     | 16GB    | DS | SK Hynix | -            | 15-15-16-36 | 1.35 | ●   |
| <b>NEO FORZA</b> | NFMUD416E8-3000DB2A(XMP)    | 16GB    | DS | SK Hynix | -            | 15-17-17-35 | -    | ●   |
| <b>NEO FORZA</b> | NFMUD416E8-3000DB3A(XMP)    | 16GB    | DS | SK Hynix | -            | 15-17-17-35 | -    | ●   |
| <b>NEO FORZA</b> | NFMUD416E8-3000DC2A(XMP)    | 16GB    | DS | SK Hynix | -            | 15-17-17-35 | -    | ●   |
| <b>NEO FORZA</b> | NFMUD416E8-3000DC3A(XMP)    | 16GB    | DS | SK Hynix | -            | 15-17-17-35 | -    | ●   |
| <b>NEO FORZA</b> | NFMUD416E8-3000DD2A(XMP)    | 16GB    | DS | SK Hynix | -            | 15-17-17-35 | -    | ●   |
| <b>NEO FORZA</b> | NFMUD416E8-3000DD3A(XMP)    | 16GB    | DS | SK Hynix | -            | 15-17-17-35 | -    | ●   |
| <b>NEO FORZA</b> | NFMUD416E8-3000DH2A(XMP)    | 16GB    | DS | SK Hynix | -            | 15-17-17-35 | -    | ●   |
| <b>NEO FORZA</b> | NFMUD416E8-3000DH2A(XMP)    | 16GB    | DS | SK Hynix | -            | 15-17-17-35 | -    | ●   |
| <b>NEO FORZA</b> | NFMUD480E8-3000DB2A(XMP)    | 8GB     | SS | SK Hynix | -            | 15-17-17-35 | -    | ● ● |
| <b>NEO FORZA</b> | NFMUD480E8-3000DB3A(XMP)    | 8GB     | SS | SK Hynix | -            | 15-17-17-35 | -    | ● ● |
| <b>NEO FORZA</b> | NFMUD480E8-3000DC2A(XMP)    | 8GB     | SS | SK Hynix | -            | 15-17-17-35 | -    | ● ● |
| <b>NEO FORZA</b> | NFMUD480E8-3000DC3A(XMP)    | 8GB     | SS | SK Hynix | -            | 15-17-17-35 | -    | ● ● |
| <b>NEO FORZA</b> | NFMUD480E8-3000DD2A(XMP)    | 8GB     | SS | SK Hynix | -            | 15-17-17-35 | -    | ● ● |
| <b>NEO FORZA</b> | NFMUD480E8-3000DD3A(XMP)    | 8GB     | SS | SK Hynix | -            | 15-17-17-35 | -    | ● ● |
| <b>NEO FORZA</b> | NFMUD480E8-3000DH2A(XMP)    | 8GB     | SS | SK Hynix | -            | 15-17-17-35 | -    | ● ● |
| <b>NEO FORZA</b> | NMUD416E82-3000DB30(XMP)    | 16GB    | DS | SK Hynix | -            | 15-17-17-35 | -    | ●   |
| <b>NEO FORZA</b> | NMUD480E82-3000DB30(XMP)    | 8GB     | SS | SK Hynix | -            | 15-17-17-35 | -    | ● ● |
| <b>PATRIOT</b>   | PV416G300C6K(XMP)           | 2x 8GB  | SS | -        | -            | 16-16-16-36 | -    | ●   |
| <b>PATRIOT</b>   | PV416G300C6K(XMP)           | 4x 8GB  | SS | -        | -            | 16-16-16-36 | 1.35 | ● ● |
| <b>PATRIOT</b>   | PV48G300C6K(XMP)            | 4x 4GB  | SS | -        | -            | 16-16-16-36 | 1.35 | ● ● |
| <b>Team</b>      | TCD44G3000C16CBK(XMP)       | 4GB     | SS | SK Hynix | T4D5128HT-30 | 16-18-18-38 | 1.35 | ● ● |
| <b>Team</b>      | TF3D48G3000HC16CBK(XMP)     | 8GB     | SS | Micron   | -            | 16-18-18-38 | 1.35 | ●   |
| <b>Team</b>      | TLTYD432G3000HC16CDC01(XMP) | 2x 16GB | SS | Micron   | -            | 16-18-18-38 | 1.35 | ●   |
| <b>V-color</b>   | TL48G30S816RGB(XMP)         | 8GB     | SS | SK Hynix | -            | 16-18-18-38 | 1.35 | ● ● |
| <b>V-color</b>   | TL48G30S8SRGB15(XMP)        | 8GB     | SS | SK Hynix | -            | 15-15-16-35 | 1.35 | ●   |
| <b>ZADAK</b>     | ZD4-MO23000C16-08GAG(XMP)   | 8GB     | SS | Samsung  | -            | 16-18-18-38 | 1.35 | ●   |

## ZENITH EXTREME ALPHA

### DDR4 3200 Qualified Vendors List (QVL)

| Vendors       | Part No.                         | Size    | SS/DS | Chip Brand | Chip NO.   | Timing      | Voltage | IM socket support (Option) |        |        |
|---------------|----------------------------------|---------|-------|------------|------------|-------------|---------|----------------------------|--------|--------|
|               |                                  |         |       |            |            |             |         | 2 DIMM                     | 4 DIMM | 8 DIMM |
| ADATA         | AX4U320038G16-BRS(XMP)           | 8x 8GB  | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| ADATA         | AX4U320038G16-BRZ(XMP)           | 8x 8GB  | SS    | ADATA      | 430A-0817A | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| Apacer        | AHU08GGB26CDU7M(XMP)             | 8GB     | SS    | -          | -          | 16-16-16-36 | 1.35    | ●                          | ●      |        |
| Apacer        | AHU08GGB32CKU7M(XMP)             | 8GB     | SS    | -          | -          | 16-16-16-36 | 1.35    | ●                          | ●      |        |
| CORSAIR       | CMD16GX4M4B3200C15(Ver4.23)(XMP) | 4x 4GB  | SS    | -          | -          | 15-15-15-36 | 1.35    | ●                          | ●      |        |
| CORSAIR       | CMD16GX4M4B3200C16(Ver5.29)(XMP) | 4x 4GB  | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          |        |        |
| CORSAIR       | CMD16GX4M4C3200C15(Ver4.24)(XMP) | 4x 4GB  | SS    | -          | -          | 15-17-17-35 | 1.35    | ●                          | ●      |        |
| CORSAIR       | CMD64GX4M8B3200C16(Ver4.31)(XMP) | 8x 8GB  | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| crucial       | BLE4G4D32AEEA.K8FE(XMP)          | 4GB     | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          |        |        |
| Crucial       | BLS8G4D32AESBK.8FE(XMP)          | 8GB     | SS    | Micron     | -          | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| G.SKILL       | F4-3200C14D-16GFX(XMP)           | 2x 8GB  | SS    | -          | -          | 14-14-14-34 | 1.35    | ●                          |        |        |
| G.SKILL       | F4-3200C14D-16GVK(XMP)           | 2x 8GB  | SS    | -          | -          | 14-14-14-34 | 1.35    | ●                          |        |        |
| G.SKILL       | F4-3200C14Q-32GFX(XMP)           | 4x 8GB  | SS    | -          | -          | 14-14-14-34 | 1.35    | ●                          | ●      |        |
| G.SKILL       | F4-3200C14Q-32GTZR(XMP)          | 4x 8GB  | SS    | Samsung    | -          | 14-14-14-34 | 1.35    | ●                          | ●      |        |
| G.SKILL       | F4-3200C16D-16GTZ(XMP)           | 2x 8GB  | DS    | -          | -          | 16-16-16-36 | 1.35    | ●                          |        |        |
| Hyper X       | HX432C16PB3/16(XMP)              | 16GB    | DS    | -          | -          | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| Hyper X       | HX432C16PB3A/8(XMP)              | 8GB     | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| Hyper X       | HX432C16PB3AK2/16(XMP)           | 2x 8GB  | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| Hyper X       | HX432C16PB3AK4/32(XMP)           | 4x 8GB  | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| Hyper X       | HX432C16PB3K2/16(XMP)            | 2x 8GB  | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          |        |        |
| Hyper X       | HX432C16PB3K2/32(XMP)            | 2x 16GB | DS    | -          | -          | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| Hyper X       | HX432C16PB3K4/64(XMP)            | 4x 16GB | DS    | -          | -          | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| KINGMAX       | GZOG43F-18SIGP(XMP)              | 8GB     | SS    | -          | -          | 16-18-18-38 | 1.35    | ●                          | ●      |        |
| PATRIOT       | PV416G320C6K(XMP)                | 2x 8GB  | SS    | -          | -          | 16-16-16-36 | 1.35    | ●                          |        |        |
| PATRIOT       | PV48G320C6K(XMP)                 | 2x 4GB  | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          |        |        |
| PATRIOT       | PVR416G320C6K(XMP)               | 2x 8GB  | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          |        |        |
| Silicon Power | SP008GXLZU320BSB(XMP)            | 8GB     | SS    | -          | -          | 16-18-18-38 | 1.35    | ●                          | ●      |        |
| Super Talent  | F3200UA4G(XMP)                   | 4GB     | SS    | -          | -          | 16-18-18-36 | 1.35    | ●                          | ●      |        |
| Super Talent  | F3200UB16G(XMP)                  | 16GB    | DS    | -          | -          | 16-18-18-36 | 1.35    | ●                          |        |        |
| Team          | TF2D48G3200HC16CBK(XMP)          | 8GB     | SS    | -          | -          | 16-18-18-38 | 1.35    | ●                          |        |        |
| V-color       | TL48G32S8CRGB16(XMP)             | 8GB     | SS    | SAMSUNG    | -          | 16-16-18-38 | 1.35    | ●                          |        |        |
| ZADAK511      | ZD4-SHA3200C16-08GAS(XMP)        | 8GB     | SS    | Samsung    | -          | 16-18-18-38 | 1.35    | ●                          | ●      |        |

## ZENITH EXTREME ALPHA

### DDR4 3466 Qualified Vendors List (QVL)

| Vendors | Part No.                     | Size        | SS/DS | Chip Brand | Chip NO. | Timing      | Voltage | MM socket support (Optional) |        |        |
|---------|------------------------------|-------------|-------|------------|----------|-------------|---------|------------------------------|--------|--------|
|         |                              |             |       |            |          |             |         | 2 DIMM                       | 4 DIMM | 8 DIMM |
| G.SKILL | F4-3466C18Q-32GTZRXB         | 32GB(8GB*4) | SS    | SK Hynix   |          | 18-22-22-42 | 1.35V   | ●                            | ●      |        |
| CORSAIR | CMK16GX4M2B3466C16 ver. 5.32 | 16GB(8GB*2) | SS    | SK Hynix   |          | 16-18-18-36 | 1.35V   | ●                            | ●      |        |

## ZENITH EXTREME ALPHA

### DDR4 3600 Qualified Vendors List (QVL)

| Vendors | Part No.                    | Size        | SS/DS | Chip Brand | Chip NO. | Timing       | Voltage | MM socket support (Optional) |        |        |
|---------|-----------------------------|-------------|-------|------------|----------|--------------|---------|------------------------------|--------|--------|
|         |                             |             |       |            |          |              |         | 2 DIMM                       | 4 DIMM | 8 DIMM |
| CORSAIR | CMK32GX4M4B3600C18 ver4.31  | 32GB(8GB*4) | SS    |            |          | 18-19-19-39  | 1.35V   | ●                            | ●      |        |
| CORSAIR | CMK32GX4M4B3600C18R ver4.31 | 32GB(8GB*4) | SS    |            |          | 18-19-19-39R | 1.35V   | ●                            | ●      |        |