

**DDR3 1333 Qualified Vendors List (QVL)**

| Vendors       | Part No.              | Size | SS/DS | Chip Brand | Chip NO.           | Timing   | Voltage | DIMM socket support (Optional) |        |
|---------------|-----------------------|------|-------|------------|--------------------|----------|---------|--------------------------------|--------|
|               |                       |      |       |            |                    |          |         | 1 DIMM                         | 2 DIMM |
| AMD           | AE32G1339U1-U         | 2GB  | SS    | AMD        | 23EY4587MB3H11503M | 9-9-9-24 | 1.5V    | •                              | •      |
| AMD           | AE34G1339U2-U         | 4GB  | DS    | AMD        | 23EY4587MB3H11503M | 9-9-9-24 | 1.5V    | •                              | •      |
| Silicon Power | SP002GBLTU133V02      | 2GB  | SS    | S-POWER    | 20YT3NG-1202       | -        | -       | •                              | •      |
| Silicon Power | SP004GBLTU133V02      | 4GB  | DS    | S-POWER    | 20YT3NG-1201       | -        | -       | •                              | •      |
| ASint         | SLZ302G08-EDJ1C       | 2GB  | SS    | Asint      | SLZ302G08-DJ1C     | -        | -       | •                              | •      |
| ASint         | SLA302G08-EDJ1C       | 4GB  | DS    | Asint      | SLA302G08-DJ1C     | -        | -       | •                              | •      |
| ASint         | SLB304G08-EDJ1B       | 8GB  | DS    | Asint      | SLB304G08-DJ1B     | -        | -       | •                              | •      |
| HMD           | HMDD302GU648S1B9C-MEX | 2GB  | SS    | ERTH       | 256X8DDR3 WT       | -        | -       | •                              | •      |
| TEAM          | TED38G1333HC9BK       | 8GB  | DS    | -          | -                  | 9-9-9-24 | -       | •                              | •      |

**DDR3 1600 Qualified Vendors List (QVL)**

| Vendors       | Part No.                | Size           | SS/DS | Chip Brand  | Chip NO.           | Timing      | Voltage | DIMM socket support (Optional) |        |
|---------------|-------------------------|----------------|-------|-------------|--------------------|-------------|---------|--------------------------------|--------|
|               |                         |                |       |             |                    |             |         | 1 DIMM                         | 2 DIMM |
| HYNIX         | HMT351U6CFR8C-PB        | 4GB            | DS    | HYNIX       | H5TQ2G83CFR PBC    | -           | -       | •                              | •      |
| KINGSTON      | KHX1600C9D3K4/16GX(XMP) | 16GB (4GB x4 ) | DS    | -           | -                  | -           | 1.65V   | •                              |        |
| KINGSTON      | KHX16C9K2/16            | 16GB(8GBx2)    | DS    | -           | -                  | -           | 1.5V    | •                              | •      |
| AMD           | AE32G1609U1-U           | 2GB            | SS    | -           | 23EY4587MB6H11503M | 9-9-9-24    | 1.5V    | •                              | •      |
| AMD           | AE34G1609U2-U           | 4GB            | DS    | AMD         | 23EY4587MB6H11503M | 9-9-9-24    | 1.5V    | •                              | •      |
| CORSAIR       | CMZ8GX3M1A1600C10(XMP)  | 8GB            | DS    | -           | -                  | 10-10-10-27 | 1.50V   | •                              | •      |
| CORSAIR       | CMZ32GX3M4X1600C10(XMP) | 32GB(8GBx4)    | DS    | -           | -                  | 10-10-10-27 | 1.50V   | •                              | •      |
| PATRIOT       | PGD316G1600ELK(XMP)     | 32GB(8GBx4)    | DS    | -           | -                  | 9-9-9-24    | 1.65V   | •                              | •      |
| SanMax        | SMD-4G68HP-16KZ         | 4GB            | DS    | HYNIX       | H5TQ2G83BFR PBC    | -           | -       | •                              | •      |
| Silicon Power | SP004GBLTU160V02(XMP)   | 4GB            | DS    | S-POWER     | 20YT5NG-1201       | -           | -       | •                              | •      |
| ASint         | SLZ302G08-EGN1C         | 2GB            | SS    | Asint       | SLZ302G08-GN1C     | -           | -       | •                              | •      |
| ASint         | SLA302G08-EGN1C         | 4GB            | DS    | Asint       | SLA302G08-GN1C     | -           | -       | •                              | •      |
| ASint         | SLB304G08-EGN1B         | 8GB            | DS    | Asint       | SLB304G08-GN1B     | -           | -       | •                              |        |
| Apacer        | 78.B1GE3.9L10C          | 4GB            | DS    | Apacer KZZC | AM5D5908DEQSCK     | -           | -       | •                              | •      |
| Elixir        | M2X8G64CB8HB5N-DG(XMP)  | 8GB            | DS    | Elixir 1213 | N2CB4G8BOBN-DG     | -           | -       | •                              | •      |
| ADATA         | AD3U1600C2G11-B         | 2GB            | SS    | -           | N/A                | -           | -       | •                              | •      |
| ADATA         | AD3U1600C4G11-B         | 4GB            | DS    | -           | N/A                | -           | -       | •                              | •      |
| ADATA         | AD3U1600W8G11-B         | 8GB            | DS    | ADATA       | F211X8B0640A       | -           | -       | •                              |        |
| TEAM          | TED34G1600HC11BK        | 4GB            | DS    | -           | -                  | 11-11-11-28 | -       | •                              | •      |
| TEAM          | TLD34G1600HC9BK(XMP)    | 4GB            | DS    | -           | -                  | 9-9-24      | 1.5V    | •                              |        |

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

| Vendors  | Part No.               | Size       | SS/DS | Chip Brand | Chip NO. | Timing | Voltage | DIMM socket support (Optional) |        |
|----------|------------------------|------------|-------|------------|----------|--------|---------|--------------------------------|--------|
|          |                        |            |       |            |          |        |         | 1 DIMM                         | 2 DIMM |
| KINGSTON | KHX1866C9D3K2/8GX(XMP) | 8GB(4GBx2) | DS    | -          | -        | -      | 1.65V   | •                              | •      |

**DDR3 2133 Qualified Vendors List (QVL)**

| Vendors | Part No.              | Size          | SS/DS | Chip Brand | Chip NO. | Timing    | Voltage | DIMM socket support (Optional) |        |
|---------|-----------------------|---------------|-------|------------|----------|-----------|---------|--------------------------------|--------|
|         |                       |               |       |            |          |           |         | 1 DIMM                         | 2 DIMM |
| CORSAIR | CMT8GX3M2B2133C9(XMP) | 8GB (4GB x 2) | DS    | -          | -        | 9-11-9-27 | 1.50V   | •                              | •      |

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.