

## M5A99X EVO、M5A97 EVO、M5A97 PRO

### DDR3 1067 Qualified Vendors List (QVL)

| Vendors  | Part No.            | Size           | SS/DS | Chip Brand | Chip NO.           | Timing   | Voltage | MM socket support (Optional) |        |        |
|----------|---------------------|----------------|-------|------------|--------------------|----------|---------|------------------------------|--------|--------|
|          |                     |                |       |            |                    |          |         | 1 DIMM                       | 2 DIMM | 4 DIMM |
| Crucial  | CT12864BA1067.8FF   | 1GB            | SS    | MICRON     | D9KPT              | 7        | -       |                              |        |        |
| Crucial  | CT12864BA1067.8SFD  | 1GB            | SS    | MICRON     | D9JNL              | 7        | -       |                              |        |        |
| Crucial  | CT12872BA1067.9FF   | 1GB            | SS    | MICRON     | D9KPT(ECC)         | 7        | -       |                              | •      | •      |
| Crucial  | CT25664BA1067.16FF  | 2GB            | DS    | MICRON     | D9KPT              | 7        | -       |                              | •      | •      |
| Crucial  | CT25664BA1067.16SFD | 2GB            | DS    | MICRON     | D9JNL              | 7        | -       |                              |        |        |
| Crucial  | CT25672BA1067.18FF  | 2GB            | DS    | MICRON     | D9KPT(ECC)         | 7        | -       |                              |        |        |
| ELPIDA   | EBJ10UE8BAW0-AE-E   | 1GB            | SS    | ELPIDA     | J1108BABG-DJ-E     | 7        | -       |                              |        |        |
| ELPIDA   | EBJ10UE8EDF0-AE-F   | 1GB            | SS    | ELPIDA     | J1108EDSE-DJ-F     | -        | -       |                              | •      | •      |
| ELPIDA   | EBJ11UD8BAFA-AG-E   | 1GB            | DS    | ELPIDA     | J5308BASE-AC-E     | 8        | -       |                              |        |        |
| ELPIDA   | EBJ21UE8BAW0-AE-E   | 2GB            | DS    | ELPIDA     | J1108BABG-DJ-E     | 7        | -       |                              |        |        |
| ELPIDA   | EBJ21UE8EDF0-AE-F   | 2GB            | DS    | ELPIDA     | J1108EDSE-DJ-F     | -        | -       |                              | •      | •      |
| GEIL     | GG34GB1066C8DC      | 4GB ( 2x 2GB ) | DS    | GEIL       | GL1L128M88BA115FW  | 8-8-8-20 | 1.3     |                              |        |        |
| Hynix    | HMT112U6AFP8C-G7N0  | 1GB            | SS    | HYNIX      | H5TQ1G83AFPG7C     | 7        | -       |                              |        |        |
| Hynix    | HYMT112U64ZNF8-G7   | 1GB            | SS    | HYNIX      | HY5TQ1G831ZNFP-G7  | 7        | -       |                              |        |        |
| Hynix    | HMT125U6AFP8C-G7N0  | 2GB            | DS    | HYNIX      | H5TQ1G83AFPG7C     | 7        | -       |                              | •      | •      |
| Hynix    | HYMT125U64ZNF8-G7   | 2GB            | DS    | HYNIX      | HY5TQ1G831ZNFP-G7  | 7        | -       |                              | •      |        |
| Kingston | KVR1066D3N7/1G      | 1GB            | SS    | Kingston   | D1288JPNDPLD9U     | 7        | 1.5     |                              |        |        |
| Kingston | KVR1066D3N7/2G      | 2GB            | DS    | Elpida     | J1108BDSE-DJ-F     | 7        | 1.5     |                              | •      | •      |
| KINGSTON | KVR1066D3N7K2/4G    | 4GB ( 2x 2GB ) | DS    | KINGSTON   | D1288JELDNGD9U     | -        | 1.5     |                              | •      | •      |
| SAMSUNG  | M378B5273BH1-CF8    | 4GB            | DS    | SAMSUNG    | K4B2G0846B-HCF8    | 8        | 1.5     |                              |        |        |
| Elixir   | M2Y2G64CB8HC5N-BE   | 2GB            | DS    | Elixir     | N2CB1G80CN-BE      | -        | -       |                              | •      | •      |
| Elixir   | M2Y2G64CB8HC9N-BE   | 2GB            | DS    | -          | -                  | -        | -       |                              | •      | •      |
| WINTEC   | 3DU3191A-10         | 1GB            | DS    | Qimonda    | IDSH51-03A1F1C-10F | 7        | -       |                              |        |        |

### DDR3 1333 Qualified Vendors List (QVL)

| Vendors | Part No.           | Size | SS/DS | Chip Brand | Chip NO.       | Timing   | Voltage   | MM socket support (Optional) |        |        |
|---------|--------------------|------|-------|------------|----------------|----------|-----------|------------------------------|--------|--------|
|         |                    |      |       |            |                |          |           | 1 DIMM                       | 2 DIMM | 4 DIMM |
| A-DATA  | AD63I1B0823EV      | 2GB  | SS    | A-DATA     | 3CCA-1509A     | -        | -         |                              | •      | •      |
| A-DATA  | AXDU1333GC2G9(XMP) | 2GB  | SS    | -          | -              | 9-9-9-24 | 1.25~1.35 |                              | •      | •      |
| A-DATA  | AD63I1C1624EV      | 4GB  | DS    | A-DATA     | 3CCA-1509A     | -        | -         |                              |        |        |
| A-DATA  | SU3U1333W8G9-B     | 8GB  | DS    | Elpida     | J4208BASE-DJ-F | 9        | -         |                              |        |        |
| Apacer  | 78.01GC6.9L0       | 1GB  | SS    | Apacer     | AM5D5808DEJSBG | 9        | -         |                              |        |        |

|                |                              |                 |    |         |                   |          |      |   |   |
|----------------|------------------------------|-----------------|----|---------|-------------------|----------|------|---|---|
| <b>Apacer</b>  | 78.A1GC6.9L1                 | 2GB             | DS | Apacer  | AM5D5808DEWSBG    | 9        | -    |   |   |
| <b>Apacer</b>  | 78.A1GC6.9L1                 | 2GB             | DS | Apacer  | AM5D5808FEQSBG    | 9        | -    |   |   |
| <b>Apacer</b>  | 78.B1GDE.9L10C               | 4GB             | DS | Apacer  | AM5D5908CEHSBG    | 9        | -    |   |   |
| <b>CORSAIR</b> | CMX3X2G1333C9                | 2GB             | DS | -       | -                 | 9-9-9-24 | 1.5  |   |   |
| <b>CORSAIR</b> | TW3X4G1333C9A                | 4GB ( 2x 2GB )  | DS | -       | -                 | 9-9-9-24 | 1.5  | • | • |
| <b>CORSAIR</b> | CMX8GX3M2A1333C9(XM<br>P)    | 8GB ( 2x 4GB )  | DS | -       | -                 | 9-9-9-24 | 1.5  | • |   |
| <b>CORSAIR</b> | CMX8GX3M4A1333C9             | 8GB(4 x 2GB)    | DS | -       | -                 | 9-9-9-24 | 1.5  |   |   |
| <b>Crucial</b> | CT12864BA1339.8FF            | 1GB             | SS | MICRON  | D9KPT             | 9        | -    |   |   |
| <b>Crucial</b> | BL25664BN1337.16FF(XM<br>P)  | 2GB             | DS | -       | -                 | 7-7-7-24 | 1.65 | • | • |
| <b>Crucial</b> | CT25664BA1339.16FF           | 2GB             | DS | MICRON  | D9KPT             | 9        | -    | • | • |
| <b>Crucial</b> | CT25672BA1339.18FF           | 2GB             | DS | MICRON  | D9KPT(ECC)        | 9        | -    |   |   |
| <b>ELPIDA</b>  | EBJ10UE8BDF0-DJ-F            | 1GB             | SS | ELPIDA  | J1108BDSE-DJ-F    | -        | -    |   |   |
| <b>ELPIDA</b>  | EBJ10UE8EDF0-DJ-F            | 1GB             | SS | ELPIDA  | J1108EDSE-DJ-F    | -        | -    |   |   |
| <b>ELPIDA</b>  | EBJ20UF8BCF0-DJ-F            | 2GB             | SS | Elpida  | J2108BCSE-DJ-F    | -        | -    |   |   |
| <b>ELPIDA</b>  | EBJ21UE8BDF0-DJ-F            | 2GB             | DS | ELPIDA  | J1108BDSE-DJ-F    | -        | -    |   |   |
| <b>ELPIDA</b>  | EBJ21UE8EDF0-DJ-F            | 2GB             | DS | ELPIDA  | J1108EDSE-DJ-F    | -        | -    |   |   |
| <b>G.SKILL</b> | F3-10600CL9D-4GBNT           | 4GB ( 2x 2GB )  | DS | G.SKILL | D3 128M8CE9 2GB   | 9-9-9-24 | 1.5  |   |   |
| <b>G.SKILL</b> | F3-10666CL8D-<br>4GBHK(XMP)  | 4GB ( 2x 2GB )  | DS | -       | -                 | 8-8-8-21 | 1.5  |   |   |
| <b>G.SKILL</b> | F3-10666CL7D-<br>4GBPI(XMP)  | 4GB(2 x 2GB)    | DS | -       | -                 | 7-7-7-21 | 1.5  |   |   |
| <b>G.SKILL</b> | F3-10666CL7D-<br>4GBRH(XMP)  | 4GB(2 x 2GB)    | DS | -       | -                 | 7-7-7-21 | 1.5  |   |   |
| <b>G.SKILL</b> | F3-10666CL8D-<br>4GBECO(XMP) | 4GB(2 x 2GB)    | DS | -       | -                 | 8-8-8-24 | 1.35 |   |   |
| <b>G.SKILL</b> | F3-10666CL7D-<br>8GBRH(XMP)  | 8GB ( 2x 4GB )  | DS | -       | -                 | 7-7-7-21 | 1.5  |   |   |
| <b>G.SKILL</b> | F3-10666CL9D-8GBRL           | 8GB ( 2x 4GB )  | DS | -       | -                 | 9-9-9-24 | 1.5  |   |   |
| <b>G.SKILL</b> | F3-10666CL9D-8GBRL           | 8GB ( 2x 4GB )  | DS | -       | -                 | 9-9-9-24 | 1.5  | • | • |
| <b>G.SKILL</b> | F3-10666CL9D-8GBXL           | 8GB ( 2x 4GB )  | DS | -       | -                 | 9-9-9-24 | 1.5  | • | • |
| <b>GEIL</b>    | GET316GB1333C9QC             | 16GB ( 4x 4GB ) | DS | -       | -                 | 9-9-9-24 | 1.5  |   |   |
| <b>GEIL</b>    | GG34GB1333C9DC               | 4GB ( 2x 2GB )  | DS | GEIL    | GL1L128M88BA115FW | 9-9-9-24 | 1.3  |   |   |
| <b>GEIL</b>    | GB34GB1333C7DC               | 4GB(2 x 2GB)    | DS | GEIL    | GL1L128M88BA15FW  | 7-7-7-24 | 1.5  |   |   |
| <b>GEIL</b>    | GG34GB1333C9DC               | 4GB(2 x 2GB)    | DS | GEIL    | GL1L128M88BA12N   | 9-9-9-24 | 1.3  |   |   |
| <b>GEIL</b>    | GV34GB1333C7DC               | 4GB(2 x 2GB)    | DS | -       | -                 | 7-7-7-24 | 1.5  |   |   |
| <b>GEIL</b>    | GV34GB1333C9DC               | 4GB(2 x 2GB)    | DS | -       | -                 | 9-9-9-24 | 1.5  |   |   |

|                 |                          |                |    |          |                   |          |      |   |   |
|-----------------|--------------------------|----------------|----|----------|-------------------|----------|------|---|---|
| <b>GEIL</b>     | GVP38GB1333C7QC          | 8GB ( 4x 2GB ) | DS | -        | -                 | 7-7-7-24 | 1.5  |   |   |
| <b>Hynix</b>    | HMT112U6TFR8A-H9         | 1GB            | SS | Hynix    | H5TC1G83TFR       | -        | -    |   |   |
| <b>Hynix</b>    | HMT325U6BFR8C-H9         | 2GB            | SS | Hynix    | H5TQ2G83BFR       | -        | -    |   |   |
| <b>Hynix</b>    | HMT125U6BFR8C-H9         | 2GB            | DS | Hynix    | H5TQ1G83BFRH9C    | 9        | -    |   |   |
| <b>Hynix</b>    | HMT125U6TFR8A-H9         | 2GB            | DS | Hynix    | H5TC1G83TFR       | -        | -    |   |   |
| <b>Hynix</b>    | HMT351U6BFR8C-H9         | 4GB            | DS | Hynix    | H5TQ2G83BFR       | -        | -    |   |   |
| <b>KINGMAX</b>  | FLFD45F-B8KL9            | 1GB            | SS | KINGMAX  | KFB8FNLXF-BNF-15A | -        | -    |   |   |
| <b>KINGMAX</b>  | FLFE85F-C8KM9            | 2GB            | SS | Kingmax  | KFC8FNMXF-BXX-15A | -        | -    |   |   |
| <b>KINGMAX</b>  | FLFE85F-B8KL9            | 2GB            | DS | KINGMAX  | KFB8FNLXL-BNF-15A | -        | -    |   |   |
| <b>KINGMAX</b>  | FLFF65F-C8KM9            | 4GB            | DS | Kingmax  | KFC8FNMXF-BXX-15A | -        | -    |   |   |
| <b>Kingston</b> | KVR1333D3N9/1G           | 1GB            | SS | Elpida   | J1108BDSE-DJ-F    | 9        | 1.5  |   |   |
| <b>Kingston</b> | KVR1333D3N9/2G(矮版)       | 2GB            | DS | Elpida   | J1108BDBG-DJ-F    | -        | 1.5  |   |   |
| <b>Kingston</b> | KVR1333D3N9/2G           | 2GB            | DS | Kingston | D1288JPNDPLD9U    | 9        | 1.5  | ● | ● |
| <b>Kingston</b> | KHX1333C9D3UK2/4GX(X MP) | 4GB ( 2x 2GB ) | DS | -        | -                 | 9        | 1.25 |   |   |
| <b>KINGSTON</b> | KVR1333D3N9K2/4G         | 4GB ( 2x 2GB ) | DS | KINGSTON | D1288JEMFPGD9U    | -        | 1.5  | ● | ● |
| <b>MICRON</b>   | MT4JTF12864AZ-1G4D1      | 1GB            | SS | Micron   | D9LGQ             | -        | -    |   |   |
| <b>MICRON</b>   | MT8JTF25664AZ-1G4D1      | 2GB            | SS | Micron   | D9LGK             | -        | -    |   |   |
| <b>MICRON</b>   | MT8JTF25664AZ-1G4D1      | 2GB            | SS | Micron   | D9LGK             | -        | -    |   |   |
| <b>MICRON</b>   | MT16JTF51264AZ-1G4D1     | 4GB            | DS | Micron   | D9LGK             | -        | -    |   |   |
| <b>OCZ</b>      | OCZ3P1333LV3GK           | 3GB(3 x 1GB)   | SS | -        | -                 | 7-7-7    | 1.65 |   |   |
| <b>OCZ</b>      | OCZ3G1333LV4GK           | 4GB ( 2x 2GB ) | DS | -        | -                 | 9-9-9    | 1.65 |   |   |
| <b>OCZ</b>      | OCZ3P1333LV4GK           | 4GB ( 2x 2GB ) | DS | -        | -                 | -        | 1.65 |   |   |
| <b>OCZ</b>      | OCZ3P1333LV4GK           | 4GB(2 x 2GB)   | DS | -        | -                 | 7-7-7    | 1.65 |   |   |
| <b>OCZ</b>      | OCZ3G1333LV8GK           | 8GB ( 2x 4GB ) | DS | -        | -                 | 9-9-9    | 1.65 |   |   |
| <b>OCZ</b>      | OCZ3G1333LV8GK           | 8GB ( 2x 4GB ) | DS | -        | -                 | 9-9-9    | 1.65 |   |   |
| <b>OCZ</b>      | OCZ3RPR1333C9LV8GK       | 8GB ( 2x 4GB ) | DS | -        | -                 | 9-9-9    | 1.65 |   |   |
| <b>PSC</b>      | AL7F8G73D-DG1            | 1GB            | SS | PSC      | A3P1GF3DGF        | -        | -    |   |   |
| <b>PSC</b>      | PC310600U-9-10-A0        | 1GB            | SS | PSC      | A3P1GF3FGF        | -        | -    |   |   |
| <b>PSC</b>      | AL8F8G73D-DG1            | 2GB            | DS | PSC      | A3P1GF3DGF        | -        | -    |   |   |
| <b>PSC</b>      | PC310600U-9-10-B0        | 2GB            | DS | PSC      | A3P1GF3FGF        | -        | -    |   |   |
| <b>SAMSUNG</b>  | M378B2873EH1-CH9         | 1GB            | SS | SAMSUNG  | K4B1G0846E        | -        | -    |   |   |
| <b>SAMSUNG</b>  | M378B2873FHS-CH9         | 1GB            | SS | SAMSUNG  | K4B1G0846F        | -        | -    |   |   |
| <b>SAMSUNG</b>  | M378B5773DH0-CH9         | 2GB            | SS | Samsung  | K4B2G08460        | -        | -    |   |   |
| <b>SAMSUNG</b>  | M378B5673EH1-CH9         | 2GB            | DS | SAMSUNG  | K4B1G0846E        | -        | -    |   |   |
| <b>SAMSUNG</b>  | M378B5673FH0-CH9         | 2GB            | DS | SAMSUNG  | K4B1G0846F        | -        | -    |   |   |
| <b>SAMSUNG</b>  | M378B5273BH1-CH9         | 4GB            | DS | SAMSUNG  | K4B2G0846B-HCH9   | 9        | -    |   |   |

|                      |                        |              |    |                |                     |            |     |
|----------------------|------------------------|--------------|----|----------------|---------------------|------------|-----|
| <b>SAMSUNG</b>       | M378B5273CH0-CH9       | 4GB          | DS | <b>SAMSUNG</b> | K4B2G0846C          | K4B2G0846C | -   |
| <b>SAMSUNG</b>       | M378B5273DH0-CH9       | 4GB          | DS | Samsung        | K4B2G08460          | -          | -   |
| <b>SAMSUNG</b>       | M378B1G73AH0-CH9       | 8GB          | DS | <b>SAMSUNG</b> | K4B4G0846A-HCH9     | -          | -   |
| <b>Super Talent</b>  | W1333UX2G8(XMP)        | 2GB(2 x 1GB) | SS | -              | -                   | 8          | 1.8 |
| <b>Transcend</b>     | TS256MLK64V3N (566577) | 2GB          | SS | Hynix          | H5TQ2G83BFR         | 9          | -   |
| <b>Transcend</b>     | TS256MLK64V3N (574206) | 2GB          | SS | Micron         | D9LGK               | 9          | -   |
| <b>Transcend</b>     | TS512MLK64V3N (389889) | 4GB          | DS | Hynix          | H5TQ2G83BFR         | 9          | -   |
| <b>Transcend</b>     | TS512MLK64V3N (574831) | 4GB          | DS | Micron         | D9LGK               | 9          | -   |
| <b>ACTICA</b>        | ACT1GHU64B8F1333S      | 1GB          | SS | Samsung        | K4B1G0846F          | -          | -   |
| <b>ACTICA</b>        | ACT1GHU72C8G1333S      | 1GB          | SS | Samsung        | K4B1G0846F(ECC)     | -          | -   |
| <b>ACTICA</b>        | ACT2GHU64B8G1333M      | 2GB          | DS | Micron         | D9KPT               | -          | -   |
| <b>ACTICA</b>        | ACT2GHU64B8G1333S      | 2GB          | DS | Samsung        | K4B1G0846F          | -          | -   |
| <b>ACTICA</b>        | ACT2GHU72D8G1333M      | 2GB          | DS | Micron         | D9KPT(ECC)          | -          | -   |
| <b>ACTICA</b>        | ACT2GHU72D8G1333S      | 2GB          | DS | Samsung        | K4B1G0846F(ECC)     | -          | -   |
| <b>ACTICA</b>        | ACT4GHU64B8H1333H      | 4GB          | DS | Hynix          | H5TQ2G83AFR         | -          | -   |
| <b>ACTICA</b>        | ACT4GHU72D8H1333H      | 4GB          | DS | Hynix          | H5TQ2G83AFR(ECC)    | -          | -   |
| <b>BUFFALO</b>       | D3U1333-1G             | 1GB          | SS | Elpida         | J1108BFBG-DJ-F      | -          | -   |
| <b>BUFFALO</b>       | FSH1333D3G-T3G(XMP)    | 3GB(3 x 1GB) | SS | -              | -                   | 7-7-7-20   | -   |
| <b>BUFFALO</b>       | D3U1333-2G             | 2GB          | DS | Elpida         | J1108BFBG-DJ-F      | -          | -   |
| <b>BUFFALO</b>       | D3U1333-4G             | 4GB          | DS | NANYA          | NT5CB256M8BN-CG     | -          | -   |
| <b>EK Memory</b>     | EKM324L28BP8-I13       | 4GB(2 x 2GB) | DS | -              | -                   | 9          | -   |
| <b>Elixir</b>        | M2F2G64CB88B7N-CG      | 2GB          | SS | Elixir         | N2CB2G808N-CG       | -          | -   |
| <b>Elixir</b>        | M2F2G64CB88D7N-CG      | 2GB          | SS | Elixir         | M2CB2G8BDN-CG       | -          | -   |
| <b>Elixir</b>        | M2Y2G64CB8HC9N-CG      | 2GB          | DS | -              | -                   | -          | -   |
| <b>Elixir</b>        | M2F4G64CB8HB5N-CG      | 4GB          | DS | Elixir         | N2CB2G808N-CG       | -          | -   |
| <b>Elixir</b>        | M2F4G64CB8HD5N-CG      | 4GB          | DS | Elixir         | M2CB2G8BDN-CG       | -          | -   |
| <b>GoodRam</b>       | GR1333D364L9/2G        | 2GB          | DS | Qimonda        | IDSH1G-03A1F1C-13H  | -          | -   |
| <b>KINGTIGER</b>     | F10DA2T1680            | 2GB          | DS | KINGTIGER      | KTG1333PS1208NST-C9 | -          | -   |
| <b>KINGTIGER</b>     | KTG2G1333PG3           | 2GB          | DS | -              | -                   | -          | -   |
| <b>Patriot</b>       | PSD31G13332            | 1GB          | DS | Patriot        | PM64M8D3BU-15       | -          | -   |
| <b>Patriot</b>       | PSD32G13332            | 2GB          | DS | Prriot         | PM128M8D3BU-15      | 9          | -   |
| <b>Patriot</b>       | PGS34G1333LLKA         | 4GB(2 x 2GB) | DS | -              | -                   | 7-7-7-20   | 1.7 |
| <b>Patriot</b>       | PVS34G1333ELK          | 4GB(2 x 2GB) | DS | -              | -                   | 9-9-9-24   | 1.5 |
| <b>Patriot</b>       | PVS34G1333LLK          | 4GB(2 x 2GB) | DS | -              | -                   | 7-7-7-20   | 1.7 |
| <b>Silicon Power</b> | SP001GBLTE133S01       | 1GB          | SS | NANYA          | NT5CB128M8AN-CG     | -          | -   |

|                      |                        |     |    |         |                 |          |         |
|----------------------|------------------------|-----|----|---------|-----------------|----------|---------|
| <b>Silicon Power</b> | SP001GBLTU1333S01      | 1GB | SS | NANYA   | NT5CB128M8AN-CG | -        | -       |
| <b>Silicon Power</b> | SP002GBLTE133S01       | 2GB | DS | NANYA   | NT5CB128M8AN-CG | -        | -       |
| <b>Silicon Power</b> | SP002GBLTU133S02       | 2GB | DS | S-POWER | I0YT3E0         | 9        | -       |
| <b>Team</b>          | TXD31024M1333C7(XMP)   | 1GB | SS | Team    | T3D1288LT-13    | 7-7-7-21 | 1.75    |
| <b>Team</b>          | TXD31048M1333C7-D(XMP) | 1GB | SS | Team    | T3D1288LT-13    | 7-7-7-21 | 1.75    |
| <b>Team</b>          | TXD32048M1333C7-D(XMP) | 2GB | DS | Team    | T3D1288LT-13    | 7-7-7-21 | 1.5-1.6 |
| <b>Team</b>          | TXD32048M1333C7-D(XMP) | 2GB | DS | Team    | T3D1288LT-13    | 7-7-7-21 | 1.5-1.6 |
| <b>UMAX</b>          | E41302GP0-73BDB        | 2GB | DS | UMAX    | U2S24D30TP-13   |          | -       |

### DDR3 1600 Qualified Vendors List (QVL)

| Vendors        | Part No.               | Size            | SS/DS | Chip Brand | Chip NO. | Timing   | Voltage   | MM socket support (Optional) |        |        |
|----------------|------------------------|-----------------|-------|------------|----------|----------|-----------|------------------------------|--------|--------|
|                |                        |                 |       |            |          |          |           | 1 DIMM                       | 2 DIMM | 4 DIMM |
| <b>A-DATA</b>  | AX3U1600GC4G9(XMP)     | 4GB             | DS    | -          | -        | 9-9-9-24 | 1.55~1.75 |                              | •      | •      |
| <b>A-DATA</b>  | AX3U1600XC4G79(XMP)    | 4GB             | DS    | -          | -        | 7-9-7-21 | 1.55~1.75 |                              | •      | •      |
| <b>CORSAIR</b> | HX3X12G1600C9(XMP)     | 12GB ( 6x 2GB ) | DS    | -          | -        | 9-9-9-24 | 1.6       |                              |        |        |
| <b>CORSAIR</b> | CMZ16GX3M4A1600C9(XMP) | 16GB ( 4x 4GB ) | DS    | -          | -        | 9-9-9-24 | 1.5       |                              |        |        |
| <b>CORSAIR</b> | CMG4GX3M2A1600C6       | 4GB ( 2x 2GB )  | DS    | -          | -        | 6-6-6-18 | 1.65      |                              |        |        |
| <b>CORSAIR</b> | CMD4GX3M2B1600C8       | 4GB( 2x 2GB )   | DS    | -          | -        | 8-8-8-24 | 1.65      |                              |        |        |
| <b>CORSAIR</b> | CMG4GX3M2A1600C6       | 4GB( 2x 2GB )   | DS    | -          | -        | 6-6-6-18 | 1.65      |                              |        |        |
| <b>CORSAIR</b> | CMX4GX3M2A1600C8(XMP)  | 4GB( 2x 2GB )   | DS    | -          | -        | 8-8-8-24 | 1.65      |                              |        |        |
| <b>CORSAIR</b> | CMD4GX3M2A1600C8(XMP)  | 4GB(2 x 2GB)    | DS    | -          | -        | 8-8-8-24 | 1.65      |                              |        |        |
| <b>CORSAIR</b> | CMG4GX3M2A1600C7(XMP)  | 4GB(2 x 2GB)    | DS    | -          | -        | 7-7-7-20 | 1.65      |                              |        |        |
| <b>CORSAIR</b> | CMX4GX3M2A1600C9(XMP)  | 4GB(2 x 2GB)    | DS    | -          | -        | 9-9-9-24 | 1.65      |                              |        |        |
| <b>CORSAIR</b> | CMP6GX3M3A1600C8(XMP)  | 6GB ( 3x 2GB )  | DS    | -          | -        | 8-8-8-24 | 1.65      |                              |        |        |

|                |                          |                |    |   |   |          |          |   |   |
|----------------|--------------------------|----------------|----|---|---|----------|----------|---|---|
| <b>CORSAIR</b> | CMP6GX3M3A1600C8(XMP)    | 6GB ( 3x 2GB ) | DS | - | - | 8-8-8-24 | 1.65     |   |   |
| <b>CORSAIR</b> | CMX6GX3M3A1600C9(XMP)    | 6GB ( 3x 2GB ) | DS | - | - | 9-9-9-24 | 1.65     |   |   |
| <b>CORSAIR</b> | CMX6GX3M3C1600C7(XMP)    | 6GB ( 3x 2GB ) | DS | - | - | 7-8-7-20 | 1.65     |   |   |
| <b>CORSAIR</b> | TR3X6G1600C8D(XMP)       | 6GB(3 x 2GB)   | DS | - | - | 8-8-8-24 | 1.65     |   |   |
| <b>CORSAIR</b> | CMP8GX3M2A1600C9(XMP)    | 8GB ( 2x 4GB ) | DS | - | - | 9-9-9-24 | 1.65     |   |   |
| <b>CORSAIR</b> | CMZ8GX3M2A1600C8(XMP)    | 8GB ( 2x 4GB ) | DS | - | - | 8-8-8-24 | 1.5      | ● | ● |
| <b>CORSAIR</b> | CMZ8GX3M2A1600C9(XMP)    | 8GB ( 2x 4GB ) | DS | - | - | 9-9-9-24 | 1.5      | ● | ● |
| <b>CORSAIR</b> | CMD8GX3M4A1600C8(XMP)    | 8GB(4 x 2GB)   | DS | - | - | 8-8-8-24 | 1.65     |   |   |
| <b>CORSAIR</b> | CMX8GX3M4A1600C9(XMP)    | 8GB(4 x 2GB)   | DS | - | - | 9-9-9-24 | 1.65     |   |   |
| <b>Crucial</b> | BL12864BN1608.8FF(XMP)   | 2GB( 2x 1GB )  | SS | - | - | 8-8-8-24 | 1.65     | ● | ● |
| <b>Crucial</b> | BL25664BN1608.16FF(XMP)  | 2GB            | DS | - | - | 8-8-8-24 | 1.65     | ● | ● |
| <b>Crucial</b> | BL25664BN1608.16FF(XMP)  | 4GB( 2x 2GB )  | DS | - | - | 8-8-8-24 | 1.65     |   |   |
| <b>G.SKILL</b> | F3-12800CL9D-4GBNQ(XMP)  | 4GB ( 2x 2GB ) | DS | - | - | 9-9-9-24 | 1.5      |   |   |
| <b>G.SKILL</b> | F3-12800CL7D-4GBRM(XMP)  | 4GB( 2x 2GB )  | DS | - | - | 7-8-7-24 | 1.6      |   |   |
| <b>G.SKILL</b> | F3-12800CL7D-4GBECO(XMP) | 4GB(2 x 2GB)   | DS | - | - | 7-8-7-24 | -        |   |   |
| <b>G.SKILL</b> | F3-12800CL7D-4GBRH(XMP)  | 4GB(2 x 2GB)   | DS | - | - | 7-7-7-24 | 1.65     |   |   |
| <b>G.SKILL</b> | F3-12800CL8D-4GBRM(XMP)  | 4GB(2 x 2GB)   | DS | - | - | 8-8-8-24 | 1.6      |   |   |
| <b>G.SKILL</b> | F3-12800CL9D-4GBECO(XMP) | 4GB(2 x 2GB)   | DS | - | - | 9-9-9-24 | 1.35     |   |   |
| <b>G.SKILL</b> | F3-12800CL8T-6GBPI(XMP)  | 6GB(3 x 2GB)   | DS | - | - | 8-8-8-21 | 1.6~1.65 |   |   |
| <b>G.SKILL</b> | F3-12800CL7D-8GBRH(XMP)  | 8GB ( 2x 4GB ) | DS | - | - | 7-8-7-24 | 1.6      |   |   |

|                 |                            |                 |    |     |   |          |      |   |   |
|-----------------|----------------------------|-----------------|----|-----|---|----------|------|---|---|
| <b>G.SKILL</b>  | F3-12800CL7D-8GBXH(XMP)    | 8GB ( 2x 4GB )  | DS | -   | - | 7-8-7-24 | 1.6  |   |   |
| <b>G.SKILL</b>  | F3-12800CL9D-8GBRL(XMP)    | 8GB ( 2x 4GB )  | DS | -   | - | 9-9-9-24 | 1.5  | • | • |
| <b>G.SKILL</b>  | F3-12800CL9D-8GBSR2(XMP)   | 8GB ( 2x 4GB )  | DS | -   | - | 9-9-9-24 | 1.25 |   |   |
| <b>G.SKILL</b>  | F3-12800CL8D-8GBECO(XMP)   | 8GB ( 2x4GB )   | DS | -   | - | 8-8-8-24 | 1.35 | • | • |
| <b>GEIL</b>     | GET316GB1600C9QC(XMP)      | 16GB ( 4x 4GB ) | DS | -   | - | 9-9-9-28 | 1.6  |   |   |
| <b>GEIL</b>     | GE34GB1600C9DC(XMP)        | 4GB ( 2x 2GB )  | DS | -   | - | 9-9-9-28 | 1.6  |   |   |
| <b>GEIL</b>     | GUP34GB1600C7DC(XMP)       | 4GB ( 2x 2GB )  | DS | -   | - | 7-7-7-24 | 1.6  |   |   |
| <b>GEIL</b>     | GE34GB1600C9DC(XMP)        | 4GB( 2x 2GB )   | DS | -   | - | 9-9-9-28 | 1.65 |   |   |
| <b>GEIL</b>     | GV34GB1600C8DC(XMP)        | 4GB(2 x 2GB)    | DS | -   | - | 8-8-8-28 | 1.6  |   |   |
| <b>GEIL</b>     | GVP38GB1600C8QC(XMP)       | 8GB ( 4x 2GB )  | DS | -   | - | 8-8-8-28 | 1.6  |   |   |
| <b>KINGMAX</b>  | FLGD45F-B8MF7(XMP)         | 1GB             | SS | -   | - |          | -    |   |   |
| <b>KINGMAX</b>  | FLGE85F-B8MF7(XMP)         | 2GB             | DS | -   | - |          | -    |   |   |
| <b>Kingston</b> | KHX1600C9D3T1BK3/12GX(XMP) | 12GB ( 3x 4GB ) | DS | -   | - | 9        | 1.65 |   |   |
| <b>KINGSTON</b> | KHX1600C9D3K3/12GX(XMP)    | 12GB( 3x 4GB )  | DS | N/A | - | -        | 1.65 |   |   |
| <b>KINGSTON</b> | KHX1600C9D3K6/24GX(XMP)    | 24GB ( 6x 4GB ) | DS | -   | - | 9        | 1.65 |   |   |
| <b>KINGSTON</b> | KHX1600C7D3K2/4GX(XMP)     | 4GB ( 2x 2GB )  | DS | -   | - | -        | 1.65 |   |   |
| <b>KINGSTON</b> | KHX1600C8D3K2/4GX(XMP)     | 4GB ( 2x 2GB )  | DS | -   | - | 8        | 1.65 |   |   |
| <b>KINGSTON</b> | KHX1600C8D3T1K2/4GX(XMP)   | 4GB ( 2x 2GB )  | DS | -   | - | 8        | 1.65 |   |   |
| <b>KINGSTON</b> | KHX1600C9D3K2/4GX(XMP)     | 4GB ( 2x 2GB )  | DS | -   | - | -        | 1.65 |   |   |
| <b>KINGSTON</b> | KHX1600C9D3K2/4GX(XMP)     | 4GB ( 2x 2GB )  | DS | -   | - | -        | 1.65 |   |   |
| <b>Kingston</b> | KHX1600C9D3LK2/4GX(XMP)    | 4GB ( 2x 2GB )  | DS | -   | - | -        | 1.65 |   |   |
| <b>Kingston</b> | KHX1600C9D3X1K2/4G         | 4GB ( 2x 2GB )  | DS | -   | - | -        | 1.65 |   |   |

|                     |                           |                 |    |         |             |          |         |   |   |
|---------------------|---------------------------|-----------------|----|---------|-------------|----------|---------|---|---|
| <b>KINGSTON</b>     | KHX1600C9D3X2K2/4GX(XMP)  | 4GB ( 2x 2GB )  | DS | -       | -           | 9        | 1.65    |   |   |
| <b>KINGSTON</b>     | KHX1600C9D3K3/6GX(XMP)    | 6GB ( 3x 2GB )  | DS | -       | -           | 9        | 1.65    |   |   |
| <b>KINGSTON</b>     | KHX1600C9D3K3/6GX(XMP)    | 6GB ( 3x 2GB )  | DS | -       | -           | 9        | 1.65    | • | • |
| <b>Kingston</b>     | KHX1600C9D3T1BK3/6GX(XMP) | 6GB ( 3x 2GB )  | DS | -       | -           | 9        | 1.65    | • | • |
| <b>KINGSTON</b>     | KHX1600C9D3T1K3/6GX(XMP)  | 6GB ( 3x 2GB )  | DS | -       | -           | -        | 1.65    |   |   |
| <b>OCZ</b>          | OCZ3G16004GK              | 4GB ( 2x 2GB )  | DS | -       | -           | 8-8-8    | 1.7     |   |   |
| <b>OCZ</b>          | OCZ3BE1600C8LV4GK         | 4GB( 2x 2GB )   | DS | -       | -           | 8-8-8    | 1.65    |   |   |
| <b>OCZ</b>          | OCZ3BE1600C8LV4GK         | 4GB( 2x 2GB )   | DS | -       | -           | 8-8-8    | 1.65    |   |   |
| <b>OCZ</b>          | OCZ3OB1600LV4GK           | 4GB( 2x 2GB )   | DS | -       | -           | 9-9-9    | 1.65    |   |   |
| <b>OCZ</b>          | OCZ3OB1600LV4GK           | 4GB(2 x 2GB)    | DS | -       | -           | 9-9-9    | 1.65    |   |   |
| <b>OCZ</b>          | OCZ3X1600LV4GK(XMP)       | 4GB(2 x 2GB)    | DS | -       | -           | 8-8-8    | 1.65    |   |   |
| <b>OCZ</b>          | OCZ3G1600LV6GK            | 6GB(3 x 2GB)    | DS | -       | -           | 8-8-8    | 1.65    |   |   |
| <b>OCZ</b>          | OCZ3X1600LV6GK(XMP)       | 6GB(3 x 2GB)    | DS | -       | -           | 8-8-8    | 1.65    |   |   |
| <b>OCZ</b>          | OCZ3X1600LV6GK(XMP)       | 6GB(3 x 2GB)    | DS | -       | -           | 8-8-8    | 1.65    |   |   |
| <b>Super Talent</b> | WP160UX4G8(XMP)           | 4GB(2 x 2GB)    | DS | -       | -           | 8        | -       |   |   |
| <b>Super Talent</b> | WP160UX4G9(XMP)           | 4GB(2 x 2GB)    | DS | -       | -           | 9        | -       |   |   |
| <b>Super Talent</b> | WB160UX6G8(XMP)           | 6GB(3 x 2GB)    | DS | -       | -           | -        | -       |   |   |
| <b>Super Talent</b> | WB160UX6G8(XMP)           | 6GB(3 x 2GB)    | DS | -       | -           | 8        | -       |   |   |
| <b>AEXEA</b>        | AXA3PS2G1600S18V(XMP)     | 2GB             | DS | -       | -           | -        | 1.65    |   |   |
| <b>AEXEA</b>        | AXA3PS4GK1600S18V(XMP)    | 4GB ( 2x 2GB )  | DS | -       | -           | -        | 1.65    |   |   |
| <b>Asint</b>        | SLZ3128M8-EGJ1D(XMP)      | 2GB             | DS | Asint   | 3128M8-GJ1D | -        | -       |   |   |
| <b>EK Memory</b>    | EKM324L28BP8-I16(XMP)     | 4GB( 2x 2GB )   | DS | -       | -           | 9        | -       |   |   |
| <b>EK Memory</b>    | EKM324L28BP8-I16(XMP)     | 4GB(2 x 2GB)    | DS | -       | -           | 9        | -       |   |   |
| <b>Elixir</b>       | M2P2G64CB8HC9N-DG(XMP)    | 2GB             | DS | -       | -           | -        | -       |   |   |
| <b>GoodRam</b>      | GR1600D364L9/2G           | 2GB             | DS | GoodRam | GF1008KC-JN | -        | -       |   |   |
| <b>KINGTIGER</b>    | KTG2G1600PG3(XMP)         | 2GB             | DS | -       | -           | -        | -       |   |   |
| <b>Mushkin</b>      | 996805(XMP)               | 4GB ( 2x 2GB )  | DS | -       | -           | 6-8-6-24 | 1.65    |   |   |
| <b>Mushkin</b>      | 998805(XMP)               | 6GB ( 3x 2GB )  | DS | -       | -           | 6-8-6-24 | 1.65    |   |   |
| <b>Mushkin</b>      | 998659(XMP)               | 6GB(3 x 2GB)    | DS | -       | -           | 9-9-9-24 | 1.5-1.6 |   |   |
| <b>Patriot</b>      | PX7312G1600LLK(XMP)       | 12GB ( 3x 4GB ) | DS | -       | -           | 8-9-8-24 | 1.65    |   |   |



|                |                         |                |    |      |              |          |      |
|----------------|-------------------------|----------------|----|------|--------------|----------|------|
| <b>Patriot</b> | PGS34G1600LLKA2         | 4GB ( 2x 2GB ) | DS | -    | -            | 8-8-8-24 | 1.7  |
| <b>Patriot</b> | PVV34G1600LLK(XMP)      | 4GB ( 2x 2GB ) | DS | -    | -            | 8-8-8-24 | 1.65 |
| <b>Patriot</b> | PGS34G1600LLKA          | 4GB( 2x 2GB )  | DS | -    | -            | 7-7-7-20 | 1.7  |
| <b>PATRIOT</b> | PGS34G1600LLKA          | 4GB(2 x 2GB)   | DS | -    | -            | 7-7-7-20 | 1.7  |
| <b>Patriot</b> | PVT36G1600LLK(XMP)      | 6GB(3 x 2GB)   | DS | -    | -            | 8-8-8-24 | 1.65 |
| <b>Patriot</b> | PX538G1600LLK(XMP)      | 8GB ( 2x 4GB ) | DS | -    | -            | 8-9-8-24 | 1.65 |
| <b>Team</b>    | TXD31024M1600C8-D(XMP)  | 1GB            | SS | Team | T3D1288RT-16 | 8-8-8-24 | 1.65 |
| <b>Team</b>    | TXD32048M1600C7-L(XMP)  | 2GB            | DS | Team | T3D1288LT-16 | 7-7-7-24 | 1.65 |
| <b>Team</b>    | TXD32048M1600C8-D(XMP)  | 2GB            | DS | Team | T3D1288RT-16 | 8-8-8-24 | 1.65 |
| <b>Team</b>    | TXD32048M1600HC8-D(XMP) | 2GB            | DS | Team | T3D1288RT-16 | 8-8-8-24 | 1.65 |

#### DDR3 1800 Qualified Vendors List (QVL)

| Vendors         | Part No.                 | Size         | SS/DS | Chip Brand | Chip NO. | Timing   | Voltage | MM socket support (Optional) |        |        |
|-----------------|--------------------------|--------------|-------|------------|----------|----------|---------|------------------------------|--------|--------|
|                 |                          |              |       |            |          |          |         | 1 DIMM                       | 2 DIMM | 4 DIMM |
| <b>G.SKILL</b>  | F3-14400CL6D-4GBFLS(XMP) | 4GB(2 x 2GB) | DS    | -          | -        | 6-8-6-24 | 1.65    | •                            | •      | •      |
| <b>G.SKILL</b>  | F3-14400CL9D-4GBRL(XMP)  | 4GB(2 x 2GB) | DS    | -          | -        | 9-9-9-24 | 1.6     | •                            | •      |        |
| <b>KINGSTON</b> | KHX1800C9D3T1K3/6GX(XMP) | 6GB(3 x 2GB) | DS    | -          | -        | -        | 1.65    | •                            | •      | •      |

#### DDR3 1866 Qualified Vendors List (QVL)

| Vendors        | Part No.                 | Size           | SS/DS | Chip Brand | Chip NO. | Timing    | Voltage | MM socket support (Optional) |        |        |
|----------------|--------------------------|----------------|-------|------------|----------|-----------|---------|------------------------------|--------|--------|
|                |                          |                |       |            |          |           |         | 1 DIMM                       | 2 DIMM | 4 DIMM |
| <b>CORSAIR</b> | TR3X6G1866C9DVer4.1(XMP) | 6GB(3 x 2GB)   | DS    | -          | -        | 9-9-9-24  | 1.65    | •                            | •      |        |
| <b>CORSAIR</b> | CMZ8GX3M2A1866C9(XMP)    | 8GB ( 2x 4GB ) | DS    | -          | -        | 9-10-9-27 | 1.5     | •                            | •      | •      |
| <b>G.SKILL</b> | F3-15000CL9D-4GBRH(XMP)  | 4GB(2 x 2GB)   | DS    | -          | -        | 9-9-9-24  | 1.65    | •                            | •      | •      |
| <b>G.SKILL</b> | F3-15000CL9D-4GBTD(XMP)  | 4GB(2 x 2GB)   | DS    | -          | -        | 9-9-9-24  | 1.65    | •                            | •      | •      |
| <b>G.SKILL</b> | F3-14900CL9D-8GBSR(XMP)  | 8GB ( 2x 4GB ) | DS    | -          | -        | 9-10-9-28 | 1.5     | •                            | •      | •      |

|                     |                          |                |    |      |              |          |      |   |   |   |
|---------------------|--------------------------|----------------|----|------|--------------|----------|------|---|---|---|
| <b>KINGSTON</b>     | KHX1866C9D3T1K3/3GX(XMP) | 3GB ( 3x 1GB ) | SS | -    | -            | -        | 1.65 | • | • | • |
| <b>KINGSTON</b>     | KHX1866C9D3T1K3/6GX(XMP) | 6GB(3 x 2GB)   | DS | -    | -            | 9        | 1.65 | • | • | • |
| <b>OCZ</b>          | OCZ3RPR1866C9LV3GK       | 3GB ( 3x 1GB ) | DS | -    | -            | 9-9-9    | 1.65 |   |   |   |
| <b>OCZ</b>          | OCZ3G1866LV4GK           | 4GB ( 2x 2GB ) | DS | -    | -            | 10-10-10 | 1.65 | • | • |   |
| <b>OCZ</b>          | OCZ3P1866C9LV6GK         | 6GB(3 x 2GB)   | DS | -    | -            | 9-9-9    | 1.65 | • | • |   |
| <b>OCZ</b>          | OCZ3RPR1866C9LV6GK       | 6GB(3 x 2GB)   | DS | -    | -            | 9-9-9    | 1.65 |   |   |   |
| <b>Super Talent</b> | W1866UX2G8(XMP)          | 2GB(2 x 1GB)   | SS | -    | -            | 8-8-8-24 | -    | • | • | • |
| <b>Team</b>         | TXD32048M1866C9(XMP)     | 2GB            | DS | Team | T3D1288RT-16 | 9-9-9-24 | 1.65 | • | • |   |

### DDR3 2000 Qualified Vendors List (QVL)

| Vendors        | Part No.                 | Size           | SS/DS | Chip Brand | Chip NO. | Timing    | Voltage   | MM socket support (Optional) |        |        |
|----------------|--------------------------|----------------|-------|------------|----------|-----------|-----------|------------------------------|--------|--------|
|                |                          |                |       |            |          |           |           | 1 DIMM                       | 2 DIMM | 4 DIMM |
| <b>A-DATA</b>  | AX3U2000GB2G9B(XMP)      | 2GB            | DS    | -          | -        | 9-11-9-27 | 1.55~1.75 | •                            | •      |        |
| <b>A-DATA</b>  | AX3U2000GC4G9B(XMP)      | 4GB            | DS    | -          | -        | 9-11-9-27 | 1.55~1.75 | •                            | •      | •      |
| <b>Apacer</b>  | 78.AAGD5.9KD(XMP)        | 6GB(3 x 2GB)   | DS    | -          | -        | 9-9-9-27  | -         | •                            | •      |        |
| <b>CORSAIR</b> | CMT6GX3M3A2000C8(XMP)    | 6GB ( 3x 2GB ) | DS    | -          | -        | 8-9-8-24  | 1.65      | •                            | •      | •      |
| <b>Crucial</b> | BL12864BE2009.8SFB3(EP)  | 1GB            | SS    | -          | -        | 9-9-9-28  | 2         | •                            |        |        |
| <b>G.SKILL</b> | F3-16000CL9D-4GBRH(XMP)  | 4GB(2 x 2GB)   | DS    | -          | -        | 9-9-9-24  | 1.65      | •                            | •      |        |
| <b>G.SKILL</b> | F3-16000CL9D-4GBTD(XMP)  | 4GB(2 x 2GB)   | DS    | -          | -        | 9-9-9-24  | 1.65      | •                            | •      |        |
| <b>G.SKILL</b> | F3-16000CL7T-6GBPS(XMP)  | 6GB(3 x 2GB)   | DS    | -          | -        | 7-8-7-20  | 1.65      | •                            | •      |        |
| <b>G.SKILL</b> | F3-16000CL9T-6GBPS(XMP)  | 6GB(3 x 2GB)   | DS    | -          | -        | 9-9-9-24  | 1.65      | •                            | •      |        |
| <b>G.SKILL</b> | F3-16000CL9T-6GBTD(XMP)  | 6GB(3 x 2GB)   | DS    | -          | -        | 9-9-9-24  | 1.6       | •                            | •      | •      |
| <b>G.SKILL</b> | F3-16000CL7Q-8GBFLS(XMP) | 8GB(4 x 2GB)   | DS    | -          | -        | 7-9-7-24  | 1.65      | •                            | •      | •      |
| <b>GEIL</b>    | GUP34GB2000C9DC(XMP)     | 4GB ( 2x 2GB ) | DS    | -          | -        | 9-9-9-28  | 1.65      | •                            | •      |        |
| <b>GEIL</b>    | GE38GB2000C9QC(XMP)      | 8GB(4 x 2GB)   | DS    | -          | -        | 9-9-9-28  | 1.65      |                              |        |        |

|                      |                             |                 |    |      |              |           |      |   |   |   |
|----------------------|-----------------------------|-----------------|----|------|--------------|-----------|------|---|---|---|
| <b>KINGSTON</b>      | KHX2000C9AD3T1K3/3GX (XMP)  | 3GB ( 3x 1GB )  | SS | -    | -            | -         | 1.65 | • | • | • |
| <b>KINGSTON</b>      | KHX2000C9AD3T1K2/4GX (XMP)  | 4GB ( 2x 2GB )  | DS | -    | -            | 9         | 1.65 | • | • |   |
| <b>KINGSTON</b>      | KHX2000C9AD3W1K2/4GX(XMP)   | 4GB ( 2x 2GB )  | DS | -    | -            | 9         | 1.65 | • | • |   |
| <b>KINGSTON</b>      | KHX2000C9D3T1K2/4GX(XMP)    | 4GB ( 2x 2GB )  | DS | -    | -            | -         | 1.65 | • | • |   |
| <b>KINGSTON</b>      | KHX2000C9AD3T1K3/6GX (XMP)  | 6GB ( 3x 2GB )  | DS | -    | -            | 9         | 1.65 | • | • |   |
| <b>KINGSTON</b>      | KHX2000C9AD3T1K3/6GX (XMP)  | 6GB ( 3x 2GB )  | DS | -    | -            | -         | 1.65 | • | • | • |
| <b>KINGSTON</b>      | KHX2000C9AD3W1K3/6GX(XMP)   | 6GB ( 3x 2GB )  | DS | -    | -            | 9         | 1.65 | • | • |   |
| <b>OCZ</b>           | OCZ3B2000LV6GK              | 6GB(3 x 2GB)    | DS | -    | -            | 7-8-7     | 1.65 | • | • |   |
| <b>Transcend</b>     | TX2000KLN-8GK (388375)(XMP) | 4GB             | DS | -    | -            |           | 1.6  | • | • | • |
| <b>AEXEA</b>         | AXA3ES2G2000LG28V(XMP)      | 2GB             | DS | -    | -            | -         | 1.65 | • | • |   |
| <b>AEXEA</b>         | AXA3ES4GK2000LG28V(XMP)     | 4GB ( 2x 2GB )  | DS | -    | -            | -         | 1.65 | • | • | • |
| <b>Gingle</b>        | 9CAASS37AZZ01D1             | 2GB             | DS | -    | -            | 9-9-9-24  | -    |   |   |   |
| <b>Patriot</b>       | PX7312G2000ELK(XMP)         | 12GB ( 3x 4GB ) | DS | -    | -            | 9-11-9-27 | 1.65 | • |   |   |
| <b>Patriot</b>       | PVT36G2000LLK(XMP)          | 6GB(3 x 2GB)    | DS | -    | -            | 8-8-8-24  | 1.65 | • |   |   |
| <b>Silicon Power</b> | SP002GBLYU200S02(XMP)       | 2GB             | DS | -    | -            | -         | -    | • | • | • |
| <b>Team</b>          | TXD32048M2000C9(XMP)        | 2GB             | DS | Team | T3D1288RT-20 | 9-9-9-24  | 1.5  | • | • |   |
| <b>Team</b>          | TXD32048M2000C9-L(XMP)      | 2GB             | DS | Team | T3D1288LT-20 | 9-9-9-24  | 1.5  | • |   |   |
| <b>Team</b>          | TXD32048M2000C9-L(XMP)      | 2GB             | DS | Team | T3D1288RT-20 | 9-9-9-24  | 1.6  |   | • |   |

### DDR3 2133 Qualified Vendors List (QVL)

| Vendors        | Part No.              | Size           | SS/DS | Chip Brand | Chip NO. | Timing    | Voltage | MM socket support (Optional) |        |        |
|----------------|-----------------------|----------------|-------|------------|----------|-----------|---------|------------------------------|--------|--------|
|                |                       |                |       |            |          |           |         | 1 DIMM                       | 2 DIMM | 4 DIMM |
| <b>CORSAIR</b> | CMT4GX3M2A2133C9(XMP) | 4GB ( 2x 2GB ) | DS    | -          | -        | 9-10-9-24 | 1.65    |                              | •      |        |

|                 |                            |                |    |   |   |           |      |   |   |
|-----------------|----------------------------|----------------|----|---|---|-----------|------|---|---|
| <b>CORSAIR</b>  | CMT4GX3M2B2133C9(XMP)      | 4GB ( 2x 2GB ) | DS | - | - | 9-10-9-27 | 1.5  | • | • |
| <b>G.SKILL</b>  | F3-17066CL9D-4GBTDS(XMP)   | 4GB ( 2x 2GB ) | DS | - | - | -         | 1.65 | • |   |
| <b>G.SKILL</b>  | F3-17066CL8D-4GBPS(XMP)    | 4GB(2 x 2GB)   | DS | - | - | 8-8-8-24  | 1.65 | • |   |
| <b>G.SKILL</b>  | F3-17066CL9D-4GBTD(XMP)    | 4GB(2 x 2GB)   | DS | - | - | 9-9-9-24  | 1.65 |   | • |
| <b>G.SKILL</b>  | F3-17066CL9T-6GB-T         | 6GB(3 x 2GB)   | DS | - | - | 9-9-9-24  | 1.65 |   |   |
| <b>GEIL</b>     | GE34GB2133C9DC(XMP)        | 4GB(2 x 2GB)   | DS | - | - | 9-9-9-28  | 1.65 |   |   |
| <b>GEIL</b>     | GU34GB2133C9DC(XMP)        | 4GB(2 x 2GB)   | DS | - | - | 9-9-9-28  | 1.65 |   |   |
| <b>KINGSTON</b> | KHX2133C9AD3T1K2/4GX(XMP)  | 4GB ( 2x 2GB ) | DS | - | - | -         | 1.65 |   | • |
| <b>KINGSTON</b> | KHX2133C9AD3W1K2/4GX(XMP)  | 4GB ( 2x 2GB ) | DS | - | - | 9         | 1.65 |   | • |
| <b>KINGSTON</b> | KHX2133C9AD3X2K2/4GX(XMP)  | 4GB ( 2x 2GB ) | DS | - | - | 9         | 1.65 | • |   |
| <b>KINGSTON</b> | KHX2133C9D3T1K2/4GX(XMP)   | 4GB ( 2x 2GB ) | DS | - | - | -         | 1.65 |   |   |
| <b>KINGSTON</b> | KHX2133C8D3T1K2/4GX(XMP)   | 4GB(2 x 2GB)   | DS | - | - | 8         | 1.65 |   |   |
| <b>KINGSTON</b> | KHX2133C9D3T1K2/4GX(XMP)   | 4GB(2 x 2GB)   | DS | - | - | 9         | 1.65 | • | • |
| <b>KINGSTON</b> | KHX2133C9AD3T1FK4/8GX(XMP) | 8GB ( 4x 2GB ) | DS | - | - | 9         | 1.65 |   | • |
| <b>Patriot</b>  | PVV34G2133C9K(XMP)         | 4GB ( 2x 2GB ) | DS | - | - | 9-11-9-27 | 1.66 | • | • |

#### 8 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.