

Qualified Vendors List (QVL), Model Name: GA-Z270-HD3P

DDR4 3800~3866MHz

| 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 | 4 |     |        |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4B3866C18R | SS    |            |           | 18-22-22-40 | 1.35v   | v                     | v |   | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3866C18Q-16GTZ   | SS    | Samsung    |           | 18-22-22-42 | 1.35v   | v                     | v |   | v   | 2133   |
| Team            | 4GB     | 1Rx8                      | TCD44G3866C18ABK    | SS    | Samsung    |           | 18-20-20-39 | 1.35v   | v                     | v | v | v   | 2133   |

DDR4 3733MHz

| 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 | 4 |     |        |
| CORSAIR         | 8GB     | 1Rx8                      | CMK32GX4M4B3733C17R        | SS    |            |           | 17-19-19-39 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMD32GX4M4B3733C17 ver4.31 | SS    | Samsung    |           | 17-19-19-39 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3733C17Q-16GTZ          | SS    | Samsung    |           | 17-19-19-39 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3733C18Q-32GTZKW        | SS    | Samsung    |           | 18-19-19-39 | 1.35v   | v                     | v | v | v   | 2133   |
| Team            | 8GB     | 1Rx8                      | TCD48G3733C18ABK           | SS    | SKhynix    |           | 18-20-20-39 | 1.35v   | v                     | v |   | v   | 2133   |

DDR4 3600~3666MHz

| 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 | 4 |     |        |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3600C18 ver4.24 | SS    | Samsung    |           | 18-19-19-39 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK32GX4M4B3600C18         | SS    |            |           | 18-19-19-39 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK32GX4M4B3600C18R        | SS    |            |           | 18-19-19-39 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3600C18         | DS    |            |           | 18-19-19-39 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3600C18R        | DS    |            |           | 18-19-19-39 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMD32GX4M4B3600C16         | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK32GX4M4B3600C16R        | SS    |            |           | 16-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3600C17Q-16GVK          | SS    |            |           | 17-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3600C17Q-32GVK          | SS    |            |           | 17-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3600C16D-16GVK          | SS    |            |           | 16-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Apacer          | 8GB     | 1Rx8                      | AHU08GGB36CJU5H            | SS    |            |           | 18-18-18-42 | 1.35v   | v                     | v | v | v   | 2400   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001804G-4BZ1RR    | SS    | Samsung    |           | 18-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001804G-4BZ1GY    | SS    | Samsung    |           | 18-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001804G-4BZ1SW    | SS    | Samsung    |           | 18-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001804G-2BZ1RR    | SS    | Samsung    |           | 18-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001804G-2BZ1GY    | SS    | Samsung    |           | 18-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001804G-2BZ1SW    | SS    | Samsung    |           | 18-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001704G-4BZ1RR    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001704G-4BZ1GY    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001704G-4BZ1SW    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001704G-2BZ1RR    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001704G-2BZ1GY    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ136001704G-2BZ1SW    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 8GB     | 1Rx8                      | AVD4UZ136001708G-4BZ1RR    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 8GB     | 1Rx8                      | AVD4UZ136001708G-4BZ1GY    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 8GB     | 1Rx8                      | AVD4UZ136001708G-4BZ1SW    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 8GB     | 1Rx8                      | AVD4UZ136001708G-2BZ1RR    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 8GB     | 1Rx8                      | AVD4UZ136001708G-2BZ1GY    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 8GB     | 1Rx8                      | AVD4UZ136001708G-2BZ1SW    | SS    |            |           | 17-20-20-40 | 1.35v   | v                     | v |   | v   | 2133   |
| Team            | 8GB     | 1Rx8                      | TCD48G3600C18ABK           | SS    | Samsung    |           | 18-20-20-39 | 1.35v   | v                     | v | v | v   | 2133   |
| PATRIOT         | 4GB     | 1Rx8                      | PV48G360C7K                | SS    |            |           | CL17        | 1.35v   | v                     | v |   | v   | 2133   |

DDR4 3400~3466MHz

| 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 | 4 |     |        |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3400C16         | SS    |            |           | 16-18-18-40 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3466C18         | SS    |            |           | 18-19-19-38 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4B3400C16         | SS    |            |           | 16-18-18-40 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4B3400C16 ver4.24 | SS    | Samsung    |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK32GX4M4B3466C16         | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4B3466C16R        | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3466C16         | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3466C16R        | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMU32GX4M4C3400C16R        | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMU32GX4M4C3400C16         | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMD32GX4M4B3466C16         | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMU32GX4M4C3466C16         | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMU32GX4M4C3400C16R        | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3400C16Q-16GRKD         | SS    |            |           | 16-16-16-36 | 1.35v   | v                     | v |   | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3466C16Q-16GVR          | SS    |            |           | 16-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-3400C16Q-32GTZ          | DS    |            |           | 16-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3400C16Q2-64GTZ         | SS    | Samsung    |           | 16-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3466C16Q2-64GTZ         | SS    | Samsung    |           | 16-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-3400C16D-16GVK          | DS    |            |           | 16-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |
| ADATA           | 4GB     | 1Rx8                      | AX4U3400W4G16-BWZ          | SS    |            |           | 16-17-17-36 | 1.35v   | v                     | v |   | v   | 2133   |
| ADATA           | 4GB     | 1Rx8                      | AX4U3466W4G16-BWZ          | SS    |            |           | 16-17-17-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Apacer          | 4GB     | 1Rx8                      | 78.BAGN1.4020B             | SS    | Samsung    |           | 18-18-18-42 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ134661704G-4BZ1RR    | SS    | Samsung    |           | 17-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ134661704G-4BZ1GY    | SS    | Samsung    |           | 17-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |

|         |     |      |                         |    |         |  |             |       |   |   |   |   |      |
|---------|-----|------|-------------------------|----|---------|--|-------------|-------|---|---|---|---|------|
| Avexir  | 4GB | 1Rx8 | AVD4UZ134661704G-4BZ1SW | SS | Samsung |  | 17-18-18-38 | 1.35v | v | v | v | v | 2133 |
| Avexir  | 4GB | 1Rx8 | AVD4UZ134661704G-2BZ1RR | SS | Samsung |  | 17-18-18-38 | 1.35v | v | v |   | v | 2133 |
| Avexir  | 4GB | 1Rx8 | AVD4UZ134661704G-2BZ1GY | SS | Samsung |  | 17-18-18-38 | 1.35v | v | v |   | v | 2133 |
| Avexir  | 4GB | 1Rx8 | AVD4UZ134661704G-2BZ1SW | SS | Samsung |  | 17-18-18-38 | 1.35v | v | v |   | v | 2133 |
| PATRIOT | 4GB | 1Rx8 | PV48G340C6K             | SS |         |  | CL16        | 1.35v | v | v |   | v | 2133 |
| Team    | 8GB | 1Rx8 | TCD48G3466C17ABK        | SS | Samsung |  | 17-19-19-39 | 1.35v | v | v |   | v | 2133 |

DDR4 3300~3333MHz

| 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 | 4 |     |        |
| HyperX          | 4GB     | 1Rx8                      | HX433C17PBK4/16         | SS    |            |           | 17-17-17-43 | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 8GB     | 1Rx8                      | HX433C16PB3K2/16        | SS    |            |           | 16-18-18    | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4B3300C16      | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3300C16      | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4B3333C16      | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK8GX4M2B3333C16       | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMD32GX4M4B3333C16      | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK64GX4M4B3333C16      | DS    |            |           | 16-18-18-36 | 1.35v   | v                     |   | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK64GX4M4B3333C16R     | DS    |            |           | 16-18-18-36 | 1.35v   | v                     |   | v | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3333C16Q-16GRKD      | SS    | SKhynix    |           | 16-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3300C16Q-16GRKD      | SS    |            |           | 16-16-16-36 | 1.35v   | v                     | v |   | v   | 2133   |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3300C16Q2-64GTZSW    | SS    | Samsung    |           | 16-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-3333C16Q-32GVR       | DS    | Samsung    |           | 16-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 16GB    | 2Rx8                      | F4-3333C16Q2-128GTZSW   | DS    | Samsung    |           | 16-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 16GB    | 2Rx8                      | F4-3300C16Q2-128GTZ     | DS    | Samsung    |           | 16-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ133331604G-4BZ1RR | SS    | Samsung    |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ133331604G-4BZ1GY | SS    | Samsung    |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ133331604G-4BZ1SW | SS    | Samsung    |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ133331604G-2BZ1RR | SS    | Samsung    |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ133331604G-2BZ1GY | SS    | Samsung    |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ133331604G-2BZ1SW | SS    | Samsung    |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| GEIL            | 4GB     | 1Rx8                      | GLWR48GB333316DC        | SS    |            |           | 16-16-16-36 | 1.35v   | v                     | v |   | v   | 2133   |

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 | 4 |     |        |
| HyperX          | 4GB     | 1Rx8                      | HX432C16PBK4/16         | SS    | SKhynix    |           | 16-16-16-39 | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX432C16PB3K4/16        | SS    | SKhynix    |           | 16-16-16-39 | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 8GB     | 1Rx8                      | HX432C16PB3K4/32        | SS    | SKhynix    |           | 16-18-18    | 1.35v   | v                     | v | v | v   | 2133   |
|                 |         |                           | HX432C16PB3K2/16        | SS    | SKhynix    |           | 16-18-18    | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3200C16      | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4B3200C15      | SS    |            |           | 16-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK8GX4M2B3200C16       | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK8GX4M2B3200C16R      | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4B3200C16      | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4C3200C16      | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4C3200C16R     | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4C3200C15      | SS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3200C16      | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3200C14      | SS    |            |           | 14-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3200C16      | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3200C16R     | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3200C16W     | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMD64GX4M8B3200C16      | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMK64GX4M8B3200C16      | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMD32GX4M4B3200C16      | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK32GX4M2B3200C16      | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK32GX4M2B3200C16R     | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK32GX4M2B3200C16W     | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK64GX4M4B3200C16      | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMU32GX4M2C3200C16      | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMU32GX4M2C3200C16R     | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMU64GX4M4C3200C16      | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMU64GX4M4C3200C16R     | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3200C16Q-16GRKD      | SS    | SKhynix    |           | 16-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3200C16Q-16GRK       | SS    |            |           | 16-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-3200C16Q-32GVK       | DS    |            |           | 16-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-3200C16D-16GVKB      | DS    |            |           | 16-18-18-38 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3200C14Q2-64GVK      | SS    | Samsung    |           | 14-14-14-34 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 16GB    | 2Rx8                      | F4-3200C16Q-64GVK       | DS    | Samsung    |           | 16-18-18-38 | 1.35v   | v                     | v |   | v   | 2133   |
| G.SKILL         | 16GB    | 2Rx8                      | F4-3200C14Q-64GVK       | DS    | Samsung    |           | 14-14-14-34 | 1.35v   | v                     | v |   | v   | 2133   |
| G.SKILL         | 16GB    | 2Rx8                      | F4-3200C14Q2-128GTZ     | DS    | Samsung    |           | 14-14-14-34 | 1.35v   | v                     | v | v | v   | 2133   |
| Apacer          | 4GB     | 1Rx8                      | 78.BAGMD.AF20B          | SS    |            |           | 16-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4U32001604G-4CIR     | SS    |            |           | CL16        | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ132001604G-4BZ1RR | SS    | Samsung    |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
|                 |         |                           | AVD4UZ132001604G-4BZ1GY |       |            |           |             |         | v                     | v | v | v   | 2133   |
|                 |         |                           | AVD4UZ132001604G-4BZ1SW |       |            |           |             |         | v                     | v | v | v   | 2133   |

|         |      |      |                       |    |         |  |             |       |   |   |   |   |      |
|---------|------|------|-----------------------|----|---------|--|-------------|-------|---|---|---|---|------|
| GEIL    | 4GB  | 1Rx8 | GPR416GB3200C16QC     | SS |         |  | 16-16-16-36 | 1.35v | v | v | v | v | 2133 |
| PATRIOT | 4GB  | 1Rx8 | PV48G320C6K           | SS |         |  | CL16        | 1.35v | v | v |   | v | 2133 |
| Panram  | 4GB  | 1Rx8 | PUD43200C164G4NJW     | SS | SKhynix |  | 16-18-18-39 | 1.35v | v | v |   | v | 2133 |
| Team    | 8GB  | 1Rx8 | TCD48G3200C16ABK      | SS | SKhynix |  | 16-16-16-36 | 1.35v | v | v | v | v | 2133 |
| Team    | 8GB  | 2Rx8 | THRD432G3200HC16CQC01 | DS |         |  | 16-18-18-38 | 1.35v | v | v |   | v | 2133 |
| Team    | 8GB  | 2Rx8 | THRD416G3200HC16CDC01 | DS |         |  | 16-18-18-38 | 1.35v | v | v |   | v | 2133 |
| Team    | 8GB  | 2Rx8 | THRD48G3200HC16C01    | DS |         |  | 16-18-18-38 | 1.35v | v |   |   | v | 2133 |
| Team    | 16GB | 2Rx8 | THRD464G3200HC16CQC01 | DS |         |  | 16-18-18-38 | 1.35v | v | v |   | v | 2133 |
| Team    | 16GB | 2Rx8 | THRD432G3200HC16CDC01 | DS |         |  | 16-18-18-38 | 1.35v | v | v |   | v | 2133 |
| Team    | 16GB | 2Rx8 | THRD416G3200HC16C01   | DS |         |  | 16-18-18-38 | 1.35v | v |   |   | 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 | 4 |     |        |
| HyperX          | 4GB     | 1Rx8                      | HX430C15PB2K4/16             | SS    |            |           | 15-16-16    | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX430C15SB2K4/16             | SS    | SKhynix    |           | C15         | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX430C15SB2K2/8              | SS    | SKhynix    |           | C15         | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX430C15SB2/4                | SS    | SKhynix    |           | C15         | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX430C15PB3K4/16             | SS    | SKhynix    |           | C15         | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX430C15PB3K2/8              | SS    | SKhynix    |           | C15         | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX430C15PBK4/32              | DS    |            |           | 15-16-16    | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX430C15SB2K4/32             | DS    | SKhynix    |           | C15         | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX430C15SB2K2/16             | DS    | SKhynix    |           | C15         | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX430C15SB2/8                | DS    | SKhynix    |           | C15         | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 8GB     | 1Rx8                      | HX430C15PB3K4/32             | SS    | SKhynix    |           | C15         | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 8GB     | 1Rx8                      | HX430C15PB3K2/16             | SS    | SKhynix    |           | C15         | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 16GB    | 2Rx8                      | HX430C16PB2K2/32             | DS    |            |           | C16         | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 16GB    | 2Rx8                      | HX430C15PB3K4/64             | DS    | SKhynix    |           | C15         | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 16GB    | 2Rx8                      | HX430C15PB3K2/32             | DS    | SKhynix    |           | C15         | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3000C15           | SS    | SKhynix    |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3000C15           | SS    | Samsung    |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4B3000C15           | SS    |            |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4B3000C15B          | SS    |            |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4B3000C15R          | SS    |            |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4B3000C14           | SS    |            |           | 14-16-16-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK8GX4M2B3000C15            | SS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK8GX4M2B3000C15R           | SS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4B3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3000C15B          | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3000C15R          | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK16GX4M2B3000C15W          | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMD16GX4M2B3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMD32GX4M4C3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMU16GX4M2C3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMU16GX4M2C3000C15R          | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMU32GX4M4C3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMU32GX4M4C3000C15R          | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK32GX4M2B3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK64GX4M4B3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK128GX4M8B3000C16          | DS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMD64GX4M4C3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMU64GX4M4C3000C15R          | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMU64GX4M4C3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMU32GX4M2C3000C15R          | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMU32GX4M2C3000C15           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v |   | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3000C15Q-16GVR            | SS    |            |           | 15-15-15-35 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-3000C15Q2-32GRBB          | SS    |            |           | 15-16-16-35 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-3000C15Q-32GRK            | DS    |            |           | 15-15-15-35 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 1Rx8                      | F4-3000C15Q2-64GVR           | SS    |            |           | 15-15-15-35 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 16GB    | 2Rx8                      | F4-3000C14Q2-128GVKD         | DS    |            |           | 14-14-14-34 | 1.35v   | v                     | v | v | v   | 2133   |
| ADATA           | 4GB     | 1Rx8                      | AX4U3000W4G16-BWZ            | SS    |            |           | 16-16-16    | 1.35    | v                     | v | v | v   | 2133   |
| ADATA           | 8GB     | 2Rx8                      | AX4U3000W8G16-BWZ            | DS    |            |           | 16-16-16    | 1.35    | v                     | v |   | v   | 2133   |
| ADATA           | 16GB    | 2Rx8                      | AX4U3000316G16               | DS    |            |           | 16-18-18-36 | 1.35    | v                     | v |   | v   | 2133   |
| Apacer          | 8GB     | 2Rx8                      | AHU08GGB30CDT5H              | DS    |            |           | 16-16-16-36 |         | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4U30001604G-4CIR          | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ130001604G-4RD         | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ130001604G-2RD         | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v |   | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ130001604G-4BZ1RR      | SS    | Samsung    |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
|                 |         |                           | AVD4UZ130001604G-4BZ1GY      |       |            |           |             |         | v                     | v | v | v   | 2133   |
|                 |         |                           | AVD4UZ130001604G-4BZ1SW      |       |            |           |             |         | v                     | v | v | v   | 2133   |
| Avexir          | 8GB     | 1Rx8                      | AVD4UZ130001608G-4RD         | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 8GB     | 1Rx8                      | AVD4UZ130001608G-2RD         | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
| Avexir          | 8GB     | 1Rx8                      | AVD4UZ130001608G-4BZ1RR      | SS    | Samsung    |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |
|                 |         |                           | AVD4UZ130001608G-4BZ1GY      |       |            |           |             |         | v                     | v | v | v   | 2133   |
|                 |         |                           | AVD4UZ130001608G-4BZ1SW      |       |            |           |             |         | v                     | v | v | v   | 2133   |
| GEIL            | 8GB     | 2Rx8                      | GPR416GB3000C15ADC           | DS    |            |           | 15-17-17-35 | 1.35v   | v                     | v | v | v   | 2133   |
| KLEVV           | 4GB     | 1Rx8                      | KM4C4GX4A-3000-16-18-18-36-0 | SS    |            |           | 16-18-18-36 | 1.35v   | v                     | v | v | v   | 2133   |

|         |      |      |                                |    |         |  |             |       |   |   |   |   |      |
|---------|------|------|--------------------------------|----|---------|--|-------------|-------|---|---|---|---|------|
| KLEVV   | 8GB  | 2Rx8 | KM4C8GX4A-3000-16-18-18-36-0/1 | DS |         |  | 16-18-18-36 | 1.35v | v | v |   | v | 2133 |
| Panram  | 4GB  | 1Rx8 | PUD43000C154G4NJW              | SS | SKhynix |  | 15-17-17-35 | 1.35v | v | v | v | v | 2133 |
| Team    | 4GB  | 1Rx8 | TLRED416G3000HC16CQC01         | SS |         |  | 16-18-18-38 | 1.35v | v | v | v | v | 2133 |
| Team    | 4GB  | 1Rx8 | TLRED48G3000HC16CDC01          | SS |         |  | 16-18-18-38 | 1.35v | v | v |   | v | 2133 |
| Team    | 4GB  | 1Rx8 | TLRED44G3000HC16C01            | SS |         |  | 16-18-18-38 | 1.35v | v |   |   | v | 2133 |
| Team    | 8GB  | 1Rx8 | TCD48G3000C16ABK               | SS | SKhynix |  | 16-16-16-36 | 1.35v | v | v | v | v | 2133 |
| Team    | 8GB  | 2Rx8 | TLRED432G3000HC16CQC01         | DS |         |  | 16-18-18-38 | 1.35v | v | v | v | v | 2133 |
| Team    | 8GB  | 2Rx8 | TLRED416G3000HC16CDC01         | DS |         |  | 16-18-18-38 | 1.35v | v | v |   | v | 2133 |
| Team    | 8GB  | 2Rx8 | TLRED48G3000HC16C01            | DS |         |  | 16-18-18-38 | 1.35v | v |   |   | v | 2133 |
| Team    | 16GB | 2Rx8 | TDPRD464G3000HC16CQC01         | DS |         |  | 16-18-18-38 | 1.35v | v | v | v | v | 2133 |
| Team    | 16GB | 2Rx8 | TDPRD432G3000HC16CDC01         | DS |         |  | 16-18-18-38 | 1.35v | v | v |   | v | 2133 |
| Team    | 16GB | 2Rx8 | TDPRD416G3000HC16C01           | DS |         |  | 16-18-18-38 | 1.35v | v |   |   | v | 2133 |
| V-Color | 8GB  | 1Rx8 | TL48G30S816B                   | SS |         |  | CL16        | 1.35v | v | 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 | 4 |     |        |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2800C16           | SS    | SKhynix    |           | 16-18-18-36 | 1.2v    | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2800C16R          | SS    | SKhynix    |           | 16-18-18-36 | 1.2v    | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2800C16B          | SS    | SKhynix    |           | 16-18-18-36 | 1.2v    | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4A2800C16           | SS    | SKhynix    |           | 16-18-18-36 | 1.2v    | v                     | v | v | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4A2800C16           | SS    | Samsung    |           | 16-18-18-36 | 1.2v    | v                     | v |   | v   | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2800C16R          | SS    |            |           | 16-18-18-36 | 1.2v    | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMD32GX4M4A2800C16           | DS    | SKhynix    |           | 16-18-18-36 | 1.2v    | v                     | v |   | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2800C16           | DS    | SKhynix    |           | 16-18-18-36 | 1.2v    | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK64GX4M8B2800C14           | DS    |            |           | 14-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMD64GX4M8B2800C14           | DS    |            |           | 14-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMD128GX4M8B2800C14          | DS    |            |           | 14-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMD32GX4M2B2800C14           | DS    |            |           | 14-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK64GX4M4B2800C14 ver.4.31  | DS    | Samsung    |           | 14-16-16-36 | 1.35v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-2800C16Q-16GRK            | SS    |            |           | 16-16-16-36 | 1.2v    | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-2800C16Q-32GRK            | DS    |            |           | 16-16-16-36 | 1.2v    | v                     | v | v | v   | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-2800C15Q2-64GRK           | DS    |            |           | 15-16-16-35 | 1.25v   | v                     | v | v | v   | 2133   |
| G.SKILL         | 16GB    | 2Rx8                      | F4-2800C15Q2-128GRKD         | DS    |            |           | 15-15-15-35 | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX428C14PB2K4/16             | SS    | SKhynix    |           | 15-15-15-39 | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX428C14SB2K4/16             | SS    | SKhynix    |           | C14         | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX428C14SB2K2/8              | SS    | SKhynix    |           | C14         | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX428C14SB2/4                | SS    | SKhynix    |           | C14         | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX428C14PBK4/32              | DS    |            |           | CL14        | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX428C14SB2K4/32             | DS    | SKhynix    |           | C14         | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX428C14SB2K2/16             | DS    | SKhynix    |           | C14         | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX428C14SB2/8                | DS    | SKhynix    |           | C14         | 1.35v   | v                     | v |   | v   | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX428C14PBK8/64              | DS    |            |           | C14         | 1.35v   | v                     | v | v | v   | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX428C14SB2K8/64             | DS    |            |           | C14         | 1.35v   | v                     | v | v | v   | 2133   |
| ADATA           | 4GB     | 1Rx8                      | AX4U2800W4G17-BRZ            | SS    |            |           | 17-17-17-36 | 1.2v    | v                     | v | v | v   | 2133   |
| ADATA           | 8GB     | 2Rx8                      | AX4U2800W8G17-BRZ            | DS    |            |           | 17-17-17-36 | 1.2v    | v                     | v | v | v   | 2133   |
| ADATA           | 8GB     | 2Rx8                      | AX4U2800W8G15-QRD            | DS    |            |           | CL15        | 1.35    | v                     | v | v | v   | 2133   |
| ADATA           | 8GB     | 1Rx8                      | AX4U280038G17-SBF            | SS    |            |           | 17-17-17    | 1.2     | v                     | v | v | v   | 2133   |
| ADATA           | 16GB    | 2Rx8                      | AX4U2800316G16               | DS    |            |           | 16-16-16-36 | 1.2v    | v                     | v | v | v   | 2133   |
| ADATA           | 16GB    | 2Rx8                      | AX4U2800316G16-SBF           | DS    |            |           | 16-16-16    | 1.2v    | v                     | v | v | v   | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4U28001504G-4CIR          | SS    |            |           | CL15        | 1.2v    | v                     | v | v | v   | 2133   |
| Avexir          | 8GB     | 1Rx8                      | AVD4UZ128001504G-4BZ1RR      | SS    | Samsung    |           | 15-15-15-35 | 1.35v   | v                     | v | v | v   | 2133   |
|                 |         |                           | AVD4UZ128001504G-4BZ1GY      |       |            |           |             |         | v                     | v |   | v   | 2133   |
|                 |         |                           | AVD4UZ128001504G-4BZ1SW      |       |            |           |             |         | v                     | v |   | v   | 2133   |
| Avexir          | 8GB     | 2Rx8                      | AVD4U28001608G-4CIR          | DS    |            |           | CL16        | 1.2v    | v                     | v | v | v   | 2133   |
| Apacer          | 4GB     | 1Rx8                      | 78.BAGM8.AF20B               | SS    |            |           | 17-17-17-36 | 1.2v    | v                     | v | v | v   | 2133   |
| Apacer          | 8GB     | 2Rx8                      | 78.CAGM8.AF30B               | DS    |            |           | 17-17-17-36 | 1.2v    | v                     | v |   | v   | 2133   |
| Apacer          | 8GB     | 2Rx8                      | AHU08GGB28CET6H              | DS    |            |           | 17-17-17-36 |         | v                     | v | v | v   | 2133   |
| KLEVV           | 4GB     | 1Rx8                      | KM4C4GX4N-2800-16-16-16-36-0 | SS    |            |           | 16-16-16-36 | 1.2v    | v                     | v | v | v   | 2133   |
| KLEVV           | 8GB     | 2Rx8                      | KM4C8GX4N-2800-16-16-16-36-0 | DS    |            |           | 16-16-16-36 | 1.2v    | v                     | v | v | v   | 2133   |
| PATRIOT         | 4GB     | 1Rx8                      | PV48G280C6K                  | SS    |            |           | CL16        | 1.2v    | v                     | v | v | v   | 2133   |
| PATRIOT         | 4GB     | 1Rx8                      | PVE48G280C6KGY               | SS    |            |           | CL16        | 1.2v    | v                     | v | v | v   | 2133   |
| PATRIOT         | 8GB     | 2Rx8                      | PV416G280C6K                 | DS    |            |           | CL16        | 1.2v    | v                     | v | v | v   | 2133   |
| Panram          | 4GB     | 1Rx8                      | PUD42800C164G4NJW            | SS    | SKhynix    |           | 16-18-18-36 | 1.25v   | v                     | v | v | v   | 2133   |
| Team            | 4GB     | 1Rx8                      | TCD44G2800C16ABK             | SS    | SKhynix    |           | 16-16-16-36 | 1.2v    | v                     | v | v | v   | 2133   |
| Team            | 4GB     | 1Rx8                      | TLRED416G2800HC16CQC01       | SS    |            |           | 16-18-18-38 | 1.2v    | v                     | v | v | v   | 2133   |
| Team            | 4GB     | 1Rx8                      | TLRED48G2800HC16CDC01        | SS    |            |           | 16-18-18-38 | 1.2v    | v                     | v |   | v   | 2133   |
| Team            | 4GB     | 1Rx8                      | TLRED44G2800HC16C01          | SS    |            |           | 16-18-18-38 | 1.2v    | v                     |   |   | v   | 2133   |
| Team            | 8GB     | 2Rx8                      | TCD48G2800C16ABK             | DS    | SKhynix    |           | 16-16-16-36 | 1.2v    | v                     | v | v | v   | 2133   |
| Team            | 16GB    | 2Rx8                      | THRD464G2800HC16CQC01        | DS    |            |           | 16-18-18-38 | 1.2v    | v                     | v | v | v   | 2133   |
| Team            | 16GB    | 2Rx8                      | THRD432G2800HC16CDC01        | DS    |            |           | 16-18-18-38 | 1.2v    | v                     | v |   | v   | 2133   |
| Team            | 16GB    | 2Rx8                      | THRD416G2800HC16C01          | DS    |            |           | 16-18-18-38 | 1.2v    | v                     |   |   | 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 | 4 |     |        |
| HyperX          | 4GB     | 1Rx8                      | HX426C15K4/16 | SS    |            |           | 15-17-17-35 | 1.2v    | v                     | v | v |     | 2666   |

|         |      |      |                             |    |         |  |             |       |   |   |   |   |      |
|---------|------|------|-----------------------------|----|---------|--|-------------|-------|---|---|---|---|------|
| HyperX  | 4GB  | 1Rx8 | HX426C13PB2K4/16            | SS |         |  | CL13        | 1.35v | v | v | v | v | 2133 |
| HyperX  | 4GB  | 1Rx8 | HX426C13SB2K4/16            | SS | SKhynix |  | CL13        | 1.35v | v | v | v | v | 2133 |
| HyperX  | 4GB  | 1Rx8 | HX426C13SB2K2/8             | SS | SKhynix |  | CL13        | 1.35v | v | v |   | v | 2133 |
| HyperX  | 4GB  | 1Rx8 | HX426C13SB2/4               | SS | SKhynix |  | CL13        | 1.35v | v | v |   | v | 2133 |
| HyperX  | 4GB  | 1Rx8 | HX426C15FBK4/16             | SS | SKhynix |  | CL15        | 1.2v  | v | v | v | v | 2133 |
| HyperX  | 4GB  | 1Rx8 | HX426C15FBK2/8              | SS | SKhynix |  | CL15        | 1.2v  | v | v |   | v | 2133 |
| HyperX  | 4GB  | 1Rx8 | HX426C15FB/4                | SS | SKhynix |  | CL15        | 1.2v  | v | v |   | v | 2133 |
| HyperX  | 8GB  | 2Rx8 | HX426C13PBK4/32             | DS | SKhynix |  | CL13        | 1.35v | v | v | v | v | 2133 |
| HyperX  | 8GB  | 2Rx8 | HX426C13SB2K4/32            | DS | SKhynix |  | CL13        | 1.35v | v | v |   | v | 2133 |
| HyperX  | 8GB  | 2Rx8 | HX426C13SB2K2/16            | DS | SKhynix |  | CL13        | 1.35v | v | v |   | v | 2133 |
| HyperX  | 8GB  | 2Rx8 | HX426C13SB2/8               | DS | SKhynix |  | CL13        | 1.35v | v | v |   | v | 2133 |
| HyperX  | 8GB  | 2Rx8 | HX426C15FBK4/32             | DS | SKhynix |  | CL15        | 1.2v  | v | v | v | v | 2666 |
| HyperX  | 8GB  | 2Rx8 | HX426C15FBK2/16             | DS | SKhynix |  | CL15        | 1.2v  | v | v |   | v | 2666 |
| HyperX  | 8GB  | 2Rx8 | HX426C15FB/8                | DS | SKhynix |  | CL15        | 1.2v  | v | v |   | v | 2666 |
| HyperX  | 8GB  | 2Rx8 | HX426C15FBK4/32             | DS | Micron  |  | CL15        | 1.2v  | v | 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  | 16GB | 2Rx8 | HX426C15SBK8/128            | DS | SKhynix |  | CL15        | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMK16GX4M4A2666C15          | SS | Samsung |  | 15-17-17-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMK16GX4M4A2666C15R         | SS | Samsung |  | 15-17-17-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMK16GX4M4A2666C16          | SS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMK16GX4M4A2666C16B         | SS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMK16GX4M4A2666C16R         | SS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMD16GX4M4A2666C15          | SS | Samsung |  | 15-17-17-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMD16GX4M4A2666C16          | SS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMD8GX4M2A2666C15           | SS |         |  | 15-17-17-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMK16GX4M4A2666C16 ver3.21  | SS | Micron  |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMK16GX4M4A2666C16B ver3.21 | SS | Micron  |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMK16GX4M4A2666C16R ver3.21 | SS | Micron  |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 4GB  | 1Rx8 | CMD16GX4M4A2666C12 ver5.20  | SS | SKhynix |  | 12-14-14-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK32GX4M4A2666C15          | DS | Samsung |  | 15-17-17-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMD32GX4M4A2666C15          | DS | Samsung |  | 15-17-17-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMD32GX4M4A2666C16          | DS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK32GX4M4A2666C16          | DS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK32GX4M4A2666C16B         | DS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK32GX4M4A2666C16R         | DS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK32GX4M4A2666C16W         | DS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK16GX4M2A2666C16          | DS |         |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK16GX4M2A2666C16R         | DS |         |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK16GX4M2A2666C16W         | DS |         |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMD16GX4M2A2666C15          | DS |         |  | 15-17-17-35 | 1.2v  | v | v |   | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK64GX4M8A2666C16          | DS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMU32GX4M4A2666C16          | DS |         |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMU32GX4M4A2666C16R         | DS |         |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK32GX4M4A2666C16 ver3.21  | DS | Micron  |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK32GX4M4A2666C16B ver3.21 | DS | Micron  |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK32GX4M4A2666C16R ver3.21 | DS | Micron  |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 8GB  | 2Rx8 | CMK32GX4M4A2666C16W ver3.21 | DS | Micron  |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 16GB | 2Rx8 | CMK32GX4M2A2666C16          | DS |         |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 16GB | 2Rx8 | CMK32GX4M2A2666C16R         | DS |         |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 16GB | 2Rx8 | CMK32GX4M2A2666C16W         | DS |         |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 16GB | 2Rx8 | CMK64GX4M4A2666C16          | DS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 16GB | 2Rx8 | CMK64GX4M4A2666C16W         | DS | Samsung |  | 16-18-18-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 16GB | 2Rx8 | CMD128GX4M8A2666C15         | DS | Samsung |  | 15-17-17-35 | 1.2v  | v | v | v | v | 2133 |
| CORSAIR | 16GB | 2Rx8 | CMK128GX4M8A2666C16         | DS | Samsung |  | 16-18-18-35 | 1.2v  | v | 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 | v | 2133 |
| CORSAIR | 16GB | 2Rx8 | CMD64GX4M4A2666C15          | DS |         |  | 15-17-17-35 | 1.2v  | v | v | v | v | 2133 |
| G.SKILL | 4GB  | 1Rx8 | F4-2666C15Q-16GRR           | SS |         |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| G.SKILL | 8GB  | 2Rx8 | F4-2666C15Q-32GRR           | DS | SKhynix |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| G.SKILL | 8GB  | 2Rx8 | F4-2666C16Q2-64GRB          | DS | SKhynix |  | 16-16-16-36 | 1.2v  | v | v | v | v | 2133 |
| ADATA   | 4GB  | 1Rx8 | AX4U2666W4G16-DRZ           | SS | SKhynix |  | 16-16-16    | 1.2v  | v | v | v | v | 2133 |
| ADATA   | 8GB  | 2Rx8 | AX4U2666W8G16-QRZ           | DS | SKhynix |  | 16-16-16    | 1.2v  | v | v | v | v | 2133 |
| Avexir  | 4GB  | 1Rx8 | AVD4U26661504G-4CIR         | SS |         |  | CL15        | 1.2v  | v | v | v | v | 2133 |
| Avexir  | 8GB  | 2Rx8 | AVD4U26661608G-4CIR         | DS |         |  | CL16        | 1.2v  | v | v | v | v | 2133 |
| Avexir  | 8GB  | 1Rx8 | AVD4UZ126661708G-4COR       | SS | Samsung |  | 17-17-17-37 | 1.2v  | v | v | v | v | 2133 |
|         |      |      | AVD4UZ126661708G-4COB       |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ126661708G-4COG       |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ126661708G-4COW       |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ126661708G-4COY       |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ126661708G-4COO       |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ126661708G-4CWW       |    |         |  |             |       | v | v | v | v | 2133 |
| Apacer  | 4GB  | 1Rx8 | AHU04GGB26CDT6H             | SS |         |  | 16-16-16-36 | 1.2v  | v | v | v | v | 2133 |
| Apacer  | 8GB  | 2Rx8 | AHU08GGB26CDT6H             | DS |         |  | 16-16-16-36 | 1.2v  | v | v | v | v | 2133 |
| CRUCIAL | 4GB  | 1Rx8 | BLT4G4D26AFTA.8FADG         | SS |         |  | 16-17-17-36 | 1.2v  | v | v | v | v | 2400 |
| CRUCIAL | 4GB  | 1Rx8 | BLE4G4D26AFEA.8FADG         | SS |         |  | 16-17-17-36 | 1.2v  | v | v | v | v | 2400 |
| CRUCIAL | 8GB  | 2Rx8 | BLT8G4D26AFTA.16FAD         | DS | Micron  |  | 16-17-17-36 | 1.2v  | v | v | v | v | 2400 |
| PATRIOT | 4GB  | 1Rx8 | PVE48G266C5KBL              | SS |         |  | CL15        | 1.2v  | v | v | v | v | 2133 |

|       |      |      |                              |    |  |  |             |      |   |   |   |   |      |
|-------|------|------|------------------------------|----|--|--|-------------|------|---|---|---|---|------|
| Team  | 4GB  | 1Rx8 | TLRED416G2666HC15BQC01       | SS |  |  | 15-17-17-35 | 1.2v | v | v | v | v | 2133 |
| Team  | 4GB  | 1Rx8 | TLRED48G2666HC15BDC01        | SS |  |  | 15-17-17-35 | 1.2v | v | v |   | v | 2133 |
| Team  | 4GB  | 1Rx8 | TLRED44G2666HC15B01          | SS |  |  | 15-17-17-35 | 1.2v | v |   |   | v | 2133 |
| Team  | 8GB  | 2Rx8 | TLRED432G2666HC15BQC01       | DS |  |  | 15-17-17-35 | 1.2v | v | v | v | v | 2133 |
| Team  | 8GB  | 2Rx8 | TLRED416G2666HC15BDC01       | DS |  |  | 15-17-17-35 | 1.2v | v | v |   | v | 2133 |
| Team  | 8GB  | 2Rx8 | TLRED48G2666HC15B01          | DS |  |  | 15-17-17-35 | 1.2v | v |   |   | v | 2133 |
| Team  | 16GB | 2Rx8 | THRD464G2666HC15BQC01        | DS |  |  | 15-17-17-35 | 1.2v | v | v | v | v | 2133 |
| Team  | 16GB | 2Rx8 | THRD432G2666HC15BDC01        | DS |  |  | 15-17-17-35 | 1.2v | v | v |   | v | 2133 |
| Team  | 16GB | 2Rx8 | THRD416G2666HC15B01          | DS |  |  | 15-17-17-35 | 1.2v | v |   |   | v | 2133 |
| KLEVV | 4GB  | 1Rx8 | KM4C4GX4N-2666-15-15-15-35-0 | SS |  |  | 15-15-15-35 | 1.2v | v | v | v | v | 2133 |

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 | 4 |      |        |
| HyperX          | 4GB     | 1Rx8                      | HX424C12PB2K4/16      | SS    | SKhynix    |           | CL12        | 1.35v   | v                     | v | v | v    | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX424C12SB2K4/16      | SS    | SKhynix    |           | C12         | 1.35v   | v                     | v | v | v    | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX424C12SB2K2/8       | SS    | SKhynix    |           | C12         | 1.35v   | v                     | v |   | v    | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX424C12SB2/4         | SS    | SKhynix    |           | C12         | 1.35v   | v                     | v |   | v    | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX424C15FBK4/16       | SS    | SKhynix    |           | C15         | 1.2v    | v                     | v | v | v    | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX424C15FBK2/8        | SS    | SKhynix    |           | C15         | 1.2v    | v                     | v | v | v    | 2133   |
| HyperX          | 4GB     | 1Rx8                      | HX424C15FB/4          | SS    | SKhynix    |           | C15         | 1.2v    | v                     | v | v | v    | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX424C12PBK4/32       | DS    |            |           | CL12        | 1.35v   | v                     | v | v | v    | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX424C12SB2K4/32      | DS    | SKhynix    |           | C12         | 1.35v   | v                     | v |   | v    | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX424C12SB2K2/16      | DS    | SKhynix    |           | C12         | 1.35v   | v                     | v |   | v    | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX424C12SB2/8         | DS    | SKhynix    |           | C12         | 1.35v   | v                     | v |   | v    | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX424C15FB/8          | DS    | SKhynix    |           | C15         | 1.2v    | v                     | v | v | v    | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX424C15FBK4/32       | DS    | SKhynix    |           | C15         | 1.2v    | v                     | v |   | v    | 2133   |
| HyperX          | 8GB     | 2Rx8                      | HX424C15FBK2/16       | DS    | SKhynix    |           | C15         | 1.2v    | v                     | v |   | v    | 2133   |
| 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 | 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 | 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   |
| HyperX          | 16GB    | 2Rx8                      | HX424C14SBK4/64       | DS    |            |           | C14         | 1.2v    | v                     | 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        | 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 | v    | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2400C14B   | SS    | Samsung    |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMK16GX4M4A2400C14R   | SS    | Samsung    |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 4GB     | 1Rx8                      | CMD16GX4M4A2400C14    | SS    | Samsung    |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C14    | DS    | Samsung    |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C14B   | DS    | Samsung    |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C14R   | DS    | Samsung    |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMD32GX4M4A2400C14    | DS    | Samsung    |           | 14-16-16-31 | 1.2v    | v                     | v |   | v    | 2133   |
| CORSAIR         | 8GB     | 1Rx8                      | CMD64GX4M8A2400C14    | SS    |            |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK64GX4M8A2400C14    | DS    |            |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C16    | SS    |            |           | 16-16-16-39 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C16R   | SS    |            |           | 16-16-16-39 | 1.2v    | v                     | 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 | v    | 2133   |
| CORSAIR         | 8GB     | 2Rx8                      | CMK32GX4M4A2400C12    | DS    |            |           | 12-14-14-28 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK128GX4M8A2400C14   | DS    |            |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMK64GX4M4A2400C14    | DS    |            |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| CORSAIR         | 16GB    | 2Rx8                      | CMD128GX4M8A2400C14   | DS    |            |           | 14-16-16-31 | 1.2v    | v                     | v | v | v    | 2133   |
| G.SKILL         | 4GB     | 1Rx8                      | F4-2400C15Q-16GRR     | SS    | Micron     |           | 15-15-15-35 | 1.2v    | v                     | v | v | v    | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-2400C15Q-32GRR     | DS    | Micron     |           | 15-15-15-35 | 1.2v    | v                     | v | v | v    | 2133   |
| G.SKILL         | 8GB     | 2Rx8                      | F4-2400C15Q2-64GRK    | DS    |            |           | 15-15-15-35 | 1.2v    | v                     | v | v | v    | 2133   |
| G.SKILL         | 16GB    | 2Rx8                      | F4-2400C15Q2-128GRK   | DS    |            |           | 15-15-15-35 | 1.2v    | v                     | v | v | v    | 2133   |
| G.SKILL         | 16GB    | 2Rx8                      | F4-2400C14Q2-128GRK   | DS    |            |           | 14-14-14-34 | 1.2v    | v                     | v | v | v    | 2133   |
| ADATA           | 4GB     | 1Rx8                      | AD4U2400W4G17-B       | SS    | SKhynix    |           |             | 1.2v    | v                     | v | v |      | 2400   |
| ADATA           | 8GB     | 2Rx8                      | AD4U2400W8G17-B       | DS    | SKhynix    |           |             | 1.2v    | v                     | v | v |      | 2400   |
| ADATA           | 16GB    | 2Rx8                      | AX4U2400316G16-SBF    | DS    |            |           | 16-16-16    | 1.2v    | v                     | v | v | v    | 2133   |
| Apacer          | 4GB     | 1Rx8                      | 78.B1GMS.4050B        | SS    | Samsung    |           | CL17        | 1.2v    | v                     | v | v |      | 2400   |
| Apacer          | 8GB     | 2Rx8                      | 78.C1GMS.4010B        | DS    | Samsung    |           | CL17        | 1.2v    | v                     | v | v |      | 2400   |
| Apacer          | 8GB     | 2Rx8                      | AU08GGB24CETBGC       | DS    |            |           | CL17        | 1.2v    | v                     | v | v |      | 2400   |
| Apacer          | 8GB     | 1Rx8                      | AHU08GGB24CDU7G       | SS    |            |           | 16-16-16-36 |         | v                     | v | v | v    | 2133   |
| Apacer          | 8GB     | 1Rx8                      | AU08GGB24CEYBGC       | SS    |            |           | CL17        | 1.2v    | v                     | v | v |      | 2400   |
| Avexir          | 4GB     | 1Rx8                      | AVD4U24001604G-4M     | SS    | SKhynix    |           | CL16        | 1.2v    | v                     | v |   | v    | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ124001604G-2COB | SS    | Spectek    |           | CL16        | 1.2v    | v                     | v | v | v    | 2133   |
| Avexir          | 4GB     | 1Rx8                      | AVD4UZ124001604G-4COR | SS    | Spectek    |           |             |         | v                     | v | v | v    | 2133   |
|                 |         |                           | AVD4UZ124001604G-4COB |       |            |           |             | v       | v                     | v | v | 2133 |        |
|                 |         |                           | AVD4UZ124001604G-4COG |       |            |           |             | v       | v                     | v | v | 2133 |        |
|                 |         |                           | AVD4UZ124001604G-4COW |       |            |           |             | v       | v                     | v | v | 2133 |        |

|         |      |      |                        |    |         |  |             |       |   |   |   |   |      |
|---------|------|------|------------------------|----|---------|--|-------------|-------|---|---|---|---|------|
|         |      |      | AVD4UZ124001604G-4COY  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001604G-4COO  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001604G-4CWW  |    |         |  |             |       | v | v | v | v | 2133 |
| Avexir  | 8GB  | 2Rx8 | AVD4U24001608G-4M      | DS | SKhynix |  | CL16        | 1.2v  | v | v | v | v | 2133 |
| Avexir  | 8GB  | 2Rx8 | AVD4UZ124001608G-2COB  | DS | Spectek |  | CL16        | 1.2v  | v | v | v | v | 2133 |
| Avexir  | 8GB  | 2Rx8 | AVD4UZ124001608G-4COR  | DS | Micron  |  | 16-16-16-36 | 1.2v  | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001608G-4COB  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001608G-4COG  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001608G-4COW  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001608G-4COY  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001608G-4COO  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001608G-4CWW  |    |         |  |             |       | v | v | v | v | 2133 |
| Avexir  | 16GB | 2Rx8 | AVD4UZ124001616G-4CWW  | DS | Micron  |  | 16-16-16-36 | 1.2v  | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001616G-4COB  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001616G-4COG  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001616G-4COW  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001616G-4COY  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001616G-4COO  |    |         |  |             |       | v | v | v | v | 2133 |
|         |      |      | AVD4UZ124001616G-4COR  |    |         |  |             |       | v | v | v | v | 2133 |
| CRUCIAL | 4GB  | 1Rx8 | BLS4G4D240FSB.8FADG    | SS | Micron  |  | 16-16-16-39 | 1.2v  | v | v | v | v | 2400 |
| CRUCIAL | 8GB  | 2Rx8 | BLS8G4D240FSB.16FARG   | DS | Micron  |  | 16-16-16-39 | 1.2v  | v | v | v | v | 2400 |
| CRUCIAL | 8GB  | 2Rx8 | BLS8G4D240FSA.16FARG   | DS | Micron  |  | 16-16-16-39 | 1.2v  | v | 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 | 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    | 8GB  | 2Rx8 | GPR432GB2400C15QC      | DS |         |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| GALAX   | 4GB  | 1Rx8 | GAM4BXLBS240016JE164C  | SS |         |  | 16-16-16-36 | 1.2v  | v | v | v | v | 2133 |
| GALAX   | 4GB  | 1Rx8 | HOF4BLBM240012FD041C   | SS |         |  | 12-12-12-28 | 1.35v | v | v |   | v | 2133 |
| GLOWAY  | 8GB  | 2Rx8 | 8G-2400                | DS |         |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| PATRIOT | 4GB  | 1Rx8 | PX416G240C5QK          | SS |         |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| PATRIOT | 4GB  | 1Rx8 | PX48G240C5K            | SS |         |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| PATRIOT | 4GB  | 1Rx8 | PV48G240C5K            | SS |         |  | CL15        | 1.2v  | v | v | v | v | 2133 |
| PATRIOT | 4GB  | 1Rx8 | PVE48G240C5KRD         | SS |         |  | CL15        | 1.2v  | v | v | v | v | 2133 |
| PATRIOT | 8GB  | 2Rx8 | PV432G240C5QK          | DS |         |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| PATRIOT | 8GB  | 2Rx8 | PX432G240C5QK          | DS |         |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| PATRIOT | 8GB  | 2Rx8 | PX416G240C5K           | DS |         |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| PATRIOT | 8GB  | 2Rx8 | PV416G240C5K           | DS |         |  | CL15        | 1.2v  | v | v | v | v | 2133 |
| Panram  | 4GB  | 1Rx8 | PUD42400C154G4NJW      | SS | SKhynix |  | 15-15-15-35 | 1.2v  | v | v |   |   | 2400 |
| Panram  | 8GB  | 2Rx8 | PUD42400C158G4NJW      | DS | SKhynix |  | 15-15-15-35 | 1.2v  | v | v | v |   | 2400 |
| Team    | 4GB  | 1Rx8 | TCD44G2400C14BK        | SS | SKhynix |  | 14-16-16-31 | 1.2v  | v | v | v | v | 2133 |
| Team    | 4GB  | 1Rx8 | TDTRD416G2400HC15AQC01 | SS |         |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| Team    | 4GB  | 1Rx8 | TDTRD48G2400HC15ADC01  | SS |         |  | 15-15-15-35 | 1.2v  | v | v |   | v | 2133 |
| Team    | 4GB  | 1Rx8 | TDTRD44G2400HC15A01    | SS |         |  | 15-15-15-35 | 1.2v  | v |   |   | v | 2133 |
| Team    | 8GB  | 2Rx8 | TED48G2400C16BK        | DS |         |  | 16-16-16-39 | 1.2v  | v | v | v |   | 2400 |
| Team    | 8GB  | 2Rx8 | TCD48G2400C14BK        | DS | SKhynix |  | 14-16-16-31 | 1.2v  | v | v | v | v | 2133 |
| Team    | 8GB  | 1Rx8 | TDTRD432G2400HC15AQC01 | SS |         |  | 15-15-15-35 | 1.2v  | v | v | v | v | 2133 |
| Team    | 8GB  | 1Rx8 | TDTRD416G2400HC15ADC01 | SS |         |  | 15-15-15-35 | 1.2v  | v | v |   | v | 2133 |
| Team    | 8GB  | 1Rx8 | TDTRD48G2400HC15A01    | SS |         |  | 15-15-15-35 | 1.2v  | v |   |   | v | 2133 |
| Team    | 16GB | 2Rx8 | TED416G2400C16BK       | DS |         |  | 16-16-16-39 | 1.2v  | v | v | v |   | 2400 |
| Team    | 16GB | 2Rx8 | TDTRD464G2400HC15BQC01 | DS |         |  | 15-17-17-35 | 1.2v  | v | v | v | v | 2133 |
| Team    | 16GB | 2Rx8 | TDTRD432G2400HC15BDC01 | DS |         |  | 15-17-17-35 | 1.2v  | v | v |   | v | 2133 |
| Team    | 16GB | 2Rx8 | TDTRD416G2400HC15B01   | DS |         |  | 15-17-17-35 | 1.2v  | v |   |   | v | 2133 |
| V-Color | 4GB  | 1Rx8 | TD4G8C17-UH            | SS |         |  | CL17        | 1.2v  | v | v | v |   | 2400 |
| V-Color | 8GB  | 2Rx8 | TD8G16C17-UH           | DS |         |  | 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 | 4 |     |        |
| HyperX          | 4GB     | 1Rx8                      | HX421C13SBK4/16  | SS    | SKhynix    |           | CL13   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 4GB     | 1Rx8                      | HX421C13SBK2/8   | SS    | SKhynix    |           | CL13   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 4GB     | 1Rx8                      | HX421C13SB/4     | SS    | SKhynix    |           | CL13   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 4GB     | 1Rx8                      | HX421C14FBK4/16  | SS    | SKhynix    |           | CL14   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 4GB     | 1Rx8                      | HX421C14FBK2/8   | SS    | SKhynix    |           | CL14   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 4GB     | 1Rx8                      | HX421C14FB/4     | SS    | SKhynix    |           | CL14   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 8GB     | 2Rx8                      | HX421C13SBK4/32  | DS    | SKhynix    |           | CL13   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 8GB     | 2Rx8                      | HX421C13SBK2/16  | DS    | SKhynix    |           | CL13   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 8GB     | 2Rx8                      | HX421C13SB/8     | DS    | SKhynix    |           | CL13   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 8GB     | 2Rx8                      | HX421C14FBK4/32  | DS    | SKhynix    |           | CL14   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 8GB     | 2Rx8                      | HX421C14FBK2/16  | DS    | SKhynix    |           | CL14   | 1.2v    | v                     | v | v |     | v      |
| HyperX          | 8GB     | 2Rx8                      | HX421C14FB/8     | DS    | SKhynix    |           | CL14   | 1.2v    | v                     | v | v |     | v      |
| 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 |     | v      |

|               |      |      |                              |    |         |                  |             |       |   |   |   |   |   |
|---------------|------|------|------------------------------|----|---------|------------------|-------------|-------|---|---|---|---|---|
| HyperX        | 16GB | 2Rx8 | HX421C14FBK2/32              | DS |         |                  | CL14        | 1.2v  | v | v | v | v | v |
| HyperX        | 16GB | 2Rx8 | HX421C14FB/16                | DS |         |                  | CL14        | 1.2v  | v | v | v | v | v |
| Kingston      | 4GB  | 1Rx8 | KVR21N15S8/4                 | SS | SKhynix |                  |             | 1.2v  | v | v | v | v | v |
| Kingston      | 4GB  | 1Rx8 | KVR21N15S8/4                 | SS | SKhynix |                  | CL15        | 1.2v  | v | v | v | v | v |
| Kingston      | 4GB  | 1Rx8 | KVR21E15S8/4                 | SS | SKhynix |                  | CL15        | 1.2v  | v | v | v | v | v |
| Kingston      | 8GB  | 2Rx8 | KVR21N15D8/8                 | DS | SKhynix |                  |             | 1.2v  | v | v | v | v | v |
| Kingston      | 8GB  | 2Rx8 | KVR21N15D8/8                 | DS | SKhynix |                  | CL15        | 1.2v  | v | v | v | v | v |
| Kingston      | 8GB  | 2Rx8 | KVR21E15D8/8HA               | DS | SKhynix |                  | CL15        | 1.2v  | v | v | v | v | v |
| Kingston      | 8GB  | 1Rx8 | KVR21N15S8/8                 | DS | Micron  |                  | CL15        | 1.2v  | v | v | v | v | v |
| Kingston      | 16GB | 2Rx8 | KVR21N15D8/16                | DS | Micron  |                  | CL15        | 1.2v  | v | v | v | v | v |
| CORSAIR       | 4GB  | 1Rx8 | CMV4GX4M1A2133C15            | SS | SKhynix |                  | CL15        | 1.2v  | v | v | v | v | v |
| CORSAIR       | 4GB  | 1Rx8 | CMK16GX4M4A2133C13           | SS |         |                  | 13-15-15-28 | 1.2v  | v | v | v | v | v |
| CORSAIR       | 4GB  | 1Rx8 | CMK16GX4M4A2133C13B          | SS |         |                  | 13-15-15-28 | 1.2v  | v | v | v | v | v |
| CORSAIR       | 4GB  | 1Rx8 | CMK16GX4M4A2133C13R          | SS |         |                  | 13-15-15-28 | 1.2v  | v | v | v | v | v |
| CORSAIR       | 4GB  | 1Rx8 | CMD16GX4M4B2133C10           | SS |         |                  | 10-12-12-31 | 1.35v | v | v | v | v | v |
| CORSAIR       | 8GB  | 2Rx8 | CMV8GX4M1A2133C15            | DS | SKhynix |                  | CL15        | 1.2v  | v | v | v | v | v |
| CORSAIR       | 8GB  | 2Rx8 | CMK32GX4M4A2133C13           | DS |         |                  | 13-15-15-28 | 1.2v  | v | v | v | v | v |
| CORSAIR       | 8GB  | 2Rx8 | CMK64GX4M8A2133C13           | DS |         |                  | 13-15-15-28 | 1.2v  | v | v | v | v | v |
| CORSAIR       | 8GB  | 2Rx8 | CMD32GX4M4B2133C10           | DS |         |                  | 10-12-12-31 | 1.35v | v | v | v | v | v |
| CORSAIR       | 16GB | 2Rx8 | CMV16GX4M1A2133C15           | DS |         |                  | C15         | 1.2v  | v | v | v | v | v |
| CORSAIR       | 16GB | 2Rx8 | CMK32GX4M2A2133C13           | DS |         |                  | 13-15-15-28 | 1.2v  | v | v | v | v | v |
| CORSAIR       | 16GB | 2Rx8 | CMK128GX4M8A2133C13          | DS |         |                  | 13-15-15-28 | 1.2v  | v | v | v | v | v |
| G.SKILL       | 4GB  | 1Rx8 | F4-2133C15Q-16GRR            | SS | Micron  |                  | 15-15-15-35 | 1.2v  | v | v | v | v | v |
| G.SKILL       | 8GB  | 2Rx8 | F4-2133C15Q-32GRR            | DS | Micron  |                  | 15-15-15-35 | 1.2v  | v | v | v | v | v |
| ADATA         | 4GB  | 1Rx8 | AD4U2133W4G15-B              | SS | SKhynix |                  | CL15        | 1.2v  | v | v | v | v | v |
| Apacer        | 4GB  | 1Rx8 | 78.B1GM3.AF00B               | SS |         |                  | CL15        | 1.2v  | v | v | v | v | v |
| Apacer        | 8GB  | 2Rx8 | 78.C1GM3.AF10B               | DS |         |                  | CL15        | 1.2v  | v | v | v | v | v |
| Avexir        | 4GB  | 1Rx8 | AVD4UZ121331504G-4COR        | SS | Spectek |                  | 15-15-15-35 | 1.2v  | v | v | v | v | v |
|               |      |      | AVD4UZ121331504G-4COB        |    |         |                  |             |       | v | v | v | v | v |
|               |      |      | AVD4UZ121331504G-4COG        |    |         |                  |             |       | v | v | v | v | v |
|               |      |      | AVD4UZ121331504G-4COW        |    |         |                  |             |       | v | v | v | v | v |
|               |      |      | AVD4UZ121331504G-4COY        |    |         |                  |             |       | v | v | v | v | v |
|               |      |      | AVD4UZ121331504G-4COO        |    |         |                  |             |       | v | v | v | v | v |
|               |      |      | AVD4UZ121331504G-4CWW        |    |         |                  |             |       | v | v | v | v | v |
| Avexir        | 8GB  | 2Rx8 | AVD4UZ121331508G-4COB        | DS | Spectek |                  | 15-15-15-35 | 1.2v  | v | v | v | v | v |
|               |      |      | AVD4UZ121331508G-4COR        |    |         |                  |             |       | v | v | v | v | v |
|               |      |      | AVD4UZ121331508G-4COG        |    |         |                  |             |       | v | v | v | v | v |
|               |      |      | AVD4UZ121331508G-4COW        |    |         |                  |             |       | v | v | v | v | v |
|               |      |      | AVD4UZ121331508G-4COY        |    |         |                  |             |       | v | v | v | v | v |
|               |      |      | AVD4UZ121331508G-4COO        |    |         |                  |             |       | v | v | v | v | v |
|               |      |      | AVD4UZ121331508G-4CWW        |    |         |                  |             |       | v | v | v | v | v |
| CRUCIAL       | 4GB  | 1Rx8 | CT4G4DFS8213.C8FAR1          | SS | Micron  |                  | CL15        | 1.2v  | v | v | v | v | v |
| CRUCIAL       | 4GB  | 1Rx8 | CT4G4WFS8213.9FA1            | SS | Micron  |                  | CL15        | 1.2v  | v | v | v | v | v |
| CRUCIAL       | 4GB  | 1Rx8 | CT4G4DFS8213.8FA2            | SS | Micron  |                  |             | 1.2v  | v | v | v | v | v |
| CRUCIAL       | 8GB  | 2Rx8 | CT8G4WFD8213                 | DS | Micron  |                  | CL15        | 1.2v  | v | v | v | v | v |
| CRUCIAL       | 8GB  | 2Rx8 | CT8G4DFD8213.16FA2           | DS | Micron  |                  |             | 1.2v  | v | v | v | v | v |
| CRUCIAL       | 8GB  | 2Rx8 | CT8G4DFD8213.C16FAR11        | DS | Micron  |                  |             | 1.2v  | v | v | v | v | v |
| CRUCIAL       | 8GB  | 1Rx8 | CT8G4DFS8213.8FB1            | SS | Micron  |                  | CL15        | 1.2v  | v | v | v | v | v |
| CRUCIAL       | 16GB | 2Rx8 | CT16G4DFD8213.16FB1          | DS | Micron  |                  | CL15        | 1.2v  | v | v | v | v | v |
| GLOWAY        | 4GB  | 1Rx8 | 4G-2133                      | SS |         |                  | 15-15-15-35 | 1.2v  | v | v | v | v | v |
| Panram        | 4GB  | 1Rx8 | PUD42133C154G2VS             | SS | SKhynix |                  | 15-15-15-36 | 1.2v  | v | v | v | v | v |
| Panram        | 4GB  | 1Rx8 | PED42133C154GVS              | SS | SKhynix |                  | 15-15-15-36 | 1.2v  | v | v | v | v | v |
| Panram        | 8GB  | 2Rx8 | PUD42133C138G4NJW            | DS | SKhynix |                  | 13-13-13-35 | 1.2v  | v | v | v | v | v |
| Panram        | 8GB  | 2Rx8 | PED42133C158GVS              | DS | SKhynix |                  | 15-15-15-36 | 1.2v  | v | v | v | v | v |
| Silicon POWER | 4GB  | 1Rx8 | SP004GBLFU213N01             | SS | Samsung |                  | CL15        | 1.2v  | v | v | v | v | v |
| Silicon POWER | 8GB  | 2Rx8 | SP008GBLFU213N01             | DS | Samsung |                  | CL15        | 1.2v  | v | v | v | v | v |
| KLEVV         | 4GB  | 1Rx8 | KM4C4GX4N-2133-15-15-15-35-0 | SS |         |                  | 15-15-15-35 | 1.2v  | v | v | v | v | v |
| Team          | 8GB  | 2Rx8 | TED48GM2133C15BK             | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | v | v | v | v | v |
| Team          | 16GB | 2Rx8 | TED416G2133C15BK             | DS | SKhynix | H5AN4G8NMFR 523V | 15-15-15-36 | 1.2v  | v | v | 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 3200 MHz or higher**, the system's stability depends on the CPU's capabilities.  
當執行XMP至**DDR4 3200MHz或是更高**, 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, and chips 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。