

## Qualified Vendors List (QVL)

| DDR3 1333    |                                |              |       |            |                     |            |         |                                |        |        |
|--------------|--------------------------------|--------------|-------|------------|---------------------|------------|---------|--------------------------------|--------|--------|
| Vendors      | Part No.                       | Size         | SS/DS | Chip Brand | Chip NO.            | Timing     | Voltage | DIMM socket support (Optional) |        |        |
|              |                                |              |       |            |                     |            |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| A-DATA       | AD3U1333C2G9                   | 2GB          | SS    | A-DATA     | 3CCD-1509HNA1126L   | -          | 1.5V    | •                              | •      | •      |
| A-DATA       | AX3U1333C2G9-BP                | 2GB          | SS    | -          | -                   | -          | 1.5V    | •                              | •      | •      |
| Apacer       | 78.A1GC6.9L1                   | 2GB          | DS    | Apacer     | AM5D5808FEQSBG      | 9          | 1.5V    | •                              | •      | •      |
| Apacer       | AU02GFA33C9NBGC                | 2GB          | DS    | Apacer     | AM5D5808APQSBG      | -          | 1.5V    | •                              | •      | •      |
| Apacer       | 78.B1GDE.9L10C                 | 4GB          | DS    | Apacer     | AM5D5908CEHSBG      | -          | 1.5V    | •                              | •      | •      |
| CORSAIR      | CMV4GX3M1A1333C9               | 4GB          | SS    | CORSAIR    | 512M8DCJGELBO301319 | -          | 1.50V   | •                              | •      | •      |
| CORSAIR      | TR3X6G1333C9 G                 | 6GB(3x 2GB)  | SS    | -          | -                   | 9-9-9-24   | 1.50V   | •                              | •      | •      |
| CORSAIR      | CMD24GX3M6A1333C9(XMP)         | 24GB(6x4GB)  | DS    | -          | -                   | 9-9-9-24   | 1.60V   | •                              | •      | •      |
| CORSAIR      | TW3X4G1333C9D G                | 4GB(2 x 2GB) | DS    | -          | -                   | 9-9-9-24   | 1.50V   | •                              | •      | •      |
| CORSAIR      | CM3X4GA1333C9N2                | 4GB          | DS    | CORSAIR    | 256MBCDJGELC0401136 | 9-9-9-24   | 1.5V    | •                              | •      | •      |
| CORSAIR      | CMX4GX3M1A1333C9               | 4GB          | DS    | -          | -                   | 9-9-9-24   | 1.50V   | •                              | •      | •      |
| CORSAIR      | CMD8GX3M4A1333C7               | 8GB(4 x 2GB) | DS    | -          | -                   | 7-7-7-20   | 1.60V   | •                              | •      | •      |
| CORSAIR      | CMV8GX3M1A1333C9               | 8GB          | DS    | CORSAIR    | 512M8DCJGELAO401213 | -          | -       | •                              | •      | •      |
| CORSAIR      | CMX16GX3M2A1333C9(Ver7.21)     | 8GB          | DS    | -          | -                   | 9-9-9-24   | 1.50V   | •                              | •      | •      |
| G.SKILL      | F3-10666CL8D-4GBECO(XMP)       | 4GB(2 x 2GB) | DS    | -          | -                   | 8-8-8-8-24 | 1.35V   | •                              | •      | •      |
| G.SKILL      | F3-10666CL7D-8GBRH(XMP)        | 8GB(2 x 4GB) | DS    | -          | -                   | 7-7-7-21   | 1.5V    | •                              | •      | •      |
| GEIL         | GVP34GB1333C7DC                | 4GB(2 x 2GB) | DS    | -          | -                   | 7-7-7-24   | 1.5V    | •                              | •      | •      |
| Hynix        | HMT325U6BFR8C-H9               | 2GB          | SS    | Hynix      | H5TQ2G83BFRH9C      | -          | 1.5V    | •                              | •      | •      |
| Hynix        | HMT351U6BFR8C-H9               | 4GB          | DS    | Hynix      | H5TQ2G83BFRH9C      | -          | 1.5V    | •                              | •      | •      |
| KINGMAX      | FLFE85F-C8K9 CAES              | 2GB          | SS    | KINGMAX    | KFC8FMXF-DXX-15A    | -          | 1.5V    | •                              | •      | •      |
| KINGMAX      | FLFE85F-C8KL9 NAES             | 2GB          | SS    | KINGMAX    | KFC8FNLXF-DXX-15A   | -          | 1.5V    | •                              | •      | •      |
| KINGMAX      | FLFE85F-C8KM9 NAES             | 2GB          | SS    | KINGMAX    | KFC8FMXF-BXX-15A    | -          | 1.5V    | •                              | •      | •      |
| KINGMAX      | FLFF65F-C8KL9 NEES             | 4GB          | DS    | KINGMAX    | KFC8FNLXF-DXX-15A   | -          | 1.5V    | •                              | •      | •      |
| KINGMAX      | FLFF65F-C8KM9 NEES             | 4GB          | DS    | KINGMAX    | KFC8FMXF-BXX-15A    | -          | 1.5V    | •                              | •      | •      |
| KINGSTON     | KVR1333D3N9/2G(Low Profile)    | 2GB          | SS    | Hynix      | H5TQ2G83AFRH9C      | 9          | 1.5V    | •                              | •      | •      |
| KINGSTON     | KVR1333D3S8N9/2G               | 2GB          | SS    | Micron     | 1D77 D9L GK         | -          | 1.5V    | •                              | •      | •      |
| KINGSTON     | KVR1333D3N9/2G-SP(Low Profile) | 2GB          | SS    | ELPIDA     | J2108BCSE-DJ-F      | -          | 1.5V    | •                              | •      | •      |
| KINGSTON     | KVR1333D3N9/2G(Low Profile)    | 2GB          | DS    | ELPIDA     | J1108BFBG-DJ-F      | 9          | 1.5V    | •                              | •      | •      |
| KINGSTON     | KVR1333D3N9/2G-SP(Low Profile) | 2GB          | DS    | KTC        | D1288JEMFNGD9U      | -          | 1.5V    | •                              | •      | •      |
| KINGSTON     | KVR1333D3N9/2G-SP(Low Profile) | 2GB          | DS    | KINGSTON   | D1288JPSFPGD9U      | -          | 1.5V    | •                              | •      | •      |
| KINGSTON     | KHX1333C7D3K2/4GX(XMP)         | 4GB(2 x 2GB) | DS    | -          | -                   | 7          | 1.65V   | •                              | •      | •      |
| KINGSTON     | KVR1333D3N9/4G(Low Profile)    | 4GB          | DS    | ELPIDA     | J2108BCSE-DJ-F      | -          | 1.5V    | •                              | •      | •      |
| KINGSTON     | KVR13N9S8/4-SP (Low Profile)   | 4GB          | SS    | NANYA      | NT5CC512MDDN-CG     | -          | 1.5V    | •                              | •      | •      |
| KINGSTON     | KVR1333D3N9/4G                 | 4GB          | DS    | KTC        | D2568JENCNGD9U      | -          | 1.5V    | •                              | •      | •      |
| KINGSTON     | KVR1333D3N9/4G-SP(Low Profile) | 4GB          | DS    | KINGSTON   | D2568JENCPGD9U      | -          | 1.5V    | •                              | •      | •      |
| Micron       | MT8JTF25664AZ-1G4D1            | 2GB          | SS    | Micron     | OJD12D9L GK         | -          | 1.5V    | •                              | •      | •      |
| Micron       | MT8JTF25664AZ-1G4M1            | 2GB          | SS    | MICRON     | IJM22 D9PFJ         | -          | 1.5V    | •                              | •      | •      |
| Micron       | MT16JTF51264AZ-1G4D1           | 4GB          | DS    | Micron     | OLD22D9L GK         | -          | 1.5V    | •                              | •      | •      |
| NANYA        | NT4GC64B8HG0NF-CG              | 4GB          | DS    | NANYA      | NT5CB256M8GN-CG     | -          | 1.5V    | •                              | •      | •      |
| PSC          | AL8F8G73F-DJ2                  | 2GB          | DS    | PSC        | A3P1GF3FGF          | -          | 1.5V    | •                              | •      | •      |
| SAMSUNG      | M378B5773DH0-CH9               | 2GB          | SS    | SAMSUNG    | K4B2G0846D          | -          | 1.5V    | •                              | •      | •      |
| SAMSUNG      | M378B1G73AH0-CH9               | 8GB          | DS    | SAMSUNG    | K4B4G0846A-HCH9     | -          | 1.5V    | •                              | •      | •      |
| Super Talent | W1333UB2GS                     | 2GB          | DS    | SAMSUNG    | K4B1G0846F          | 9          | 1.5V    | •                              | •      | •      |
| Super Talent | W1333UB4GS                     | 4GB          | DS    | SAMSUNG    | K4B2G0846C          | -          | 1.5V    | •                              | •      | •      |
| Super Talent | W1333UX6GM                     | 6GB(3x 2GB)  | DS    | Micron     | 0BF27D9KPT          | 9-9-9-24   | 1.5V    | •                              | •      | •      |
| Transcend    | JM1333KLN-2G                   | 2GB          | SS    | HYNIX      | H5TQ2G83BZRH9C      | -          | 1.5V    | •                              | •      | •      |
| AMD          | AE32G1339U1-U                  | 2GB          | SS    | AMD        | 25E14367MB3H11303   | 9-9-9-24   | 1.5V    | •                              | •      | •      |
| AMD          | AE34G1339U2-U                  | 4GB          | DS    | AMD        | 25E14367MB3H11303   | 9-9-9-24   | 1.5V    | •                              | •      | •      |
| ASint        | SLZ302G08-EDJ1C                | 2GB          | SS    | Asint      | SLZ302G08-DJ1C      | -          | 1.5V    | •                              | •      | •      |
| Asint        | SLA304G08-EDJ1B                | 4GB          | SS    | Asint      | 304G08-DJ1B1301     | -          | -       | •                              | •      | •      |
| ASint        | SLA302G08-EDJ1C                | 4GB          | DS    | Asint      | SLA302G08-DJ1C      | -          | 1.5V    | •                              | •      | •      |
| ASint        | SLB304G08-EDJ1B                | 8GB          | DS    | Asint      | SLB304G08-DJ1B      | -          | 1.5V    | •                              | •      | •      |
| Elixir       | M2F2G64CB88B7N-CG              | 2GB          | SS    | Elixir     | N2CB2G80BN-CG       | -          | 1.5V    | •                              | •      | •      |
| Elixir       | M2F2G64CB88D7N-CG              | 2GB          | SS    | Elixir     | N2CB2G80DN-CG       | -          | 1.5V    | •                              | •      | •      |
| Elixir       | M2F2G64CB88G7N-CG              | 2GB          | SS    | Elixir     | N2CB2G80GN-CG       | -          | -       | •                              | •      | •      |
| Elixir       | M2F4G64CB88B5N-CG              | 4GB          | DS    | Elixir     | N2CB2G80BN-CG       | -          | 1.5V    | •                              | •      | •      |
| Elixir       | M2F4G64CB88D5N-CG              | 4GB          | DS    | Elixir     | N2CB2G80DN-CG       | -          | 1.5V    | •                              | •      | •      |
| HMD          | HMDD302GU648S1B9C-MEX          | 2GB          | SS    | ERTH       | 256X8DDR3 WT        | -          | 1.5V    | •                              | •      | •      |
| HMD          | HMDD304GU648S1B9C-MEX          | 4GB          | SS    | UJJK       | 512X8DDR3 WT        | -          | 1.5V    | •                              | •      | •      |
| HMD          | HMDD308GU648D1B9C-MEX          | 8GB          | DS    | FFCT       | 512X8DDR3 WT        | -          | 1.5V    | •                              | •      | •      |
| KINGSHARE    | KSRPCD313332G                  | 2GB          | DS    | PATRIOT    | PM128M8D385-15      | -          | 1.5V    | •                              | •      | •      |
| KINGSTEK     | KSTD3PC-10600                  | 2GB          | SS    | MICRON     | PE911-125E          | -          | 1.5V    | •                              | •      | •      |
| MARKVISION   | BMD32048M1333C9-1123           | 2GB          | DS    | MARKVISION | M3D1288P-13         | -          | 1.50V   | •                              | •      | •      |
| MARKVISION   | BMD34096M1333C9-1124           | 4GB          | DS    | MARKVISION | M3D2568E-13         | -          | 1.50V   | •                              | •      | •      |
| PATRIOT      | PG38G1333EL(XMP)               | 8GB          | DS    | -          | -                   | 9-9-9-24   | 1.5V    | •                              | •      | •      |
| RAMAXEL      | RMR1870ED48E8F-1333            | 2GB          | DS    | ELPIDA     | J1108BDBG-DJ-F      | -          | -       | •                              | •      | •      |
| RAMAXEL      | RMR1870EC58E9F-1333            | 4GB          | DS    | ELPIDA     | J2108BCSE-DJ-F      | -          | 1.50V   | •                              | •      | •      |
| RiDATA       | C304627CB1AG22Fe               | 2GB          | DS    | RiDATA     | N/A                 | 9          | 1.5V    | •                              | •      | •      |
| RiDATA       | E304459CB1AG32Cf               | 4GB          | DS    | RiDATA     | N/A                 | 9          | 1.5V    | •                              | •      | •      |
| Samsung      | SP002GBLTU133V02               | 2GB          | SS    | S-POWER    | 20YT3NG-1202        | -          | 1.5V    | •                              | •      | •      |
| TEAM         | TED34GM1333C9BK                | 4GB          | DS    | HYNIX      | DWLDL9J5HL          | 9-9-9-24   | 1.5V    | •                              | •      | •      |
| TEAM         | TED38GM1333C9BK                | 8GB          | DS    | HYNIX      | DWLDL9J5HL          | 9-9-9-24   | 1.5V    | •                              | •      | •      |
| WINTEC       | 3WVS31333-2G-CNR               | 2GB          | DS    | AMPO       | AM3420803-13H       | -          | 1.5V    | •                              | •      | •      |

| DDR3 1600 |                        |      |       |            |                    |          |         |                                |        |        |
|-----------|------------------------|------|-------|------------|--------------------|----------|---------|--------------------------------|--------|--------|
| Vendors   | Part No.               | Size | SS/DS | Chip Brand | Chip NO.           | Timing   | Voltage | DIMM socket support (Optional) |        |        |
|           |                        |      |       |            |                    |          |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| APACER    | 4GB UNB PC3-12800 CL11 | 4GB  | SS    | APACER     | AM5D6008BQQSCK     | -        | 1.50V   | •                              | •      | •      |
| Apacer    | AU04GFA60CATBGC        | 4GB  | SS    | Apacer     | AM5D6008QJMCK1336F | -        | 1.50V   | •                              | •      | •      |
| Apacer    | 78.BAQEJ.9LK0C(XMP)    | 4GB  | DS    | -          | -                  | -        | 1.50V   | •                              | •      | •      |
| Apacer    | 78.B1GE3.9L10C         | 4GB  | DS    | Apacer     | AM5D5908DEQSCK     | -        | 1.50V   | •                              | •      | •      |
| APACER    | 8GB UNB PC3-12800 CL11 | 8GB  | DS    | APACER     | AM5D6008BQQSCK     | -        | 1.50V   | •                              | •      | •      |
| CORSAIR   | CMV4GX3M1A1600C11      | 4GB  | SS    | CORSAIR    | 512M8DDLGPB0381320 | -        | 1.50V   | •                              | •      | •      |
| CORSAIR   | CMY8GX3M2A1600C9       | 4GB  | SS    | -          | -                  | 9-9-9-24 | 1.50V   | •                              | •      | •      |

|           |                           |                 |    |              |                      |             |             |   |   |
|-----------|---------------------------|-----------------|----|--------------|----------------------|-------------|-------------|---|---|
| CORSAIR   | CMD12GX3M6A1600C8(XMP)    | 12GB(6x2GB)     | DS | -            | -                    | 8-8-8-24    | 1.65V       | • | • |
| CORSAIR   | CMZ32GX3M4X1600C10(XMP)   | 32GB(8GBx4)     | DS | -            | -                    | 10-10-10-27 | 1.50V       | • | • |
| CORSAIR   | CMP4GX3M2A1600C8(XMP)     | 4GB(2 x 2GB)    | DS | -            | -                    | 8-8-8-24    | 1.65V       | • | • |
| CORSAIR   | CMP4GX3M2A1600C9(XMP)     | 4GB(2 x 2GB)    | DS | -            | -                    | 9-9-9-24    | 1.65V       | • | • |
| CORSAIR   | CMP4GX3M2C1600C7(XMP)     | 4GB(2 x 2GB)    | DS | -            | -                    | 7-8-7-20    | 1.65V       | • | • |
| CORSAIR   | CML8GX3M2A1600C9          | 4GB             | DS | -            | -                    | 9-9-9-24    | 1.50V       | • | • |
| CORSAIR   | CMZ4GX3M1A1600C9          | 4GB             | DS | -            | -                    | 9-9-9-24    | 1.50V       | • | • |
| CORSAIR   | CMZ8GX3M2A1600C9          | 4GB             | DS | -            | -                    | 9-9-9-24    | 1.50V       | • | • |
| CORSAIR   | TR3X6G1600C8D G(XMP)      | 6GB(3 x 2GB)    | DS | -            | -                    | 8-8-8-24    | 1.65V       | • | • |
| CORSAIR   | TR3X6G1600C9 G(XMP)       | 6GB(3 x 2GB)    | DS | -            | -                    | 9-9-9-24    | 1.65V       | • | • |
| CORSAIR   | CMP8GX3M2A1600C9(XMP)     | 8GB(2 x 4GB)    | DS | -            | -                    | 9-9-9-24    | 1.65V       | • | • |
| CORSAIR   | CMZ8GX3M2A1600C7R(XMP)    | 8GB(2 x 4GB)    | DS | -            | -                    | 7-8-7-20    | 1.50V       | • | • |
| CORSAIR   | CML16GX3M2A1600C10        | 8GB             | DS | -            | -                    | 10-10-10-27 | 1.50V       | • | • |
| CORSAIR   | CMV8GX3M1A1600C11         | 8GB             | DS | CORSAIR      | 512M8DDLGPSBO381311  | -           | -           | • | • |
| CORSAIR   | CMY16GX3M2A1600C9         | 8GB             | DS | -            | -                    | 9-9-9-24    | 1.50V       | • | • |
| CORSAIR   | CMY32GX3M4A1600C9         | 8GB             | DS | -            | -                    | 9-9-9-24    | 1.50V       | • | • |
| CORSAIR   | CMZ8GX3M1A1600C10(XMP)    | 8GB             | DS | -            | -                    | 10-10-10-27 | 1.50V       | • | • |
| G.SKILL   | F3-12800CL7D-4GBRH(XMP)   | 4GB(2 x 2GB)    | SS | -            | -                    | 7-7-7-24    | 1.6V        | • | • |
| G.SKILL   | F3-12800CL7D-4GBRM(XMP)   | 4GB(2 x 2GB)    | DS | -            | -                    | 7-8-7-24    | 1.6V        | • | • |
| G.SKILL   | F3-12800CL9D-4GBRL(XMP)   | 4GB(2 x 2GB)    | DS | -            | -                    | 9-9-9-24    | 1.5V        | • | • |
| G.SKILL   | F3-12800CL7D-8GBRH(XMP)   | 8GB(2 x 4GB)    | DS | -            | -                    | 7-8-7-24    | 1.6V        | • | • |
| G.SKILL   | F3-12800CL8D-8GBECO(XMP)  | 8GB(2 x 4GB)    | DS | -            | -                    | 8-8-8-24    | XMP 1.35V   | • | • |
| G.SKILL   | F3-12800CL9D-8GBRL(XMP)   | 8GB(2 x 4GB)    | DS | -            | -                    | 9-9-9-24    | 1.5V        | • | • |
| G.SKILL   | F3-12800CL10S-8GBXL(XMP)  | 8GB             | DS | -            | -                    | 10-10-10-20 | 1.50V       | • | • |
| GEIL      | GB34GB1600C11DC(XMP)      | 4GB             | DS | GEIL         | GL1L256M88BA15GL     | -           | 1.5V        | • | • |
| GEIL      | GET316GB1600C9QC(XMP)     | 16GB ( 4x 4GB ) | DS | -            | -                    | 9-9-9-28    | 1.6V        | • | • |
| HYNIX     | HMT351U6CFR8C-PB          | 4GB             | DS | HYNIX        | H5TQ2G83CFR PBC      | -           | 1.50V       | • | • |
| KINGMAX   | FLGE85F-B8KJ9A FEIS(XMP)  | 2GB             | DS | -            | -                    | -           | 1.5V        | • | • |
| KINGSTON  | KHX1600C9D3P1K2/4G        | 4GB(2 x 2GB)    | SS | -            | -                    | -           | 1.5V        | • | • |
| KINGSTON  | KVR16N11S8/4(Low Profile) | 4GB             | SS | KINGSTON     | U317X8BRR19          | -           | 1.50V       | • | • |
| KINGSTON  | KHX1600C9D3K3/12GX(XMP)   | 12GB(3x4GB)     | DS | -            | -                    | 9-9-9-27    | 1.65V       | • | • |
| KINGSTON  | KHX1600C9D3K4/16GX(XMP)   | 16GB ( 4GB x4 ) | DS | -            | -                    | -           | 1.65V       | • | • |
| KINGSTON  | KHX16C9K2/16              | 16GB(8GBx2)     | DS | -            | -                    | -           | 1.5V        | • | • |
| KINGSTON  | KHX1600C9AD3/2G           | 2GB             | DS | -            | -                    | -           | 1.65V       | • | • |
| KINGSTON  | KVR1600D3N11/2G-ES        | 2GB             | DS | KTC          | D1288JPNPDL9U        | 11-11-11-28 | 1.35V-1.5V  | • | • |
| KINGSTON  | KHX1600C7D3K2/4GX(XMP)    | 4GB ( 2x 2GB )  | DS | -            | -                    | -           | 1.65V       | • | • |
| KINGSTON  | KHX1600C9D3K2K2/4GX(XMP)  | 4GB(2 x 2GB)    | DS | -            | -                    | 9-9-9-27    | 1.65V       | • | • |
| KINGSTON  | KHX1600C9D3/4G            | 4GB             | DS | -            | -                    | -           | 1.65V       | • | • |
| KINGSTON  | KVR16N11/4(Low Profile)   | 4GB             | DS | KINGSTON     | D2568GEROPGGBU       | -           | 1.5V        | • | • |
| KINGSTON  | KHX1600C9D3T1K3/6GX(XMP)  | 6GB ( 3x 2GB )  | DS | -            | -                    | -           | 1.65V       | • | • |
| KINGSTON  | KHX1600C9D3T1BK3/6GX(XMP) | 6GB(3 x 2GB)    | DS | -            | -                    | 9-9-9-27    | 1.65V       | • | • |
| KINGSTON  | KHX1600C9D3K2/8GX(XMP)    | 8GB(2 x 4GB)    | DS | -            | -                    | -           | 1.65V       | • | • |
| KINGSTON  | KHX1600C9D3P1K2/8G        | 8GB(2 x 4GB)    | DS | -            | -                    | -           | 1.5V        | • | • |
| KINGSTON  | KHX16C10B1K2/16X(XMP)     | 8GB             | DS | -            | -                    | -           | 1.5V        | • | • |
| KINGSTON  | KHX16C9P1K2/16(XMP)       | 8GB             | DS | -            | -                    | -           | 1.5V        | • | • |
| MICRON    | MT8JTF51264AZ-1G6E1       | 4GB             | SS | MICRON       | D9QBJ                | -           | 1.50V       | • | • |
| MICRON    | MT16JTF1G64AZ-1G6E1       | 8GB             | DS | MICRON       | D9QBJ                | -           | -           | • | • |
| PSC       | AL9F8L93B-GN2E            | 4GB             | SS | PSC          | XHP284C3G-M          | -           | 1.50V       | • | • |
| PSC       | ALAF8L93B-GN2E            | 8GB             | DS | PSC          | XHR425C3G-M          | -           | 1.50V       | • | • |
| Transcend | TS512MLK64W6H             | 4GB             | SS | SEC 234 HYKO | K4B4GO8468           | -           | -           | • | • |
| Transcend | JM1600K1H-8G              | 8GB             | DS | Transcend    | E223X8BO648S         | -           | -           | • | • |
| Transcend | TS1GLK64V6H               | 8GB             | DS | SEC 222 HYKO | 6MD9639W             | -           | 1.50V       | • | • |
| Transcend | TS1GLK64W6H               | 8GB             | DS | SEC 234 HYKO | K4B4GO8468           | -           | 1.35V       | • | • |
| ADATA     | ADDU1600W4G11-B           | 4GB             | SS | ADATA        | DWND-1211A           | -           | -           | • | • |
| ADATA     | AX3U1600W4G9-DB           | 8GB ( 2x 4GB )  | SS | -            | -                    | 9-9-9-24    | 1.5V        | • | • |
| ADATA     | AX3U1600W8G9-DB           | 16GB ( 2x 8GB ) | DS | -            | -                    | 9-9-9-24    | 1.5V        | • | • |
| ADATA     | ADDU1600W8G11-B           | 8GB             | DS | ELPIDA       | J4208EBBG-GN-F       | -           | -           | • | • |
| ADATA     | AD3U1600W8G11-B           | 8GB             | DS | ADATA        | F211X8B0640A         | -           | -           | • | • |
| AMD       | AE32G1609U1-U             | 2GB             | SS | -            | -                    | 9-9-9-24    | 1.5V        | • | • |
| AMD       | AE38G1609U1K              | 4GB             | SS | -            | -                    | 9-9-9-28    | 1.5V        | • | • |
| ASint     | SLZ302G08-EGN1C           | 2GB             | SS | Asint        | SLZ302G08-GN1C       | -           | 1.5V        | • | • |
| Asint     | SLA304G08-ENG1B           | 4GB             | SS | Asint        | 304G08-GN1B1301      | -           | 1.5V        | • | • |
| Asint     | SLZ3128M8-EJG1D(XMP)      | 2GB             | DS | Asint        | 3128M8-GJ1D          | 9-9-9-24    | 1.6V        | • | • |
| Asint     | SLA302G08-EGG1C(XMP)      | 4GB             | DS | Asint        | 302G08-GG1C          | -           | 1.5V-1.6V   | • | • |
| Asint     | SLA302G08-EJG1C(XMP)      | 4GB             | DS | Asint        | 302G08-GJ1C          | -           | 1.5V-1.6V   | • | • |
| ASint     | SLA302G08-EGN1C           | 4GB             | DS | Asint        | SLA302G08-GN1C       | -           | 1.5V        | • | • |
| Asint     | SLB304G08-EJG1B           | 8GB             | DS | -            | -                    | -           | 1.5V-1.6V   | • | • |
| ASint     | SLB304G08-EGN1B           | 8GB             | DS | Asint        | SLB304G08-GN1B       | -           | 1.5V        | • | • |
| Elixir    | M2P2G64CB8HC9N-DG(XMP)    | 2GB             | DS | -            | -                    | -           | 1.65V/1.65V | • | • |
| Elixir    | M2P2G64CB8HC9N-DG         | 2GB             | DS | -            | -                    | -           | 1.5V-1.6V   | • | • |
| Elixir    | M2X8G64CB8HB5N-DG(XMP)    | 8GB             | DS | Elixir 1213  | N2CB4G8BOBN-DG       | -           | 1.5V-1.65V  | • | • |
| MIRAGES   | KMD3U1600V4G(PC3-12/00U)  | 4GB             | SS | -            | SEC246BCKOK4B4GO846C | -           | -           | • | • |
| PATRIOT   | PGD316G1600ELK(XMP)       | 32GB(8GBx4)     | DS | -            | -                    | 9-9-9-24    | 1.65V       | • | • |
| PATRIOT   | PV332G160C9QK             | 8GB             | DS | -            | -                    | -           | 1.5V        | • | • |
| SANMAX    | SMD-4G28N1P-16KM          | 4GB             | SS | ELPIDA       | J4208BBBG-GN-F       | -           | -           | • | • |
| SanMax    | SMD-4G68HP-16KZ           | 4GB             | DS | HYNIX        | H5TQ2G83BFR PBC      | -           | 1.5V        | • | • |
| SANMAX    | SMD-8G28NP-16KM           | 8GB             | DS | ELPIDA       | J4208BBBG-GN-F       | -           | 1.50V       | • | • |
| Simcon    | SP002GBLTU160V02(XMP)     | 2GB             | SS | S-POWER      | 20YT5NG-1201         | -           | 1.5V        | • | • |
| Simcon    | SP004GBLTU160V02(XMP)     | 4GB             | DS | S-POWER      | 20YT5NG-1201         | -           | -           | • | • |
| TEAM      | TLD34G1600HCBK            | 4GB             | SS | -            | -                    | 9-9-9-24    | 1.5V        | • | • |
| TEAM      | TED34GM1600C11BK          | 4GB             | DS | HYNIX        | DW3DJJ273            | -           | 1.5V        | • | • |
| TEAM      | TED38GM1600C11BK          | 8GB             | DS | HYNIX        | DT38J3bb4AM          | 11-11-11-20 | 1.5V        | • | • |
| TEAM      | TLD38G1600HC9BK           | 8GB             | DS | -            | -                    | 9-9-9-24    | 1.5V        | • | • |
| V-COLOR   | TD4G8C11-H11              | 4GB             | SS | HYNIX        | H5TQ4G83MFR          | -           | -           | • | • |

|      |                        |     |    |   |   |          |      |   |   |   |
|------|------------------------|-----|----|---|---|----------|------|---|---|---|
| GEIL | GVP38GB1600C11SC (XMP) | 4GB | DS | - | - | 9-9-9-28 | 1.5V | • | • | • |
|------|------------------------|-----|----|---|---|----------|------|---|---|---|

### DDR3 1866

| Vendors  | Part No.                     | Size          | SS/DS | Chip Brand | Chip NO.   | Timing      | Voltage | DIMM socket support (Optional) |        |        |
|----------|------------------------------|---------------|-------|------------|------------|-------------|---------|--------------------------------|--------|--------|
|          |                              |               |       |            |            |             |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| CORSAIR  | CMY8GX3M2A1866C9             | 4GB           | SS    | -          | -          | 9-10-9-27   | 1.50V   | •                              | •      | •      |
| CORSAIR  | CMZ8GX3M2A1866C9(XMP)        | 8GB(2 x 4GB)  | DS    | -          | -          | 9-10-9-27   | 1.50V   | •                              | •      | •      |
| CORSAIR  | CMD32GX3M4A1866C9(Ver3.24)   | 8GB           | DS    | -          | -          | 9-10-9-27   | 1.50V   | •                              | •      | •      |
| CORSAIR  | CMY16GX3M2A1866C9(Ver3.24)   | 8GB           | DS    | -          | -          | 9-10-9-27   | 1.50V   | •                              | •      | •      |
| CORSAIR  | CMY32GX3M4A1866C9            | 8GB           | DS    | -          | -          | 9-10-9-27   | 1.50V   | •                              | •      | •      |
| CORSAIR  | CMZ16GX3M2A1866C10(Ver4.21)  | 8GB           | DS    | -          | -          | 10-11-10-20 | 1.50V   | •                              | •      | •      |
| CRUCIAL  | BLT4G3D1869DT1TX0.13FKD(XMP) | 4GB           | DS    | -          | -          | 9-9-9-27    | 1.5V    | •                              | •      | •      |
| CRUCIAL  | BLT4G3D1869DT1TX0.13FKD(XMP) | 4GB           | DS    | -          | -          | 9-9-9-27    | 1.5V    | •                              | •      | •      |
| CRUCIAL  | BLT4G3D1869DT1TX0.13FKD(XMP) | 4GB           | DS    | -          | -          | 9-9-9-27    | 1.5V    | •                              | •      | •      |
| G.SKILL  | F3-14900CL9Q-16GBZL(XMP1.3)  | 16GB (4GB x4) | DS    | -          | -          | 9-10-9-28   | 1.5V    | •                              | •      | •      |
| G.SKILL  | F3-14900CL9Q-16GBZL(XMP1.3)  | 16GB (4GB x4) | DS    | -          | -          | 10-11-10-20 | 1.5V    | •                              | •      | •      |
| G.SKILL  | F3-14900CL9Q-8GBXL(XMP)      | 8GB(2 x 4GB)  | DS    | -          | -          | 9-10-9-28   | 1.5V    | •                              | •      | •      |
| G.SKILL  | F3-14900CL9Q-8GBXL(XMP)      | 8GB(2GBx4)    | DS    | -          | -          | 9-9-9-24    | 1.6V    | •                              | •      | •      |
| KINGSTON | KHX1866C9D3K4/16GX(XMP)      | 16GB (4GB x4) | DS    | -          | -          | -           | 1.65V   | •                              | •      | •      |
| KINGSTON | KHX1866C11D3P1K2/8G          | 8GB (4GB x 2) | DS    | -          | -          | -           | 1.5V    | •                              | •      | •      |
| KINGSTON | KHX1866C9D3K2/8GX(XMP)       | 8GB(4GBX2)    | DS    | -          | -          | -           | 1.65V   | •                              | •      | •      |
| KINGSTON | KHX18C10T3K4/32X             | 8GB           | DS    | -          | -          | -           | 1.5V    | •                              | •      | •      |
| AMD      | AP38G1869U2K                 | 8GB(4GBX2)    | DS    | -          | -          | 9-10-9-27   | 1.5V    | •                              | •      | •      |
| AMD      | AP38G1869U1K(XMP)            | 4GB           | SS    | -          | -          | 9-10-9-27   | 1.5V    | •                              | •      | •      |
| AMD      | AP38G1869U2K                 | 8GB(4GBX2)    | DS    | -          | -          | 9-10-9-27   | 1.5V    | •                              | •      | •      |
| PATRIOT  | PV138G186C9KPD000326         | 4GB           | DS    | -          | -          | -           | 1.5V    | •                              | •      | •      |
| TEAM     | TED34GM1866C13BK             | 4GB           | DS    | HYNIX      | DW3DJ472B3 | -           | 1.5V    | •                              | •      | •      |
| TEAM     | TLD34G1866HC9KBK             | 4GB           | DS    | -          | -          | 9-11-9-27   | 1.5V    | •                              | •      | •      |
| TEAM     | TED38GM1866C13BK             | 8GB           | DS    | HYNIX      | DT38G54BHM | -           | 1.5V    | •                              | •      | •      |
| TEAM     | TLD38G1866HC10SBK            | 8GB           | DS    | -          | -          | 10-11-10-20 | 1.5V    | •                              | •      | •      |

### DDR3 2000(Downgrade to DDR3 1866)

|          |                           |                |    |       |                 |             |            |   |   |   |
|----------|---------------------------|----------------|----|-------|-----------------|-------------|------------|---|---|---|
| CORSAIR  | CMZ4GX3M2A2000C10(XMP)    | 4GB(2 x 2GB)   | SS | -     | -               | 10-10-10-27 | 1.50V      | • | • | • |
| CORSAIR  | CMT6GX3M3A2000C8(XMP)     | 6GB(3 x 2GB)   | DS | -     | -               | 8-9-8-24    | 1.65V      | • | • | • |
| G.SKILL  | F3-16000CL9D-4GBFLS(XMP)  | 4GB(2 x 2GB)   | DS | -     | -               | 9-9-9-24    | 1.65V      | • | • | • |
| G.SKILL  | F3-16000CL6T-6GBPIS(XMP)  | 6GB (3x 2GB)   | DS | -     | -               | 6-9-6-24    | 1.65V      | • | • | • |
| GEIL     | GUP34GB2000C9DC(XMP)      | 4GB(2 x 2GB)   | DS | -     | -               | 9-9-9-28    | 1.65V      | • | • | • |
| KINGSTON | KHX2000C9AD3T1K2/4GX(XMP) | 4GB ( 2x 2GB ) | DS | -     | -               | -           | 1.65V      | • | • | • |
| KINGSTON | KHX2000C9AD3W1K3/6GX(XMP) | 6GB ( 3x 2GB ) | DS | -     | -               | -           | 1.65V      | • | • | • |
| KINGSTON | KHX2000C9AD3T1K3/6GX(XMP) | 6GB (3x 2GB)   | DS | -     | -               | -           | 1.65V      | • | • | • |
| Asint    | SLA302G08-ML2HB(XMP)      | 4GB            | DS | HYNIX | H5TQ2G83BFR H9C | -           | 1.5V-1.65V | • | • | • |

### DDR3 2133

| Vendors  | Part No.                    | Size            | SS/DS | Chip Brand | Chip NO. | Timing      | Voltage | DIMM socket support (Optional) |        |        |
|----------|-----------------------------|-----------------|-------|------------|----------|-------------|---------|--------------------------------|--------|--------|
|          |                             |                 |       |            |          |             |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| CORSAIR  | CMZ8GX3M2A2133C11(Ver4.21)  | 4GB             | SS    | -          | -        | 11-11-11-27 | 1.50V   | •                              | •      | •      |
| CORSAIR  | CMY8GX3M2A2133C11R          | 8GB(4 x 2GB)    | SS    | -          | -        | 11-11-11-27 | 1.50V   | •                              | •      | •      |
| CORSAIR  | CMT16GX3M4X2133C9(XMP 1.3)  | 16GB (4GB x4)   | DS    | -          | -        | 9-11-10-27  | 1.50V   | •                              | •      | •      |
| CORSAIR  | CMT4GX3M2A2133C9(XMP)       | 4GB(2x 2GB)     | DS    | -          | -        | 9-10-9-24   | 1.65V   | •                              | •      | •      |
| CORSAIR  | CMT4GX3M2B2133C9(XMP)       | 4GB(2x 2GB)     | DS    | -          | -        | 9-10-9-27   | 1.50V   | •                              | •      | •      |
| CORSAIR  | CMD8GX3M2B2133C9(Ver5.12)   | 4GB             | DS    | -          | -        | 9-11-11-31  | 1.65V   | •                              | •      | •      |
| CORSAIR  | CMT8GX3M2B2133C9(XMP)       | 8GB (4GB x 2)   | DS    | -          | -        | 9-11-9-27   | 1.50V   | •                              | •      | •      |
| CORSAIR  | CMD16GX3M2A2133C9(Ver4.21)  | 8GB             | DS    | -          | -        | 9-11-11-31  | 1.65V   | •                              | •      | •      |
| CORSAIR  | CMD32GX3M4A2133C9(Ver4.21)  | 8GB             | DS    | -          | -        | 9-11-11-31  | 1.65V   | •                              | •      | •      |
| G.SKILL  | F3-17000CL9Q-16GBZH(XMP1.3) | 16GB (4GB x4)   | DS    | -          | -        | 9-11-10-28  | 1.65V   | •                              | •      | •      |
| G.SKILL  | F3-17000CL11Q2-64GBZLD(XMP) | 8GB             | DS    | -          | -        | 11-11-11-24 | 1.5V    | •                              | •      | •      |
| GEIL     | GE34GB2133C9DC(XMP)         | 2GB             | DS    | -          | -        | 9-9-9-28    | 1.65V   | •                              | •      | •      |
| KINGSTON | KHX2133C11D3K4/16GX(XMP)    | 16GB (4GB x4)   | DS    | -          | -        | -           | 1.65V   | •                              | •      | •      |
| KINGSTON | KHX2133C11D3T1K2/16GX(XMP)  | 16GB(8GB x 2)   | DS    | -          | -        | -           | 1.6V    | •                              | •      | •      |
| KINGSTON | KHX21C11T1BK2/16X(XMP)      | 16GB(8GBx2)     | DS    | -          | -        | -           | 1.6V    | •                              | •      | •      |
| KINGSTON | KHX2133C9AD3T1K2/4GX(XMP)   | 4GB ( 2x 2GB )  | DS    | -          | -        | -           | 1.65V   | •                              | •      | •      |
| KINGSTON | KHX2133C9AD3X2K2/4GX(XMP)   | 4GB(2 x 2GB)    | DS    | -          | -        | 9-11-9-27   | 1.65V   | •                              | •      | •      |
| KINGSTON | KHX2133C9AD3T1K4/8GX(XMP)   | 8GB(4 x 2GB)    | DS    | -          | -        | 9-11-9-27   | 1.65V   | •                              | •      | •      |
| KINGSTON | KHX21C11T1BK2/8X(XMP)       | 8GB(4GBx2)      | DS    | -          | -        | -           | 1.6V    | •                              | •      | •      |
| KINGSTON | KHX2133C9AD3T1FK4/8GX(XMP)  | 8GB(4x 2GB)     | DS    | -          | -        | -           | 1.65V   | •                              | •      | •      |
| KINGSTON | KHX21C11T3K4/32X            | 8GB             | DS    | -          | -        | -           | 1.65V   | •                              | •      | •      |
| ADATA    | AX3U2133W4G10-DR            | 8GB ( 2x 4GB )  | SS    | -          | -        | 10-11-11-11 | 1.65V   | •                              | •      | •      |
| ADATA    | AX3U2133W8G10-DR            | 16GB ( 2x 8GB ) | DS    | -          | -        | 10-11-11-11 | 1.65V   | •                              | •      | •      |
| AMD      | AG34G2130UI                 | 4GB             | SS    | -          | -        | 10-11-11-11 | 1.65V   | •                              | •      | •      |
| AMD      | AG316G2130U1S(XMP)          | 4GB             | SS    | -          | -        | 10-11-11-11 | 1.65V   | •                              | •      | •      |
| AMD      | AP38G2133U2K                | 4GB             | DS    | -          | -        | 11-11-11-11 | 1.65V   | •                              | •      | •      |
| PATRIOT  | PGD38G2133C11K(XMP)         | 16GB (4GB x4)   | DS    | -          | -        | 11-11-11-11 | 1.65V   | •                              | •      | •      |
| TEAM     | TLD34G2133HC11ABK           | 4GB             | SS    | -          | -        | 11-11-11-11 | 1.65V   | •                              | •      | •      |
| TEAM     | TLD38G2133HC11ABK           | 8GB             | DS    | -          | -        | 11-11-13-24 | 1.65V   | •                              | •      | •      |

### DDR3 2200

| Vendors | Part No.                 | Size | SS/DS | Chip Brand | Chip NO. | Timing    | Voltage | DIMM socket support (Optional) |        |        |
|---------|--------------------------|------|-------|------------|----------|-----------|---------|--------------------------------|--------|--------|
|         |                          |      |       |            |          |           |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| GEIL    | GET34GB2200C9DC(XMP)     | 2GB  | DS    | -          | -        | 9-10-9-28 | 1.65V   | •                              | •      | •      |
| GEIL    | GET38GB2200C9ADC(XMP)    | 4GB  | DS    | -          | -        | 9-11-9-28 | 1.65V   | •                              | •      | •      |
| KINGMAX | FLKE85F-B8KJAA-FEIS(XMP) | 2GB  | DS    | -          | -        | -         | 1.5V    | •                              | •      | •      |

### DDR3 2250

| Vendors  | Part No.                 | Size           | SS/DS | Chip Brand | Chip NO. | Timing | Voltage | DIMM socket support (Optional) |        |        |
|----------|--------------------------|----------------|-------|------------|----------|--------|---------|--------------------------------|--------|--------|
|          |                          |                |       |            |          |        |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| KINGSTON | KHX2250C9D3T1K2/4GX(XMP) | 4GB ( 2x 2GB ) | DS    | -          | -        | -      | 1.65V   | •                              | •      | •      |

### DDR3 2400

| Vendors | Part No.                     | Size         | SS/DS | Chip Brand | Chip NO. | Timing      | Voltage | DIMM socket support (Optional) |        |        |
|---------|------------------------------|--------------|-------|------------|----------|-------------|---------|--------------------------------|--------|--------|
|         |                              |              |       |            |          |             |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| CORSAIR | CMGTX8(XMP)                  | 8GB (2GBx 4) | SS    | -          | -        | 10-12-10-24 | 1.65V   | •                              | •      | •      |
| CORSAIR | CMD16GX3M2A2400C9(Ver4.21)   | 8GB          | DS    | -          | -        | 10-12-12-24 | 1.65V   | •                              | •      | •      |
| CORSAIR | CMD32GX3M4A2400C10(Ver5.29)  | 8GB          | DS    | -          | -        | 10-12-12-24 | 1.65V   | •                              | •      | •      |
| CORSAIR | CMY16GX3M2A2400C10R(Ver4.21) | 8GB          | DS    | -          | -        | 10-12-12-24 | 1.65V   | •                              | •      | •      |

|                 |                             |                 |    |   |   |             |       |   |   |   |
|-----------------|-----------------------------|-----------------|----|---|---|-------------|-------|---|---|---|
| <b>G.SKILL</b>  | F3-2400C10D-8GTX(XMP)       | 8GB(2x 4GB)     | SS | - | - | 10-12-12-24 | 1.65V | • | • | • |
| <b>G.SKILL</b>  | F3-19200CL9D-4GBPIS(XMP)    | 4GB(2x 2GB)     | DS | - | - | 9-11-9-28   | 1.65V | • | • | • |
| <b>G.SKILL</b>  | F3-19200CL 10Q-32GBZHD(XMP) | 8GB             | DS | - | - | 10-12-12-24 | 1.65V | • | • | • |
| <b>GEIL</b>     | GET34GB2400C9DC(XMP)        | 2GB             | DS | - | - | 9-11-9-27   | 1.65V | • | • | • |
| <b>KINGSTON</b> | KHX24C11T2K2/8X(XMP)        | 4GB             | DS | - | - | -           | 1.65V | • | • | • |
| <b>ADATA</b>    | AX3U2400W4G11-DMV           | 8GB ( 2x 4GB )  | SS | - | - | 11-13-13-25 | 1.65V | • | • | • |
| <b>ADATA</b>    | AX3U2400W8G11-DMV           | 16GB ( 2x 8GB ) | DS | - | - | 11-13-13-25 | 1.65V | • | • | • |
| <b>TEAM</b>     | TXD34G2400HC10QBK           | 4GB             | DS | - | - | 10-12-12-24 | 1.62V | • | • | • |
| <b>AMD</b>      | AG34G2401G1S                | 4GB             | SS | - | - | 11-12-12-24 | 1.65V | • | • | • |
| <b>TEAM</b>     | TXD38G2400HC10QBK           | 8GB             | DS | - | - | 10-12-12-31 | 1.62V | • | • | • |

#### DDR3 2600(Downgrade to DDR3 2400)

| Vendors        | Part No.                  | Size            | SS/DS | Chip Brand | Chip NO. | Timing      | Voltage | DIMM socket support (Optional) |        |        |
|----------------|---------------------------|-----------------|-------|------------|----------|-------------|---------|--------------------------------|--------|--------|
|                |                           |                 |       |            |          |             |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| <b>G.SKILL</b> | F3-2600CL10Q-16GBZMD(XMP) | 16GB(4x 4GB)    | DS    | -          | -        | 10-12-12-24 | 1.65V   | •                              | •      | •      |
| <b>G.SKILL</b> | F3-2600CL11Q-32GBZHD(XMP) | 32GB(8GBx4)     | DS    | -          | -        | 11-13-13-25 | 1.65V   | •                              | •      | •      |
| <b>ADATA</b>   | AX3U2600GW8G11            | 16GB ( 2x 8GB ) | DS    | -          | -        | 11-13-13-25 | 1.65V   | •                              | •      | •      |

#### DDR3 2666(Downgrade to DDR3 2400)

| Vendors        | Part No.                 | Size        | SS/DS | Chip Brand | Chip NO. | Timing      | Voltage | DIMM socket support (Optional) |        |        |
|----------------|--------------------------|-------------|-------|------------|----------|-------------|---------|--------------------------------|--------|--------|
|                |                          |             |       |            |          |             |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| <b>CORSAIR</b> | CMD16GX3M4A2666C11 (XMP) | 4GB         | DS    | -          | -        | 11-13-13-25 | 1.65V   | •                              | •      | •      |
| <b>G.SKILL</b> | F3-2666C11Q-16GTXD(XMP)  | 16GB(4GBx4) | DS    | -          | -        | 11-13-13-25 | 1.65V   | •                              | •      | •      |

#### DDR3 2800(Downgrade to DDR3 2400)

| Vendors        | Part No.                 | Size        | SS/DS | Chip Brand | Chip NO. | Timing      | Voltage | DIMM socket support (Optional) |        |        |
|----------------|--------------------------|-------------|-------|------------|----------|-------------|---------|--------------------------------|--------|--------|
|                |                          |             |       |            |          |             |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| <b>CORSAIR</b> | CMD16GX3M4A2800C12 (XMP) | 4GB         | DS    | -          | -        | 12-14-14-26 | 1.65V   | •                              | •      | •      |
| <b>G.SKILL</b> | F3-2800C11Q-16GTXD(XMP)  | 16GB(4GBx4) | DS    | -          | -        | 11-13-13-25 | 1.65V   | •                              | •      | •      |
| <b>G.SKILL</b> | F3-2800C12Q-32GGTXDG     | 8GB         | DS    | -          | -        | 12-14-14-26 | 1.65V   | •                              | •      | •      |
| <b>ADATA</b>   | AX3U2800W4G12-DGV        | 4GB         | SS    | -          | -        | 12-14-14-26 | 1.65V   | •                              | •      | •      |
| <b>ADATA</b>   | AX3U2800W8G12-DGV        | 8GB         | DS    | -          | -        | 12-14-14-26 | 1.65V   | •                              | •      | •      |
| <b>AVEXIR</b>  | AVD3UH28001204G-4BZ1     | 4GB         | SS    | -          | -        | -           | 1.65V   | •                              | •      | •      |

#### DDR3 2933(Downgrade to DDR3 2400)

| Vendors        | Part No.            | Size | SS/DS | Chip Brand | Chip NO. | Timing      | Voltage | DIMM socket support (Optional) |        |        |
|----------------|---------------------|------|-------|------------|----------|-------------|---------|--------------------------------|--------|--------|
|                |                     |      |       |            |          |             |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| <b>G.SKILL</b> | F3-2933C12Q-16GTDXG | 4GB  | SS    | -          | -        | 12-14-14-26 | 1.65V   | •                              | •      | •      |
| <b>G.SKILL</b> | F3-2933C12D-16GTDXG | 8GB  | DS    | -          | -        | 12-14-14-26 | 1.65V   | •                              | •      | •      |

#### DDR3 3000(Downgrade to DDR3 2400)

| Vendors        | Part No.            | Size | SS/DS | Chip Brand | Chip NO. | Timing | Voltage | DIMM socket support (Optional) |        |        |
|----------------|---------------------|------|-------|------------|----------|--------|---------|--------------------------------|--------|--------|
|                |                     |      |       |            |          |        |         | 1 DIMM                         | 2 DIMM | 4 DIMM |
| <b>G.SKILL</b> | F3-3000C12Q-16GTXDG | 4GB  | SS    | -          | -        | -      | 1.65V   | •                              | •      | •      |

#### 4 DIMM Slots

- **1 DIMM**: Supports one module inserted in any slot as Single-channel memory configuration
- **2 DIMM**: Supports one pair of modules inserted into either the **blue** slots or the **black** slots as one pair of Dual-channel memory configuration
- **4 DIMM**: Supports 4 modules inserted into both the **blue** and **black** slots as two pairs of Dual-channel memory configuration

-When installing total memory of 4GB capacity or more, Windows 32-bit operation system may only recognize less than 3GB. Hence, a total installed memory of less than 3GB is recommended.

-It is recommended to install the memory modules from the slots for better overclocking capability.

-The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module.

Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.