

Qualified Vendors List (QVL) B450M GAMING

| DDR4 3200MHz    |         |                           |                            |       |            |           |             |         |                       |   |     |        |  |
|-----------------|---------|---------------------------|----------------------------|-------|------------|-----------|-------------|---------|-----------------------|---|-----|--------|--|
| Module Supplier | Density | # of Ranks x DRAM devices | Module P/N.                | SS/DS | Chip Brand | Chip P/N. | Timing      | Voltage | Memory socket support |   | XMP | Native |  |
|                 |         |                           |                            |       |            |           |             |         | 1                     | 2 |     |        |  |
| HyperX          | 8GB     | 1Rx8                      | HX432C16PB3K4/32           | SS    | Hynix      |           | 16-18-18    | 1.35v   | V                     | V | v   | 2133   |  |
|                 |         |                           | HX432C16PB3K2/16           | SS    | Hynix      |           | 16-18-18    | 1.35v   | V                     | V | v   | 2133   |  |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4C3200C16 ver4.24 | SS    | Samsung    |           | 16-18-18-36 | 1.35v   |                       |   | v   | 2133   |  |
| CORSAIR         | 8GB     | 1Rx8                      | CMD64GX4M8B3200C16         | SS    |            |           | 16-18-18-36 | 1.35v   | V                     | V | v   | 2133   |  |
| CORSAIR         | 16GB    | 2Rx8                      | CMK64GX4M4B3200C16         | DS    |            |           | 16-18-18-36 | 1.35v   | V                     | V | v   | 2133   |  |
| CORSAIR         | 16GB    | 2Rx8                      | CMK32GX4M2D3200C16 ver3.31 | DS    | Micron     |           | 16-19-19-36 | 1.35v   | V                     | V | v   | 2133   |  |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3200C14Q-32GFX          | SS    |            |           | 14-14-14-34 | 1.35v   | V                     | V | v   | 2133   |  |
| G.SKILL         | 16GB    | 2Rx8                      | F4-3200C16Q-64GVK          | DS    | Samsung    |           | 16-18-18-38 | 1.35v   | V                     | V | v   | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U320038G16-BRS          | SS    |            |           | 16-18-18    | 1.35v   |                       |   | v   | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U320038G16-SRS          | SS    |            |           | 16-18-18    | 1.35v   |                       |   | v   | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U320038G16-DRS          | SS    |            |           | 16-18-18    | 1.35v   |                       |   | v   | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U320038G16-QRS          | SS    |            |           | 16-18-18    | 1.35v   |                       |   | v   | 2133   |  |
| GEIL            | 8GB     | 1Rx8                      | GAFY416GB3200C16ADC        | SS    |            |           | 16-18-18-36 | 1.35v   | V                     | V | v   | 2133   |  |
| PATRIOT         | 4GB     | 1Rx8                      | PV48G320C6K                | SS    |            |           | CL16        | 1.35v   |                       |   | v   | 2133   |  |

| DDR4 3000MHz    |         |                           |                                  |       |            |           |             |         |                       |   |     |        |  |
|-----------------|---------|---------------------------|----------------------------------|-------|------------|-----------|-------------|---------|-----------------------|---|-----|--------|--|
| Module Supplier | Density | # of Ranks x DRAM devices | Module P/N.                      | SS/DS | Chip Brand | Chip P/N. | Timing      | Voltage | Memory socket support |   | XMP | Native |  |
|                 |         |                           |                                  |       |            |           |             |         | 1                     | 2 |     |        |  |
| HyperX          | 4GB     | 1Rx8                      | HX430C15PB3K4/16                 | SS    | Hynix      |           | C15         | 1.35v   | V                     | V |     | 2133   |  |
| HyperX          | 4GB     | 1Rx8                      | HX430C15PB3K2/8                  | SS    | Hynix      |           | C15         | 1.35v   |                       |   |     | 2133   |  |
| HyperX          | 8GB     | 1Rx8                      | HX430C15PB3K4/32                 | SS    | Hynix      |           | C15         | 1.35v   |                       |   |     | 2133   |  |
| HyperX          | 8GB     | 1Rx8                      | HX430C15PB3K2/16                 | SS    | Hynix      |           | C15         | 1.35v   | V                     | V |     | 2133   |  |
| HyperX          | 8GB     | 1Rx8                      | HX430C15PB3/8                    | SS    | Hynix      |           | C15         | 1.35v   |                       |   |     | 2133   |  |
| HyperX          | 16GB    | 2Rx8                      | HX430C15PB3K4/64                 | DS    | Hynix      |           | C15         | 1.35v   | V                     | V |     | 2133   |  |
| HyperX          | 16GB    | 2Rx8                      | HX430C15PB3K2/32                 | DS    | Hynix      |           | C15         | 1.35v   | V                     | V |     | 2133   |  |
| HyperX          | 16GB    | 2Rx8                      | HX430C15PB3K8/128                | DS    | Hynix      |           | C15         | 1.35v   |                       |   |     | 2133   |  |
| HyperX          | 16GB    | 2Rx8                      | HX430C15PB3K4/64                 | DS    | Hynix      |           | C15         | 1.35v   | V                     | V |     | 2133   |  |
| HyperX          | 16GB    | 2Rx8                      | HX430C15PB3K2/32                 | DS    | Hynix      |           | C15         | 1.35v   |                       |   |     | 2133   |  |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3000C14               | SS    |            |           | 14-16-16-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 2Rx8                      | CMD32GX4M4C3000C15 ver4.24       | DS    | Samsung    |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 2Rx8                      | CMU32GX4M4C3000C15               | DS    |            |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 2Rx8                      | CMU32GX4M4C3000C15R              | DS    |            |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 2Rx8                      | CM4X8GC3000C15K4-CN ver4.24      | DS    | Samsung    |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 1Rx8                      | CMD32GX4M4C3000C15 ver5.30       | SS    | Hynix      |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 1Rx8                      | CMR32GX4M4C3000C15 ver4.31       | SS    | Samsung    |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 1Rx8                      | CMD16GX4M2B3000C15 ver5.30       | SS    | Hynix      |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 1Rx8                      | CMR16GX4M2C3000C15 ver4.31       | SS    | Samsung    |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 1Rx8                      | CMK16GX4M2B3000C15 ver3.32       | SS    | Micron     |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 1Rx8                      | CMD32GX4M4C3000C15 ver3.32       | SS    | Micron     |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 1Rx8                      | CMK16GX4M2C3000C16 ver3.31       | SS    | Micron     |           | 16-18-18-36 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 8GB     | 1Rx8                      | CMR16GX4M2C3000C15 ver5.30       | SS    | Hynix      |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 16GB    | 2Rx8                      | CMU32GX4M2C3000C15R              | DS    |            |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 16GB    | 2Rx8                      | CMU32GX4M2C3000C15               | DS    |            |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CORSAIR         | 16GB    | 2Rx8                      | CMR32GX4M2C3000C15 ver4.31       | DS    | Samsung    |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| CRUCIAL         | 8GB     | 1Rx8                      | BLT8GD430BET4K.C8FD              | SS    | Micron     |           | 16-18-18-38 | 1.35v   | V                     | V |     | 2400   |  |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3000C15Q2-64GVR               | SS    |            |           | 15-15-15-35 | 1.35v   | V                     | V |     | 2133   |  |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3000C16D-16GTZR               | SS    |            |           | 16-18-18-38 | 1.35v   | V                     | V |     | 2133   |  |
| G.SKILL         | 16GB    | 2Rx8                      | F4-3000C14Q2-128GVKD             | DS    |            |           | 14-14-14-34 | 1.35v   | V                     | V |     | 2133   |  |
| ADATA           | 4GB     | 1Rx8                      | AX4U3000W4G16-BWZ                | SS    |            |           | 16-16-16    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 4GB     | 1Rx8                      | AX4U3000W4G16-DWZ                | SS    |            |           | 16-16-16    | 1.35v   | V                     | V |     | 2133   |  |
| ADATA           | 4GB     | 1Rx8                      | AX4U3000W4G16-QWZ                | SS    |            |           | 16-16-16    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 8GB     | 2Rx8                      | AX4U3000W8G16-BWZ                | DS    |            |           | 16-16-16    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 8GB     | 2Rx8                      | AX4U3000W8G16-DWZ                | DS    |            |           | 16-16-16    | 1.35v   | V                     | V |     | 2133   |  |
| ADATA           | 8GB     | 2Rx8                      | AX4U3000W8G16-QWZ                | DS    |            |           | 16-16-16    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-BBZ                | SS    | Hynix      |           | 16-18-18    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-DBZ                | SS    | Hynix      |           | 16-18-18    | 1.35v   | V                     | V |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-QBZ                | SS    | Hynix      |           | 16-18-18    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-BBZ                | SS    | Hynix      |           | 16-18-18    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-SBZ                | SS    | Hynix      |           | 16-18-18    | 1.35v   | V                     | V |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-DBZ                | SS    | Hynix      |           | 16-18-18    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-QBZ                | SS    | Hynix      |           | 16-18-18    | 1.35v   | V                     | V |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-QBZ                | SS    | Hynix      |           | 16-18-18    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-BRS                | SS    | Hynix      |           | 16-18-18    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-SRS                | SS    | Hynix      |           | 16-18-18    | 1.35v   | V                     | V |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-DRS                | SS    | Hynix      |           | 16-18-18    | 1.35v   |                       |   |     | 2133   |  |
| ADATA           | 8GB     | 1Rx8                      | AX4U300038G16-QRS                | SS    | Hynix      |           | 16-18-18    | 1.35v   |                       |   |     | 2133   |  |
| Apacer          | 8GB     | 2Rx8                      | AHU08GGB30CDT5H                  | DS    |            |           | 16-16-16-36 |         | V                     | V |     | 2133   |  |
| Apacer          | 8GB     | 1Rx8                      | AHU08GGB30CDU7V                  | SS    |            |           | 16-16-16-36 | 1.35v   | V                     | V |     | 2133   |  |
| Apacer          | 8GB     | 1Rx8                      | AHU08GGB30CKU8R (EK.16GAZ.GJDK2) | SS    |            |           | 16-18-18-38 | 1.35v   | V                     | V |     | 2400   |  |
| GEIL            | 8GB     | 2Rx8                      | GPR416GB3000C15ADC               | SS    |            |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| GEIL            | 8GB     | 1Rx8                      | GEX416GB3000C15ADC               | SS    |            |           | 15-17-17-35 | 1.35v   | V                     | V |     | 2133   |  |
| KLEVV           | 4GB     | 1Rx8                      | KM4B4GX1A-3000-15-16-16-36-0     | SS    |            |           | 15-16-16-36 | 1.35v   | V                     | V |     | 2400   |  |
| KLEVV           | 4GB     | 1Rx8                      | KM424GX1A-3000-15-16-16-36-1     | SS    |            |           | 15-16-16-36 | 1.35v   | V                     | V |     | 2400   |  |
| KLEVV           | 8GB     | 1Rx8                      | KM488GX1A-3000-15-16-16-36-0     | SS    |            |           | 15-16-16-36 | 1.35v   | V                     | V |     | 2400   |  |
| KLEVV           | 8GB     | 1Rx8                      | KM428GX1A-3000-15-16-16-36-1     | SS    |            |           | 15-16-16-36 | 1.35v   | V                     | V |     | 2400   |  |
| Team            | 8GB     | 2Rx8                      | TLRED432G3000HC16CQC01           | DS    |            |           | 16-18-18-38 | 1.35v   |                       |   |     | 2133   |  |
| Team            | 8GB     | 2Rx8                      | TDGED432G3000HC16CQC01           | DS    |            |           | 16-18-18-38 | 1.35v   |                       |   |     | 2133   |  |
| Team            | 8GB     | 2Rx8                      | THRD432G3000HC16CQC01            | DS    |            |           | 16-18-18-38 | 1.35v   |                       |   |     | 2133   |  |
| Team            | 8GB     | 2Rx8                      | THWD432G3000HC16CQC01            | DS    |            |           | 16-18-18-38 | 1.35v   |                       |   |     | 2133   |  |
| Team            | 8GB     | 2Rx8                      | THBD432G3000HC16CQC01            | DS    |            |           | 16-18-18-38 | 1.35v   |                       |   |     | 2133   |  |
| Team            | 8GB     | 2Rx8                      | TDTRD432G3000HC16CQC01           | DS    |            |           | 16-18-18-38 | 1.35v   |                       |   |     | 2133   |  |
| Team            | 8GB     | 2Rx8                      | TDTRD432G3000HC16CQC01           | DS    |            |           | 16-18-18-38 | 1.35v   |                       |   |     | 2133   |  |
| Team            | 8GB     | 2Rx8                      | TDTRD432G3000HC16CQC01           | DS    |            |           | 16-18-18-38 | 1.35v   |                       |   |     | 2133   |  |
| Team            | 8GB     | 2Rx8                      | TDTRD432G3000HC16CQC01           | DS    |            |           | 16-18-18-38 | 1.35v   |                       |   |     | 2133   |  |
| Team            | 8GB     | 2Rx8                      | TDTRD432G3000HC16CQC01           | DS    |            |           | 16-18-18-38 | 1.35v   | V                     | V |     | 2133   |  |
| Team            | 8GB     | 2Rx8                      | TDTRD432G3000HC16CQC01           | DS    |            |           | 16-18-18-38 | 1.35v   |                       |   |     | 2133   |  |

|           |     |      |                        |    |       |  |  |             |       |   |   |  |  |      |
|-----------|-----|------|------------------------|----|-------|--|--|-------------|-------|---|---|--|--|------|
| Team      | 8GB | 2Rx8 | THRD416G3000HC16CDC01  | DS |       |  |  | 16-18-18-38 | 1.35v |   |   |  |  | 2133 |
| Team      | 8GB | 2Rx8 | THWD416G3000HC16CDC01  | DS |       |  |  | 16-18-18-38 | 1.35v |   |   |  |  | 2133 |
| Team      | 8GB | 2Rx8 | THBD416G3000HC16CDC01  | DS |       |  |  | 16-18-18-38 | 1.35v |   |   |  |  | 2133 |
| Team      | 8GB | 2Rx8 | TDRD416G3000HC16CDC01  | DS |       |  |  | 16-18-18-38 | 1.35v |   |   |  |  | 2133 |
| Team      | 8GB | 2Rx8 | TDTD416G3000HC16CDC01  | DS |       |  |  | 16-18-18-38 | 1.35v |   |   |  |  | 2133 |
| Team      | 8GB | 2Rx8 | TDTBD416G3000HC16CDC01 | DS |       |  |  | 16-18-18-38 | 1.35v |   |   |  |  | 2133 |
| Team      | 8GB | 1Rx8 | TF1D48G3000HC16CBK     | SS |       |  |  | 16-18-18-38 | 1.35v | V | V |  |  | 2133 |
| V-Color   | 8GB | 1Rx8 | TL48G30S816B           | SS |       |  |  | CL16        | 1.35v | V | V |  |  | 2133 |
| V-Color   | 8GB | 1Rx8 | TL48G30S816RGB         | SS |       |  |  | 16-18-18-38 | 1.35v | V | V |  |  | 2133 |
| Neo Forza | 8GB | 1Rx8 | NMUD480E82-3000DC30    | SS | Hynix |  |  | 15-17-17-35 | 1.35v |   |   |  |  | 2133 |
| Neo Forza | 8GB | 1Rx8 | NMUD480E82-3000DA30    | SS | Hynix |  |  | 15-17-17-35 | 1.35v | V | V |  |  | 2133 |
| Neo Forza | 8GB | 1Rx8 | NMUD480E82-3000DB30    | SS | Hynix |  |  | 15-17-17-35 | 1.35v |   |   |  |  | 2133 |
| Neo Forza | 8GB | 1Rx8 | NMUD480E82-3000DD30    | SS | Hynix |  |  | 15-17-17-35 | 1.35v |   |   |  |  | 2133 |
| Neo Forza | 8GB | 1Rx8 | NMUD480E81-3000DC30    | SS | Hynix |  |  | 15-17-17-35 | 1.35v |   |   |  |  | 2133 |
| Neo Forza | 8GB | 1Rx8 | NMUD480E81-3000DA30    | SS | Hynix |  |  | 15-17-17-35 | 1.35v | V | V |  |  | 2133 |
| Neo Forza | 8GB | 1Rx8 | NMUD480E81-3000DB30    | SS | Hynix |  |  | 15-17-17-35 | 1.35v |   |   |  |  | 2133 |
| Neo Forza | 8GB | 1Rx8 | NMUD480E81-3000DD30    | SS | Hynix |  |  | 15-17-17-35 | 1.35v |   |   |  |  | 2133 |

DDR4 2933MHz

| Module Supplier | Density | # of Ranks x DRAM devices | Module P/N.                  | SS/DS | Chip Brand | Chip P/N. | Timing      | Voltage | Memory socket support |   | XMP | Native |
|-----------------|---------|---------------------------|------------------------------|-------|------------|-----------|-------------|---------|-----------------------|---|-----|--------|
|                 |         |                           |                              |       |            |           |             |         | 1                     | 2 |     |        |
| CORSAIR         | 16GB    | 2Rx8                      | CMK128GX4M8Z2933C16 ver 4.31 | DS    | Samsung    |           | 16-18-18-36 | 1.35    | V                     | V | v   | 2133   |

DDR4 2800MHz

| Module Supplier | Density | # of Ranks x DRAM devices | Module P/N.                  | SS/DS | Chip Brand | Chip P/N. | Timing      | Voltage | Memory socket support |   | XMP | Native |
|-----------------|---------|---------------------------|------------------------------|-------|------------|-----------|-------------|---------|-----------------------|---|-----|--------|
|                 |         |                           |                              |       |            |           |             |         | 1                     | 2 |     |        |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2800C16           | SS    | Hynix      |           | 16-18-18-36 | 1.2v    |                       |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2800C16R          | SS    | Hynix      |           | 16-18-18-36 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2800C16B          | SS    | Hynix      |           | 16-18-18-36 | 1.2v    |                       |   | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK64GX4M8B2800C14           | DS    |            |           | 14-16-16-36 | 1.35v   | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMD64GX4M8B2800C14           | DS    |            |           | 14-16-16-36 | 1.35v   | V                     | V | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMD128GX4M8B2800C14 ver5.39  | DS    | Hynix      |           | 14-16-16-36 | 1.35v   | V                     | V | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMD32GX4M2B2800C14           | DS    |            |           | 14-16-16-36 | 1.35v   | V                     | V | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK64GX4M4B2800C14 ver 4.31  | DS    | Samsung    |           | 14-16-16-36 | 1.35v   | V                     | V | v   | 2133   |
| G.SKILL         | 16GB    | 2Rx8                      | F4-2800C15Q2-128GRKD         | DS    |            |           | 15-15-15-35 | 1.35v   | V                     | V | v   | 2133   |
| ADATA           | 4GB     | 1Rx8                      | AX4U2800W4G17-BRZ            | SS    | Hynix      |           | 17-17-17-36 | 1.2v    |                       |   | v   | 2133   |
| ADATA           | 4GB     | 1Rx8                      | AX4U2800W4G17-DRZ            | SS    | Hynix      |           | 17-17-17-36 | 1.2v    | V                     | V | v   | 2133   |
| ADATA           | 4GB     | 1Rx8                      | AX4U2800W4G17-QRZ            | SS    | Hynix      |           | 17-17-17-36 | 1.2v    |                       |   | v   | 2133   |
| ADATA           | 8GB     | 1Rx8                      | AX4U280038G17-BRZ            | SS    | Hynix      |           | 17-17-17    | 1.2     |                       |   | v   | 2133   |
| ADATA           | 8GB     | 1Rx8                      | AX4U280038G17-DRZ            | SS    | Hynix      |           | 17-17-17    | 1.2     | V                     | V | v   | 2133   |
| ADATA           | 8GB     | 1Rx8                      | AX4U280038G17-QRZ            | SS    | Hynix      |           | 17-17-17    | 1.2     |                       |   | v   | 2133   |
| ADATA           | 8GB     | 2Rx8                      | AX4U2800W8G17-BRD            | DS    | Hynix      |           | 17-17-17    | 1.2     |                       |   | v   | 2133   |
| ADATA           | 8GB     | 2Rx8                      | AX4U2800W8G17-DRD            | DS    | Hynix      |           | 17-17-17    | 1.2     | V                     | V | v   | 2133   |
| ADATA           | 8GB     | 2Rx8                      | AX4U2800W8G17-QRD            | DS    | Hynix      |           | 17-17-17    | 1.2     |                       |   | v   | 2133   |
| ADATA           | 16GB    | 2Rx8                      | AX4U2800316G16-BRD           | DS    | Hynix      |           | 16-16-16    | 1.2     |                       |   | v   | 2133   |
| ADATA           | 16GB    | 2Rx8                      | AX4U2800316G16-DRD           | DS    | Hynix      |           | 16-16-16    | 1.2     | V                     | V | v   | 2133   |
| ADATA           | 16GB    | 2Rx8                      | AX4U2800316G16-QRD           | DS    | Hynix      |           | 16-16-16    | 1.2     |                       |   | v   | 2133   |
| KLEVV           | 4GB     | 1Rx8                      | KM4C4GX4N-2800-16-16-16-36-0 | SS    |            |           | 16-16-16-36 | 1.2v    | V                     | V | v   | 2133   |
| KLEVV           | 8GB     | 2Rx8                      | KM4C8GX4N-2800-16-16-16-36-0 | DS    |            |           | 16-16-16-36 | 1.2v    | V                     | V | v   | 2133   |
| KINGMAX         | 8GB     | 1Rx8                      | GLM642F-18KIIA CJB4          | SS    |            |           | 1.2v        | 1.2v    | V                     | V | v   | 2133   |
| PATRIOT         | 4GB     | 1Rx8                      | PVE48G280C6KRD               | SS    |            |           | CL16        | 1.2v    | V                     | V | v   | 2133   |
| Team            | 4GB     | 1Rx8                      | TLRED416G2800HC16CQC01       | SS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 4GB     | 1Rx8                      | TGDED416G2800HC16CQC01       | SS    |            |           | 16-18-18-38 | 1.2v    | V                     | V | v   | 2133   |
| Team            | 4GB     | 1Rx8                      | TLRED48G2800HC16CDC01        | SS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 4GB     | 1Rx8                      | TGDED48G2800HC16CDC01        | SS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 8GB     | 2Rx8                      | TLRED432G2800HC16CQC01       | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 8GB     | 2Rx8                      | TGDED432G2800HC16CQC01       | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 8GB     | 2Rx8                      | THRD432G2800HC16CQC01        | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 8GB     | 2Rx8                      | THWD432G2800HC16CQC01        | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 8GB     | 2Rx8                      | THBD432G2800HC16CQC01        | DS    |            |           | 16-18-18-38 | 1.2v    | V                     | V | v   | 2133   |
| Team            | 8GB     | 2Rx8                      | TLRED416G2800HC16CDC01       | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 8GB     | 2Rx8                      | TGDED416G2800HC16CDC01       | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 8GB     | 2Rx8                      | THRD416G2800HC16CDC01        | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 8GB     | 2Rx8                      | THWD416G2800HC16CDC01        | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 16GB    | 2Rx8                      | THRD464G2800HC16CQC01        | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 16GB    | 2Rx8                      | THWD464G2800HC16CQC01        | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 16GB    | 2Rx8                      | THBD464G2800HC16CQC01        | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 16GB    | 2Rx8                      | THRD432G2800HC16CDC01        | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 16GB    | 2Rx8                      | THWD432G2800HC16CDC01        | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Team            | 16GB    | 2Rx8                      | THBD432G2800HC16CDC01        | DS    |            |           | 16-18-18-38 | 1.2v    |                       |   | v   | 2133   |
| Neo Forza       | 8GB     | 1Rx8                      | NMUD480E82-2800EB30          | SS    | Hynix      |           | 19-26-26-46 | 1.2v    |                       |   | v   | 2133   |
| Neo Forza       | 8GB     | 1Rx8                      | NMUD480E82-2800EA30          | SS    | Hynix      |           | 19-26-26-46 | 1.2v    |                       |   | v   | 2133   |
| Neo Forza       | 8GB     | 1Rx8                      | NMUD480E82-2800EC30          | SS    | Hynix      |           | 19-26-26-46 | 1.2v    |                       |   | v   | 2133   |
| Neo Forza       | 8GB     | 1Rx8                      | NMUD480E82-2800ED30          | SS    | Hynix      |           | 19-26-26-46 | 1.2v    |                       |   | v   | 2133   |
| Neo Forza       | 16GB    | 2Rx8                      | NMUD416E82-2800EB30          | DS    | Hynix      |           | 19-26-26-46 | 1.2v    |                       |   | v   | 2133   |
| Neo Forza       | 16GB    | 2Rx8                      | NMUD416E82-2800EA30          | DS    | Hynix      |           | 19-26-26-46 | 1.2v    | V                     | V | v   | 2133   |
| Neo Forza       | 16GB    | 2Rx8                      | NMUD416E82-2800EC30          | DS    | Hynix      |           | 19-26-26-46 | 1.2v    |                       |   | v   | 2133   |
| Neo Forza       | 16GB    | 2Rx8                      | NMUD416E82-2800ED30          | DS    | Hynix      |           | 19-26-26-46 | 1.2v    |                       |   | v   | 2133   |

DDR4 2666MHz

| Module Supplier | Density | # of Ranks x DRAM devices | Module P/N.     | SS/DS | Chip Brand | Chip P/N. | Timing | Voltage | Memory socket support |   | XMP | Native |
|-----------------|---------|---------------------------|-----------------|-------|------------|-----------|--------|---------|-----------------------|---|-----|--------|
|                 |         |                           |                 |       |            |           |        |         | 1                     | 2 |     |        |
| HyperX          | 4GB     | 1Rx8                      | HX426C15FBK4/16 | SS    | SKhynix    |           | CL15   | 1.2v    | V                     | V | v   | 2666   |
| HyperX          | 4GB     | 1Rx8                      | HX426C15FBK2/8  | SS    | SKhynix    |           | CL15   | 1.2v    | V                     | V | v   | 2666   |
| HyperX          | 4GB     | 1Rx8                      | HX426C15FBJ/4   | SS    | SKhynix    |           | CL15   | 1.2v    | V                     | V | v   | 2666   |
| HyperX          | 4GB     | 1Rx8                      | HX426C15FBK4/16 | SS    | Micron     |           | CL15   | 1.2v    | V                     | V | v   | 2666   |
| HyperX          | 4GB     | 1Rx8                      | HX426C15FBK2/8  | SS    | Micron     |           | CL15   | 1.2v    | V                     | V | v   | 2666   |
| HyperX          | 4GB     | 1Rx8                      | HX426C15FBJ/4   | SS    | Micron     |           | CL15   | 1.2v    | V                     | V | v   | 2666   |

|          |      |      |                              |    |         |  |             |      |   |   |   |      |
|----------|------|------|------------------------------|----|---------|--|-------------|------|---|---|---|------|
| HyperX   | 8GB  | 2Rx8 | HX426C15FBK4/32              | DS | Micron  |  | CL15        | 1.2v | V | V | v | 2666 |
| HyperX   | 8GB  | 2Rx8 | HX426C15FBK2/16              | DS | Micron  |  | CL15        | 1.2v | V | V | v | 2666 |
| HyperX   | 8GB  | 2Rx8 | HX426C15FB/8                 | DS | Micron  |  | CL15        | 1.2v | V | V | v | 2666 |
| HyperX   | 8GB  | 1Rx8 | HX426C16FB2K4/32             | SS | Hynix   |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 8GB  | 1Rx8 | HX426C16FB2K2/16             | SS | Hynix   |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 8GB  | 1Rx8 | HX426C16FB2/8                | SS | Hynix   |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 8GB  | 1Rx8 | HX426C16FB2K4/32             | SS | Micron  |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 8GB  | 1Rx8 | HX426C16FB2K2/16             | SS | Micron  |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 8GB  | 1Rx8 | HX426C16FB2/8                | SS | Micron  |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 8GB  | 1Rx8 | HX426C13PB3K4/32             | SS | Hynix   |  | CL13        | 1.35 | V | V | v | 2400 |
| HyperX   | 8GB  | 1Rx8 | HX426C13PB3K2/16             | SS | Hynix   |  | CL13        | 1.35 | V | V | v | 2400 |
| HyperX   | 8GB  | 1Rx8 | HX426C13PB3/8                | SS | Hynix   |  | CL13        | 1.35 | V | V | v | 2400 |
| HyperX   | 16GB | 2Rx8 | HX426C16FBK4/64              | DS | Hynix   |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 16GB | 2Rx8 | HX426C16FBK2/32              | DS | Hynix   |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 16GB | 2Rx8 | HX426C16FBK/16               | DS | Hynix   |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 16GB | 2Rx8 | HX426C16FWK4/64              | DS | Hynix   |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 16GB | 2Rx8 | HX426C16FWK2/32              | DS | Hynix   |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 16GB | 2Rx8 | HX426C16FWK/16               | DS | Hynix   |  | CL16        | 1.2v | V | V | v | 2666 |
| HyperX   | 16GB | 2Rx8 | HX426C13PB3K4/64             | DS | Hynix   |  | CL13        | 1.35 | V | V | v | 2400 |
| HyperX   | 16GB | 2Rx8 | HX426C13PB3K2/32             | DS | Hynix   |  | CL13        | 1.35 | V | V | v | 2400 |
| HyperX   | 16GB | 2Rx8 | HX426C13PB3/16               | DS | Hynix   |  | CL13        | 1.35 | V | V | v | 2400 |
| Kingston | 8GB  | 1Rx8 | KVR26N19S8/8                 | SS | Micron  |  | CL19        | 1.2v | V | V | v | 2666 |
| Kingston | 8GB  | 1Rx8 | KVR26N19S8/8                 | SS | Micron  |  | CL19        | 1.2v | V | V | v | 2666 |
| Kingston | 16GB | 2Rx8 | KVR26N19D8/16                | DS | Micron  |  | CL19        | 1.2v | V | V | v | 2666 |
| Kingston | 16GB | 2Rx8 | KVR26N19D8/16                | DS | Micron  |  | CL19        | 1.2v | V | V | v | 2666 |
| CORSAIR  | 4GB  | 1Rx8 | CMD8GX4M2A2666C15            | SS |         |  | 15-17-17-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 4GB  | 1Rx8 | CMK16GX4M4A2666C16 ver 3.21  | SS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 4GB  | 1Rx8 | CMK16GX4M4A2666C16B ver 3.21 | SS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 4GB  | 1Rx8 | CMK16GX4M4A2666C16R ver 3.21 | SS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 4GB  | 1Rx8 | CMV4GX4M1A2666C18            | SS |         |  | 18-18-18-43 | 1.2v | V | V | v | 2666 |
| CORSAIR  | 4GB  | 1Rx8 | CMK8GX4M2A2666C16 ver3.22    | SS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMK32GX4M4A2666C15           | DS | Samsung |  | 15-17-17-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMD32GX4M4A2666C15           | DS | Samsung |  | 15-17-17-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMK16GX4M2A2666C16 ver4.23   | DS | Samsung |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMK16GX4M2A2666C16Rver4.23   | DS | Samsung |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMK16GX4M2A2666C16W ver4.23  | DS | Samsung |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMK64GX4M8A2666C16           | DS | Samsung |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMU32GX4M4A2666C16 ver3.21   | DS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMU32GX4M4A2666C16R ver3.21  | DS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMK32GX4M4A2666C16 ver3.21   | DS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMK32GX4M4A2666C16B ver3.21  | DS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMK32GX4M4A2666C16R ver .21  | DS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 2Rx8 | CMK32GX4M4A2666C16W ver3.21  | DS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 1Rx8 | CMK32GX4M4A2666C16 ver5.30   | SS | Hynix   |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 1Rx8 | CMK32GX4M4A2666C16B ver5.30  | SS | Hynix   |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 1Rx8 | CMK32GX4M4A2666C16R ver5.30  | SS | Hynix   |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 1Rx8 | CMK32GX4M4A2666C16W ver5.30  | SS | Hynix   |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 1Rx8 | CMK16GX4M2A2666C16 ver5.30   | DS | Hynix   |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 1Rx8 | CMK16GX4M2A2666C16R ver5.30  | DS | Hynix   |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 1Rx8 | CMR64GX4M8A2666C16 ver5.30   | SS | Hynix   |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 1Rx8 | CMR64GX4M2A2666C16 ver5.30   | SS | Hynix   |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 1Rx8 | CMK16GX4M2D2666C16 ver4.21   | SS | Samsung |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 8GB  | 1Rx8 | CMV8GX4M1A2666C18            | SS |         |  | 18-18-18-43 | 1.2v | V | V | v | 2666 |
| CORSAIR  | 16GB | 2Rx8 | CMK32GX4M2A2666C16           | DS |         |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMK32GX4M2A2666C16R          | DS |         |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMK32GX4M2A2666C16W          | DS |         |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMK64GX4M4A2666C16 ver 4.31  | DS | Samsung |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMK64GX4M4A2666C16W ver 4.31 | DS | Samsung |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMD128GX4M8A2666C15          | DS | Samsung |  | 15-17-17-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMK32GX4M2A2666C16R          | DS |         |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMU64GX4M4A2666C16           | DS |         |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMD64GX4M4A2666C15           | DS |         |  | 15-17-17-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMK64GX4M4A2666C16 ver3.31   | DS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMK64GX4M4A2666C16W ver3.31  | DS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMK16GX4M1A2666C16 ver5.39   | DS | Hynix   |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMK128GX4M8A2666C16 ver5.39  | DS | Hynix   |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| CORSAIR  | 16GB | 2Rx8 | CMV16GX4M1A2666C18           | DS |         |  | 18-18-18-43 | 1.2v | V | V | v | 2666 |
| CORSAIR  | 16GB | 2Rx8 | CMK128GX4M8A2666C16 ver3.32  | DS | Micron  |  | 16-18-18-35 | 1.2v | V | V | v | 2133 |
| G.SKILL  | 4GB  | 1Rx8 | F4-2666C15Q-16GRR            | SS |         |  | 15-15-15-35 | 1.2v | V | V | v | 2133 |
| G.SKILL  | 8GB  | 2Rx8 | F4-2666C15Q-32GRR            | DS | Hynix   |  | 15-15-15-35 | 1.2v | V | V | v | 2133 |
| ADATA    | 4GB  | 1Rx8 | AX4U2666W4G16-BRZ            | SS | Hynix   |  | 16-16-16    | 1.2v | V | V | v | 2133 |
| ADATA    | 4GB  | 1Rx8 | AX4U2666W4G16-DRZ            | SS | Hynix   |  | 16-16-16    | 1.2v | V | V | v | 2133 |
| ADATA    | 4GB  | 1Rx8 | AX4U2666W4G16-QRZ            | SS | Hynix   |  | 16-16-16    | 1.2v | V | V | v | 2133 |
| ADATA    | 4GB  | 1Rx8 | AD4U2666W4G19-B              | SS | spectek |  | C19         | 1.2v | V | V | v | 2666 |
| ADATA    | 8GB  | 2Rx8 | AX4U2666W8G16-BRZ            | DS | Hynix   |  | 16-16-16    | 1.2v | V | V | v | 2133 |
| ADATA    | 8GB  | 2Rx8 | AX4U2666W8G16-DRZ            | DS | Hynix   |  | 16-16-16    | 1.2v | V | V | v | 2133 |
| ADATA    | 8GB  | 2Rx8 | AX4U2666W8G16-QRZ            | DS | Hynix   |  | 16-16-16    | 1.2v | V | V | v | 2133 |
| ADATA    | 8GB  | 1Rx8 | AX4U266638G16-BRS            | SS | Hynix   |  | 16-16-16    | 1.2v | V | V | v | 2133 |
| ADATA    | 8GB  | 1Rx8 | AX4U266638G16-SRS            | SS | Hynix   |  | 16-16-16    | 1.2v | V | V | v | 2133 |
| ADATA    | 8GB  | 1Rx8 | AX4U266638G16-DRS            | SS | Hynix   |  | 16-16-16    | 1.2v | V | V | v | 2133 |
| ADATA    | 8GB  | 1Rx8 | AX4U266638G16-QRS            | SS | Hynix   |  | 16-16-16    | 1.2v | V | V | v | 2133 |
| ADATA    | 8GB  | 1Rx8 | AD4U266638G19-B              | SS |         |  | C19         | 1.2v | V | V | v | 2666 |
| ADATA    | 16GB | 2Rx8 | AD4U2666316G19-B             | SS |         |  | C19         | 1.2v | V | V | v | 2666 |
| Apacer   | 4GB  | 1Rx8 | AHU04GB26CDT6H               | SS |         |  | 16-16-16-36 | 1.2v | V | V | v | 2133 |
| CRUCIAL  | 4GB  | 1Rx8 | BLT4G4D26AFTA.8FADG          | SS |         |  | 16-17-17-36 | 1.2v | V | V | v | 2400 |
| CRUCIAL  | 4GB  | 1Rx8 | BLE4G4D26AFAE.8FADG          | SS |         |  | 16-17-17-36 | 1.2v | V | V | v | 2400 |

|         |      |      |                               |    |        |  |             |       |   |   |   |      |
|---------|------|------|-------------------------------|----|--------|--|-------------|-------|---|---|---|------|
| CRUCIAL | 4GB  | 1Rx8 | BLS4G4D26BFSC.8FBR2           | SS |        |  | 16-18-18-38 | 1.2v  | V | V | v | 2666 |
| CRUCIAL | 8GB  | 2Rx8 | BLT8G4D26AFTA.16FAD           | DS | Micron |  | 16-17-17-36 | 1.2v  | V | V | v | 2400 |
| CRUCIAL | 8GB  | 2Rx8 | BLS8G4D26BFSC.16FBR2          | DS |        |  | 16-18-18-38 | 1.2v  | V | V | v | 2666 |
| CRUCIAL | 16GB | 2Rx8 | BLS16G4D26BFSC.16FBD          | DS |        |  | 16-18-18-38 | 1.2v  | V | V | v | 2666 |
| GEIL    | 8GB  | 1Rx8 | GAEXW416GB2666C16ADC          | SS |        |  | 16-18-18-36 | 1.35v | V | V | v | 2133 |
| GEIL    | 16GB | 2Rx8 | GAEXW432GB2666C16ADC          | DS |        |  | 16-18-18-36 | 1.35v | V | V | v | 2133 |
| GEIL    | 16GB | 2Rx8 | GAEXY432GB2666C16ADC          | DS |        |  | 16-18-18-36 | 1.35v | V | V | v | 2133 |
| PATRIOT | 4GB  | 1Rx8 | PVE48G266C6KBL                | SS |        |  | CL16        | 1.2v  | V | V | v | 2133 |
| PATRIOT | 8GB  | 2Rx8 | PVE416G266C6KBL               | DS |        |  | CL16        | 1.2v  | V | V | v | 2133 |
| Panram  | 8GB  | 1Rx8 | W4U2666PS-8G                  | SS |        |  | CL16        | 1.2v  | V | V | v | 2666 |
| Panram  | 16GB | 2Rx8 | W4U2666PS-16G                 | DS |        |  | CL16        | 1.2v  | V | V | v | 2666 |
| KLEVV   | 4GB  | 1Rx8 | KM4Z4GX1N-2666-15-15-15-35-1  | SS |        |  | 15-15-15-35 | 1.2v  | V | V | v | 2400 |
| KLEVV   | 16GB | 2Rx8 | KM4Z216X1N-2666-15-15-15-35-1 | DS |        |  | 15-15-15-35 | 1.2v  | V | V | v | 2400 |
| Team    | 4GB  | 1Rx8 | TLRED416G2666HC15BQC01        | SS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 4GB  | 1Rx8 | TGDED416G2666HC15BQC01        | SS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 4GB  | 1Rx8 | TLRED48G2666HC15BDC01         | SS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 4GB  | 1Rx8 | TGDED48G2666HC15BDC01         | SS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 4GB  | 1Rx8 | TED416G2666C19QC01            | SS |        |  | 19-19-19-43 | 1.2v  | V | V | v | 2666 |
| Team    | 4GB  | 1Rx8 | TED48G2666C19DC01             | SS |        |  | 19-19-19-43 | 1.2v  | V | V | v | 2666 |
| Team    | 4GB  | 1Rx8 | TED44G2666C1901               | SS |        |  | 19-19-19-43 | 1.2v  | V | V | v | 2666 |
| Team    | 8GB  | 2Rx8 | TLRED432G2666HC15BQC01        | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 8GB  | 2Rx8 | TGDED432G2666HC15BQC01        | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 8GB  | 2Rx8 | THRD432G2666HC15BQC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 8GB  | 2Rx8 | THWD432G2666HC15BQC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 8GB  | 2Rx8 | THBD432G2666HC15BQC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 8GB  | 2Rx8 | TLRED416G2666HC15BDC01        | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 8GB  | 2Rx8 | TGDED416G2666HC15BDC01        | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 8GB  | 2Rx8 | THRD416G2666HC15BDC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 8GB  | 2Rx8 | THWD416G2666HC15BDC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 8GB  | 2Rx8 | THBD416G2666HC15BDC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 8GB  | 1Rx8 | TED432G2666C19QC01            | SS |        |  | 19-19-19-43 | 1.2v  | V | V | v | 2666 |
| Team    | 8GB  | 1Rx8 | TED416G2666C19DC01            | SS |        |  | 19-19-19-43 | 1.2v  | V | V | v | 2666 |
| Team    | 8GB  | 1Rx8 | TED48G2666C1901               | SS |        |  | 19-19-19-43 | 1.2v  | V | V | v | 2666 |
| Team    | 16GB | 2Rx8 | THRD464G2666HC15BQC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 16GB | 2Rx8 | THWD464G2666HC15BQC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 16GB | 2Rx8 | THBD464G2666HC15BQC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 16GB | 2Rx8 | THRD432G2666HC15BDC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 16GB | 2Rx8 | THWD432G2666HC15BDC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 16GB | 2Rx8 | THBD432G2666HC15BDC01         | DS |        |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team    | 16GB | 2Rx8 | TED464G2666C19QC01            | DS |        |  | 19-19-19-43 | 1.2v  | V | V | v | 2666 |
| Team    | 16GB | 2Rx8 | TED432G2666C19DC01            | DS |        |  | 19-19-19-43 | 1.2v  | V | V | v | 2666 |
| Team    | 16GB | 2Rx8 | TED416G2666C1901              | DS |        |  | 19-19-19-43 | 1.2v  | V | V | v | 2666 |

DDR4 2400MHz

| Module Supplier | Density | # of Ranks x DRAM devices | Module P/N.                | SS/DS | Chip Brand | Chip P/N. | Timing      | Voltage | Memory socket support |   | XMP | Native |
|-----------------|---------|---------------------------|----------------------------|-------|------------|-----------|-------------|---------|-----------------------|---|-----|--------|
|                 |         |                           |                            |       |            |           |             |         | 1                     | 2 |     |        |
| HyperX          | 8GB     | 2Rx8                      | HX424C15FB/8               | DS    | SKhynix    |           | C15         | 1.2v    | V                     | V | v   | 2133   |
| HyperX          | 8GB     | 1Rx8                      | HX424C15FB2K4/32           | SS    |            |           | C15         | 1.2v    | V                     | V | v   | 2133   |
| HyperX          | 8GB     | 1Rx8                      | HX424C15FB2K2/16           | SS    |            |           | C15         | 1.2v    | V                     | V | v   | 2133   |
| HyperX          | 8GB     | 1Rx8                      | HX424C15FB2/8              | SS    |            |           | C15         | 1.2v    | V                     | V | v   | 2133   |
| HyperX          | 16GB    | 2Rx8                      | HX424C15FBK4/64            | DS    |            |           | C15         | 1.2v    | V                     | V | v   | 2133   |
| HyperX          | 16GB    | 2Rx8                      | HX424C15FBK2/32            | DS    |            |           | C15         | 1.2v    | V                     | V | v   | 2133   |
| HyperX          | 16GB    | 2Rx8                      | HX424C15FB/16              | DS    |            |           | C15         | 1.2v    | V                     | V | v   | 2133   |
| Kingston        | 4GB     | 1Rx8                      | KVR24N17S8/4               | SS    | Micron     |           | CL17        | 1.2v    | V                     | V | v   | 2400   |
| Kingston        | 8GB     | 2Rx8                      | KVR24N17D8/8               | DS    | Micron     |           | CL17        | 1.2v    | V                     | V | v   | 2400   |
| Kingston        | 8GB     | 1Rx8                      | KVR24N17S8/8               | SS    | Micron     |           | CL17        | 1.2v    | V                     | V | v   | 2400   |
| Kingston        | 16GB    | 2Rx8                      | KVR24N17D8/16              | DS    | Micron     |           | CL17        | 1.2v    | V                     | V | v   | 2400   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2400C14         | SS    | Samsung    |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2400C14B        | SS    | Samsung    |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2400C14R        | SS    | Samsung    |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4A2400C14         | SS    | Samsung    |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK8GX4M2D2400C14 ver3.11  | SS    | Micron     |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C14         | DS    | Samsung    |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C14B        | DS    | Samsung    |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C14R        | DS    | Samsung    |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMD64GX4M8A2400C14 ver4.24 | SS    | Samsung    |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK64GX4M8A2400C14         | DS    | Samsung    |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C16         | SS    |            |           | 16-16-16-39 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C16R        | SS    |            |           | 16-16-16-39 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK16GX4M2A2400C16         | SS    |            |           | 16-16-16-39 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK16GX4M2A2400C16R        | SS    |            |           | 16-16-16-39 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMD32GX4M4A2400C12         | DS    |            |           | 12-14-14-28 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C12         | DS    |            |           | 12-14-14-28 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK16GX4M2Z2400C16 ver3.31 | SS    | Micron     |           | 16-16-16-39 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK16GX4M2A2400C16 ver5.30 | SS    | Hynix      |           | 16-16-16-39 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK32GX4M4A2400C14 ver3.31 | SS    | Micron     |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK16GX4M2D2400C14 ver4.21 | SS    | Samsung    |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK128GX4M8A2400C14        | DS    |            |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK64GX4M4A2400C14         | DS    |            |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMD128GX4M8A2400C14        | DS    |            |           | 14-16-16-31 | 1.2v    | V                     | V | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK64GX4M4A2400C16 ver3.32 | DS    | Micron     |           | 16-16-16-39 | 1.2v    | V                     | V | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-2400C15Q-16GRR          | SS    | Micron     |           | 15-15-15-35 | 1.2v    | V                     | V | v   | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-2400C15Q-32GRR          | DS    | Micron     |           | 15-15-15-35 | 1.2v    | V                     | V | v   | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-2400C15Q2-64GRK         | DS    |            |           | 15-15-15-35 | 1.2v    | V                     | V | v   | 2133   |
| G.SKILL         | 8GB     | 1Rx8                      | F4-2400C17S-8GDB           | SS    |            |           | 17-17-17-39 | 1.2v    | V                     | V | v   | 2400   |
| ADATA           | 4GB     | 1Rx8                      | AD4U2400W4G17-B            | SS    | Hynix      |           |             | 1.2v    | V                     | V | v   | 2400   |
| ADATA           | 8GB     | 2Rx8                      | AX4U2400W8G16-BRD          | DS    | Hynix      |           | 16-16-16    | 1.2v    | V                     | V | v   | 2133   |
| ADATA           | 8GB     | 2Rx8                      | AX4U2400W8G16-DRD          | DS    | Hynix      |           | 16-16-16    | 1.2v    | V                     | V | v   | 2133   |

|          |      |       |                                |    |         |  |             |       |   |   |   |      |
|----------|------|-------|--------------------------------|----|---------|--|-------------|-------|---|---|---|------|
| ADATA    | 8GB  | 2Rx8  | AX4U2400W8G16-QRD              | DS | Hynix   |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 8GB  | 1Rx8  | AX4U240038G16-BRZ              | SS | Hynix   |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 8GB  | 1Rx8  | AX4U240038G16-DRZ              | SS | Hynix   |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 8GB  | 1Rx8  | AX4U240038G16-QRZ              | SS | Hynix   |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 8GB  | 2Rx8  | AX4U2400W8G16-BRZ              | DS |         |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 8GB  | 2Rx8  | AX4U2400W8G16-DRZ              | DS |         |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 8GB  | 2Rx8  | AX4U2400W8G16-QRZ              | DS |         |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 16GB | 2Rx8  | AX4U2400316G16-BRZ             | DS | Hynix   |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 16GB | 2Rx8  | AX4U2400316G16-DRZ             | DS | Hynix   |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 16GB | 2Rx8  | AX4U2400316G16-QRZ             | DS | Hynix   |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 16GB | 2Rx8  | AX4U2400316G16-BRD             | DS | Hynix   |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 16GB | 2Rx8  | AX4U2400316G16-DRD             | DS | Hynix   |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| ADATA    | 16GB | 2Rx8  | AX4U2400316G16-QRD             | DS | Hynix   |  | 16-16-16    | 1.2v  | V | V | v | 2133 |
| Apacer   | 8GB  | 2Rx8  | AU08GGB24CETBGC                | DS |         |  | CL17        | 1.2v  | V | V | v | 2400 |
| Apacer   | 8GB  | 1Rx8  | AHU08GGB24CDU7G                | SS |         |  | 16-16-16-36 | 1.2v  | V | V | v | 2133 |
| Apacer   | 8GB  | 1Rx8  | AU08GGB24CEYBGC                | SS |         |  | CL17        | 1.2v  | V | V | v | 2400 |
| Apacer   | 8GB  | 1Rx8  | AHU08GGB24CDU7S (EK.08G2T.GEJ) | SS |         |  | 16-16-16-36 | 1.2v  | V | V | v | 2400 |
| CRUCIAL  | 8GB  | 2Rx8  | BLS8G4D240FSB.16FARG           | DS | Micron  |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| CRUCIAL  | 8GB  | 2Rx8  | BLS8G4D240FSA.16FARG           | DS | Micron  |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| CRUCIAL  | 8GB  | 1Rx8  | CT8G4DFS824A.8FB1              | SS | Micron  |  | CL17        | 1.2v  | V | V | v | 2400 |
| CRUCIAL  | 8GB  | 2Rx8  | CT8G4WFD824A.18FB1             | DS | Micron  |  | CL17        | 1.2v  | V | V | v | 2400 |
| CRUCIAL  | 8GB  | 2Rx8  | BLS8G4D240FSB.16FAR            | DS | Micron  |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| CRUCIAL  | 16GB | 2Rx8  | BLS16G4D240FSB.16FAD           | DS | Micron  |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| CRUCIAL  | 16GB | 2Rx8  | CT16G4DFD824A.16FB1            | DS | Micron  |  | CL17        | 1.2v  | V | V | v | 2400 |
| CRUCIAL  | 16GB | 2Rx8  | CT16G4WFD824A.18FB1            | DS | Micron  |  | CL17        | 1.2v  | V | V | v | 2400 |
| GEIL     | 4GB  | 1Rx8  | GPR48GB2400C16DC               | SS |         |  | 16-16-16-36 | 1.2v  | V | V | v | 2133 |
| GEIL     | 8GB  | 2Rx8  | GPR432GB2400C15QC              | DS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2133 |
| GEIL     | 8GB  | 1Rx16 | GFY416GB2400C16DC              | SS |         |  | 16-16-16-36 | 1.2v  | V | V | v | 2133 |
| GEIL     | 8GB  | 1Rx8  | GAPB416GB2400C16DC             | SS |         |  | 16-16-16-36 | 1.2v  | V | V | v | 2133 |
| GALAX    | 4GB  | 1Rx8  | GAM4XBLBS240016JE164C          | SS |         |  | 16-16-16-36 | 1.2v  | V | V | v | 2133 |
| GALAX    | 4GB  | 1Rx8  | HOF4BLBM240012FD041C           | SS |         |  | 12-12-12-28 | 1.35v | V | V | v | 2133 |
| KLEVV    | 4GB  | 1Rx8  | KM4B4GX1N-2400-15-15-15-35-0   | SS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2400 |
| KLEVV    | 4GB  | 1Rx8  | KM4Z4GX1N-2400-15-15-15-35-1   | SS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2400 |
| KLEVV    | 8GB  | 1Rx8  | KM4B8GX1N-2400-15-15-15-35-0   | SS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2400 |
| KLEVV    | 8GB  | 1Rx8  | KM4Z8GX1N-2400-15-15-15-35-1   | SS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2400 |
| KLEVV    | 16GB | 2Rx8  | KM4B16X1N-2400-15-15-15-35-0   | DS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2400 |
| KLEVV    | 16GB | 2Rx8  | KM4Z16X1N-2400-15-15-15-35-0   | DS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2400 |
| KINGMAX  | 4GB  | 1Rx16 | GLLF62F-DAKZIG CLBU Z11C       | SS | Spectek |  | 17-17-17-39 | 1.2v  | V | V | v | 2400 |
| KINGMAX  | 4GB  | 1Rx16 | GLLF62F-DAKZIG CLBU Z11B       | SS | Spectek |  | 17-17-17-39 | 1.2v  | V | V | v | 2400 |
| KINGMAX  | 16GB | 2Rx8  | GLLH22F-18KIIA CFBU Z11B       | DS | Spectek |  | 17-17-17-39 | 1.2v  | V | V | v | 2400 |
| PATRIOT  | 4GB  | 1Rx8  | PVE48G240C5KRD                 | SS |         |  | CL15        | 1.2v  | V | V | v | 2133 |
| PATRIOT  | 8GB  | 1Rx8  | PVE416G240C5KRD                | SS |         |  | CL15        | 1.2v  | V | V | v | 2133 |
| PATRIOT  | 8GB  | 1Rx8  | PSD48G240081                   | SS |         |  | CL17        | 1.2v  | V | V | v | 2400 |
| PATRIOT  | 16GB | 2Rx8  | PSD416G24002                   | DS |         |  | CL17        | 1.2v  | V | V | v | 2400 |
| Team     | 8GB  | 2Rx8  | TED432G2400C16QC01             | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 8GB  | 2Rx8  | TPRD432G2400HC16QC01           | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 8GB  | 2Rx8  | TPD432G2400HC16QC01            | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 8GB  | 2Rx8  | TED416G2400C16DC01             | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 8GB  | 2Rx8  | TPRD416G2400HC16DC01           | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 8GB  | 2Rx8  | TPD416G2400HC16DC01            | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 8GB  | 2Rx8  | TED48G2400C1601                | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 8GB  | 2Rx8  | TPRD48G2400HC1601              | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 8GB  | 2Rx8  | TPD48G2400HC1601               | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 8GB  | 2Rx8  | TDTRD416G2400HC15ADC01         | DS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 2Rx8  | TDTWD416G2400HC15ADC01         | DS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 2Rx8  | TDTBD416G2400HC15ADC01         | DS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 2Rx8  | TDTRD48G2400HC15A01            | DS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 2Rx8  | TDTWD48G2400HC15A01            | DS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 2Rx8  | TDTBD48G2400HC15A01            | DS |         |  | 15-15-15-35 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 1Rx8  | TLGD432G2400HC14QC01           | SS |         |  | 14-16-16-31 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 1Rx8  | TLRED432G2400HC14QC01          | SS |         |  | 14-16-16-31 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 1Rx8  | TLGD416G2400HC14DC01           | SS |         |  | 14-16-16-31 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 1Rx8  | TLRED416G2400HC14DC01          | SS |         |  | 14-16-16-31 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 1Rx8  | TLGD48G2400HC1401              | SS |         |  | 14-16-16-31 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 1Rx8  | TLRED48G2400HC1401             | SS |         |  | 14-16-16-31 | 1.2v  | V | V | v | 2133 |
| Team     | 8GB  | 1Rx8  | TF3D48G2400HC15BBK             | SS |         |  | 15-17-17-35 | 1.2v  | V | V | v | 2133 |
| Team     | 16GB | 2Rx8  | TED464G2400C16QC01             | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 16GB | 2Rx8  | TPRD464G2400HC16QC01           | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 16GB | 2Rx8  | TPD464G2400HC16QC01            | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 16GB | 2Rx8  | TED432G2400C16DC01             | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 16GB | 2Rx8  | TPRD432G2400HC16DC01           | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 16GB | 2Rx8  | TPD432G2400HC16DC01            | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 16GB | 2Rx8  | TED416G2400C1601               | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 16GB | 2Rx8  | TPRD416G2400HC1601             | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Team     | 16GB | 2Rx8  | TPD416G2400HC1601              | DS |         |  | 16-16-16-39 | 1.2v  | V | V | v | 2400 |
| Panram   | 8GB  | 1Rx8  | PU042400C158G4NJW              | SS |         |  | CL15        | 1.2v  | V | V | v | 2400 |
| Samsung  | 4GB  | 1Rx16 | M378A5244CB0-CRC               | SS |         |  |             | 1.2v  | V | V | v | 2400 |
| innodisk | 8GB  | 2Rx8  | M4C0-8GSSMCSJ                  | DS | Samsung |  |             | 1.2v  | V | V | v | 2400 |
| V-Color  | 8GB  | 2Rx8  | TD8G16C17-UH                   | DS |         |  | CL17        | 1.2v  | V | V | v | 2400 |
| V-Color  | 8GB  | 1Rx8  | TC48G24S817                    | SS |         |  | CL17        | 1.2v  | V | V | v | 2400 |

DDR4 2133MHz

| Module Supplier | Density | # of Ranks x DRAM devices | Module P/N.      | SS/DS | Chip Brand | Chip P/N. | Timing | Voltage | Memory socket support |   | XMP | Native |
|-----------------|---------|---------------------------|------------------|-------|------------|-----------|--------|---------|-----------------------|---|-----|--------|
|                 |         |                           |                  |       |            |           |        |         | 1                     | 2 |     |        |
| HyperX          | 8GB     | 1Rx8                      | HX421C14FB2K4/32 | SS    |            |           | CL14   | 1.2v    | V                     | V | v   | v      |
| HyperX          | 8GB     | 1Rx8                      | HX421C14FB2K2/16 | SS    |            |           | CL14   | 1.2v    | V                     | V | v   | v      |
| HyperX          | 8GB     | 1Rx8                      | HX421C14FB2/8    | SS    |            |           | CL14   | 1.2v    | V                     | V | v   | v      |

|               |      |      |                               |    |         |                  |             |       |   |   |   |
|---------------|------|------|-------------------------------|----|---------|------------------|-------------|-------|---|---|---|
| HyperX        | 16GB | 2Rx8 | HX421C14FBK4/64               | DS |         |                  | CL14        | 1.2v  | V | V | v |
| HyperX        | 16GB | 2Rx8 | HX421C14FBK2/32               | DS |         |                  | CL14        | 1.2v  | V | V | v |
| HyperX        | 16GB | 2Rx8 | HX421C14FB/16                 | DS |         |                  | CL14        | 1.2v  | V | V | v |
| Kingston      | 4GB  | 1Rx8 | KVR21E15S8/4                  | SS | SKhynix |                  | CL15        | 1.2v  | V | V | v |
| Kingston      | 8GB  | 2Rx8 | KVR21N15D8/8                  | DS | SKhynix |                  | CL15        | 1.2v  | V | V | v |
| Kingston      | 8GB  | 2Rx8 | KVR21E15D8/8HA                | DS | SKhynix |                  | CL15        | 1.2v  | V | V | v |
| Kingston      | 8GB  | 1Rx8 | KVR21N15S8/8                  | DS | Micron  |                  | CL15        | 1.2v  | V | V | v |
| Kingston      | 16GB | 2Rx8 | KVR21N15D8/16                 | DS | Micron  |                  | CL15        | 1.2v  | V | V | v |
| CORSAIR       | 4GB  | 1Rx8 | CMD16GX4M4B2133C10            | SS |         |                  | 10-12-12-31 | 1.35v | V | V | v |
| CORSAIR       | 8GB  | 2Rx8 | CMK64GX4M8A2133C13            | DS |         |                  | 13-15-15-28 | 1.2v  | V | V | v |
| CORSAIR       | 8GB  | 1Rx8 | CMV8GX4M1A2133C15-ESS         | SS | Samsung |                  | C15         | 1.2v  | V | V | v |
| CORSAIR       | 8GB  | 2Rx8 | CMD32GX4M4B2133C10            | DS |         |                  | 10-12-12-31 | 1.35v | V | V | v |
| CORSAIR       | 16GB | 2Rx8 | CMV16GX4M1A2133C15            | DS |         |                  | C15         | 1.2v  | V | V | v |
| CORSAIR       | 16GB | 2Rx8 | CMK128GX4M8A2133C13           | DS |         |                  | 13-15-15-28 | 1.2v  | V | V | v |
| G.SKILL       | 4GB  | 1Rx8 | F4-2133C15Q-16GRR             | SS | Micron  |                  | 15-15-15-35 | 1.2v  | V | V | v |
| G.SKILL       | 8GB  | 2Rx8 | F4-2133C15Q-32GRR             | DS | Micron  |                  | 15-15-15-35 | 1.2v  | V | V | v |
| G.SKILL       | 8GB  | 1Rx8 | F4-2133C15S-8GIS              | SS |         |                  | 15-15-15-35 | 1.2v  | V | V | v |
| CRUCIAL       | 4GB  | 1Rx8 | CT4G4DFS8213.C8FAR1           | SS | Micron  |                  | CL15        | 1.2v  | V | V | v |
| CRUCIAL       | 4GB  | 1Rx8 | CT4G4WFS8213.9FA1             | SS | Micron  |                  | CL15        | 1.2v  | V | V | v |
| CRUCIAL       | 4GB  | 1Rx8 | CT4G4DFS8213.8FA2             | SS | Micron  |                  | CL15        | 1.2v  | V | V | v |
| CRUCIAL       | 8GB  | 2Rx8 | CT8G4WFD8213                  | DS | Micron  |                  | CL15        | 1.2v  | V | V | v |
| CRUCIAL       | 8GB  | 2Rx8 | CT8G4DFD8213.16FA2            | DS | Micron  |                  | CL15        | 1.2v  | V | V | v |
| CRUCIAL       | 8GB  | 2Rx8 | CT8G4DFD8213.C16FAR11         | DS | Micron  |                  | CL15        | 1.2v  | V | V | v |
| CRUCIAL       | 8GB  | 1Rx8 | CT8G4DFS8213.8FB1             | SS | Micron  |                  | CL15        | 1.2v  | V | V | v |
| CRUCIAL       | 16GB | 2Rx8 | CT16G4DFD8213.16FB1           | DS | Micron  |                  | CL15        | 1.2v  | V | V | v |
| GEIL          | 4GB  | 1Rx8 | GPR416GB2133C15QC             | SS |         |                  | 15-15-15-36 | 1.2v  | V | V | v |
| GLOWAY        | 4GB  | 1Rx8 | 4G-2133                       | SS |         |                  | 15-15-15-35 | 1.2v  | V | V | v |
| Silicon POWER | 4GB  | 1Rx8 | SP004GBLUFU213N01             | DS | Samsung |                  | CL15        | 1.2v  | V | V | v |
| Silicon POWER | 8GB  | 2Rx8 | SP008GBLUFU213N01             | SS | Samsung |                  | CL15        | 1.2v  | V | V | v |
| KLEVV         | 4GB  | 1Rx8 | KM4B4GX1N-2133-15-15-15-35-0  | SS |         |                  | 15-15-15-35 | 1.2v  | V | V | v |
| KLEVV         | 8GB  | 1Rx8 | KM4B8GX1N-2133-15-15-15-35-0  | SS |         |                  | 15-15-15-35 | 1.2v  | V | V | v |
| KLEVV         | 16GB | 2Rx8 | KM4B16GX1N-2133-15-15-15-35-0 | DS |         |                  | 15-15-15-35 | 1.2v  | V | V | v |
| Team          | 8GB  | 2Rx8 | TED432G2133C15QC01            | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 8GB  | 2Rx8 | TPRD432G2133HC15QC01          | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 8GB  | 2Rx8 | TPD432G2133HC15QC01           | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 8GB  | 2Rx8 | TED416G2133C15DC01            | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 8GB  | 2Rx8 | TPRD416G2133HC15DC01          | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 8GB  | 2Rx8 | TPD416G2133HC15DC01           | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 8GB  | 2Rx8 | TED48G2133C1501               | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 8GB  | 2Rx8 | TPRD48G2133HC1501             | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 8GB  | 2Rx8 | TPD48G2133HC1501              | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 16GB | 2Rx8 | TED464G2133C15QC01            | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 16GB | 2Rx8 | TPRD464G2133HC15QC01          | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 16GB | 2Rx8 | TPD464G2133HC15QC01           | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 16GB | 2Rx8 | TED432G2133C15DC01            | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 16GB | 2Rx8 | TPRD432G2133HC15DC01          | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 16GB | 2Rx8 | TPD432G2133HC15DC01           | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 16GB | 2Rx8 | TED416G2133C1501              | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 16GB | 2Rx8 | TPRD416G2133HC1501            | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Team          | 16GB | 2Rx8 | TPD416G2133HC1501             | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | V | V | v |
| Panram        | 8GB  | 1Rx8 | PUD42133C158G2VS              | SS |         |                  | CL15        | 1.2v  | V | V | v |
| V-Color       | 8GB  | 1Rx8 | TE48G21S815                   | SS | SKhynix |                  | CL15        | 1.2v  | V | V | v |
| V-Color       | 8GB  | 1Rx8 | TC48G21S815-IMS               | SS |         |                  | CL15        | 1.2v  | V | V | v |
| V-Color       | 16GB | 2Rx8 | TE416G21D815                  | DS | SKhynix |                  | CL15        | 1.2v  | V | V | v |

\* 2 DIMM: Supports one pair of modules inserted into the same color slots as one pair of Dual-channel memory configuration. Install the modules into **DDR4\_1**, **DDR4\_2** for better compatibility.  
 2 DIMM: 請將兩支記憶體模組安裝在同樣顏色記憶體插槽以啟動雙通道設定，並優先安裝在**DDR4\_1**, **DDR4\_2**插槽以確保更好的相容性

\* When running XMP at **DDR4 3200MHz or higher**, the system's stability depends on the CPU's capabilities.  
 當執行XMP至**DDR4 3200MHz或更高**，系統的穩定性會依據CPU的效能而有所差異

\* Memory modules listed as above is for reference only. Due to massive memory models in market, we can only verify some of them.  
 以下所列的記憶體模組僅供參考，因市面上的記憶體模組眾多，我們無法一一驗證

\* When enabling Dual Channel mode with two or four memory modules, it is recommended that using the same capacity, brand, speed, andchips of memory modules and also installed in the same color of DDR4 slots.  
 若要安裝兩支或四支DDR4記憶體模組，建議您使用相同容量/廠牌/速度/顆粒等之記憶體模組。

