

Qualified Vendors List (QVL)

| DDR3 3000 (downgrade to DDR3 2400) | | | | | | | | | |
|--|-----------------|------|----------------------------|-------|------------|----------------|----------------|--------------|------------|
| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
| GSET30D1 | G.SKILL | 4GB | F3-3000C12Q-16GTXDG | DS | | | v | v | v |
| DDR3 2933 (downgrade to DDR3 2400) | | | | | | | | | |
| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
| AET29E1 | ADATA | 8GB | AX3U2933W8G12 | DS | | | v | v | v |
| APET29D1 | Apacer | 4GB | 78.BAGHB.AFL0C | DS | | | v | v | v |
| APET29E1 | Apacer | 8GB | 78.CAGHB.AFM0C | DS | | | v | v | v |
| CET29D1 | CORSAIR | 4GB | CMY16GX3M4A2933C12R PK1 | DS | | | v | v | v |
| GSET29D2 | G.SKILL | 4GB | F3-2933C12D-8GTXDG | DS | | | v | v | v |
| GSET29E1 | G.SKILL | 8GB | F3-2933C12Q-32GTXDG | DS | | | v | v | |
| DDR3 2800 (downgrade to DDR3 2400) | | | | | | | | | |
| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
| AET28E1 | ADATA | 8GB | AX3U2800W8G12 | DS | | | v | v | v |
| AET28D1 | ADATA | 4GB | AX3U2800W4G12 | DS | | | v | v | v |
| AVET28D1 | Avexir | 4GB | AVD3U28001204G-4CI | DS | | | v | v | v |
| CET28D1 | CORSAIR | 4GB | CMD16GX3M4A2800C11 | DS | | | v | v | v |
| CET28D2 | CORSAIR | 4GB | CMD16GX3M4A2800C12 | DS | | | v | v | v |
| GET28D1 | GEIL | 4GB | GOC316GB2800C11QC | SS | | | v | v | |
| GSET28D2 | G.SKILL | 4GB | F3-2800C11Q-16GTXD | DS | | | v | v | v |
| GSET28E1 | G.SKILL | 8GB | F3-2800C11Q-32GTXDG | DS | | | v | v | |
| GSET28E2 | G.SKILL | 8GB | F3-2800C12Q-32GTXDG | DS | | | v | v | v |
| DDR3 2600~2666 (downgrade to DDR3 2400) | | | | | | | | | |
| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
| APET26D2 | Apacer | 4GB | 78.BAGFR.AFD0C | DS | | | v | v | v |
| CET26D2 | CORSAIR | 4GB | CMD16GX3M4A2666C11 | DS | | | v | v | v |
| GSET26D1 | G.SKILL | 4GB | F3-2666C11Q-16GTXD | DS | | | v | v | v |
| GSET26E1 | G.SKILL | 8GB | F3-2666C11Q-32GTXD | DS | | | v | v | v |
| DDR3 2400 | | | | | | | | | |
| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
| AET24D2 | ADATA | 4GB | AX3U2400GC4G10-DG2 | DS | | | v | v | v |
| AET24E1 | ADATA | 8GB | AX3U2400GW8G11-DG2 | DS | | | v | v | v |
| APET24D2 | Apacer | 4GB | 78.BAGFL.AFD0C | DS | | | v | v | v |
| CET24D1 | CORSAIR | 4GB | CMD16GX3M4A2400C10 | DS | | | v | v | v |
| CET24E1 | CORSAIR | 8GB | CMY16GX3M2A2400C10R | DS | | | v | v | v |
| CET24E2 | CORSAIR | 8GB | CMD16GX3M2A2400C10 | DS | | | v | v | v |
| GSET24D1 | G.SKILL | 4GB | F3-19200CL11Q-16GBZHD | DS | | | v | v | v |
| GSET24E1 | G.SKILL | 8GB | F3-2400C10Q-32GTX | DS | | | v | v | v |
| KET24D1 | Kingston | 4GB | KHX24C11T3K4/16GX | DS | | | v | v | v |
| KMET24C1 | KingMax | 2GB | FLLE88F-C8KLAA | SS | | | v | v | v |
| KMET24D1 | KingMax | 4GB | FLLF68F-C8KKAA | DS | | | v | v | v |
| PAET24D1 | PATRIOT | 4GB | PXD38G2400C11K | DS | | | v | v | v |
| TAET24E2 | Team | 8GB | TXD316G2400HC10QDC01 | DS | | | v | v | v |
| DDR3 2200~2250 (downgrade to DDR3 2133) | | | | | | | | | |
| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
| KMET22C2 | KingMax | 2GB | FLKE85F-B8KJAA-FEIS | DS | | | v | v | v |
| DDR3 2133 | | | | | | | | | |
| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
| AET21D2 | ADATA | 4GB | AX3U2133XC4G10-2X | DS | | | v | v | v |
| AET21E1 | ADATA | 8GB | AX3U2133XW8G10-2X | DS | | | v | v | v |
| APET21D1 | Apacer | 4GB | 78.BAGE4.AFD0C | DS | | | v | v | v |
| APET21D2 | Apacer | 4GB | AHU04GFB33CAQ3B | DS | | | v | v | v |
| CET21D2 | CORSAIR | 4GB | CMD8GX3M2A2133C9 | DS | | | v | v | v |
| CET21E1 | CORSAIR | 8GB | CMZ16GX3M2A2133C10 | DS | | | v | v | v |
| CET21E2 | CORSAIR | 8GB | CMZ32GX3M4A2133C9 | DS | | | v | v | v |
| GSET21D2 | G.SKILL | 4GB | F3-17000CL9Q-16GBZH | DS | | | v | v | v |
| GSET21D3 | G.SKILL | 8GB | F3-17000CL11D-8GBXL | DS | | | v | v | v |
| GSET21E1 | G.SKILL | 8GB | F3-2133C9Q-32GZH | DS | | | v | v | v |
| GSET21E3 | G.SKILL | 8GB | F3-2133C11D-16GZL | DS | | | v | v | v |
| GSET21E4 | G.SKILL | 8GB | F3-2133C10Q-32GSR | DS | | | v | v | v |
| KET21D1 | Kingston | 4GB | KHX2133C11D3K4/16GX | DS | | | v | v | v |
| PAET21D1 | PATRIOT | 4GB | PXD38G2133C11K | DS | | | v | v | v |
| PAET21E1 | PATRIOT | 8GB | PV316G213C1K | DS | | | v | v | v |
| TAET21E2 | Team | 8GB | TLD316G2133HC11ADC01 | DS | | | v | v | v |
| DDR3 2000 (downgrade to DDR3 1866) | | | | | | | | | |

| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
|------------------|-----------------|------|------------------------|-------|------------|----------------|----------------|--------------|------------|
| APET20C2 | Apacer | 2GB | 78.AAGD5.9KD | DS | | | v | v | v |
| GET20C1 | GEIL | 2GB | GE34GB2000C9DC | DS | | | v | v | v |
| O20D1 | OCZ | 4GB | OCZ3P2000LV8GK | DS | | | v | v | v |
| MU20C1 | mushkin | 2GB | 996696es | DS | | | v | v | v |
| WET20C1 | Winchip | 2GB | GDF2GB28L100C9 | DS | | | v | v | v |
| WET20D1 | Winchip | 4GB | DFC4GBIILK20900E | DS | | | v | v | v |
| DDR3 1866 | | | | | | | | | |
| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
| AVET186E1 | Avexir | 8GB | AVD3U18660908G-4CI | DS | | | v | v | v |
| CET186D2 | CORSAIR | 4GB | CMZ16GX3M4X1866C9R | DS | | | v | v | v |
| CET186D4 | CORSAIR | 4GB | CMD8GX3M2A1866C9 | DS | | | v | v | v |
| CET186D5 | CORSAIR | 4GB | CMZ8GX3M2A1866C9 | DS | | | v | v | v |
| CET186E3 | CORSAIR | 8GB | CMZ32GX3M4X1866C10 | DS | | | v | v | v |
| CET186E4 | CORSAIR | 8GB | CMD16GX3M2A1866C9 | DS | | | v | v | v |
| CRET186D1 | Crucial | 4GB | BLE4G3D1869DETTX0.16FM | DS | | | v | v | v |
| CRET186E1 | Crucial | 8GB | BLE8G3D1869DETTX0.16FE | DS | | | v | v | v |
| GET186D1 | GEIL | 4GB | GOC38GB1866C9DC | DS | | | v | v | v |
| GSET186D2 | G.SKILL | 4GB | F3-14900CL9Q-16GBZL | DS | | | v | v | v |
| GSET186D3 | G.SKILL | 4GB | F3-14900CL9D-8GBSR | DS | | | v | v | v |
| GSET186E1 | G.SKILL | 8GB | F3-1866C9Q-32GXM | DS | | | v | v | v |
| GSET186E2 | G.SKILL | 8GB | F3-1866C10D-16GAB | DS | | | v | v | v |
| KET186D2 | Kingston | 4GB | KHX1866C9D3K2/8GX | DS | | | v | v | v |
| PAET186D1 | PATRIOT | 4GB | PXD38G1866ELK | DS | | | v | v | v |
| TAET186E2 | Team | 8GB | TLD316G1866HC10SDC01 | DS | | | v | v | v |
| TA186E3 | Team | 8GB | TED38GM1866C13BK | DS | | | v | v | v |
| DDR3 1600 | | | | | | | | | |
| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
| AET16D2-C | ADATA | 4GB | AX3U1600GC4G9-BG | DS | | | v | v | v |
| A16D1 | ADATA | 4GB | AD3U1600W4G11-B | SS | | | v | v | v |
| A16E1 | ADATA | 8GB | AD3U1600W8G11-B | DS | | | v | v | v |
| APET16D1 | Apacer | 4GB | AHU04GFA60C9Q1D | DS | | | v | v | v |
| APET16D2 | Apacer | 4GB | AHU04GFB33CAQ3B | DS | | | v | v | v |
| AP16D1 | Apacer | 4GB | 78.B1GE3.9L10C | DS | | | v | v | v |
| AP16D2 | Apacer | 4GB | 78.B1GET.9K00C | SS | | | v | v | v |
| AP16E1 | Apacer | 8GB | 78.C1GET.9K10C | DS | | | v | v | v |
| APET16E1 | Apacer | 8GB | AHU08GFA60CBT3B | DS | | | v | v | v |
| AVET16E1 | Avexir | 8GB | AVD3U16001008G-4CI | DS | | | v | v | v |
| AMET16C1 | AMD | 2GB | AE32G1609U1-U | SS | | | v | v | v |
| AM16D1 | AMD | 4GB | AE34G1609U2-U | DS | | | v | v | v |
| AMET16D2 | AMD | 4GB | AP38G1608U2K | DS | | | v | v | v |
| CET16D7 | CORSAIR | 4GB | CMD8GX3M2A1600C9 | DS | | | v | v | v |
| CET16D8 | CORSAIR | 4GB | CMD8GX3M2A1600C8 | DS | | | v | v | v |
| CET16D9 | CORSAIR | 4GB | CMZ16GX3M4A1600C9 | DS | | | v | v | v |
| CET16D10 | CORSAIR | 4GB | CMX8GX3M2A1600C9 | DS | | | v | v | v |
| CET16D11 | CORSAIR | 4GB | CML8GX3M2A1600C9 | DS | | | v | v | v |
| CET16E1 | CORSAIR | 8GB | CMZ32GX3M4X1600C10 | DS | | | v | v | v |
| CET16E2-C | CORSAIR | 8GB | CMZ8GX3M1A1600C10 | DS | | | v | v | v |
| CET16E4 | CORSAIR | 8GB | CMZ16GX3M2A1600C10 | DS | | | v | v | v |
| CET16E5 | CORSAIR | 8GB | CMZ16GX3M2A1600C9 | DS | | | v | v | v |
| C16E1 | CORSAIR | 8GB | CMV8GX3M1A13600C11 | DS | | | v | v | v |
| CR16D1 | Crucial | 4GB | CT51264BD160B.16FMR | DS | | | v | v | v |
| CRET16D1 | Crucial | 4GB | BLT4G3D1608DT1TX0.16FM | DS | | | v | v | v |
| CRET16E1 | Crucial | 8GB | CT102464BD160B.M16FED | DS | | | v | v | v |
| CRET16E2 | Crucial | 8GB | BLT8G3D1608DT1TX0.16FE | DS | | | v | v | v |
| CRET16E3 | Crucial | 8GB | BLS8G3D169DS3.16FED | DS | | | v | v | v |
| EXET16D1 | elixir | 4GB | M2X4G64CB8HG5N-DG | DS | | | v | v | v |
| EXET16E1 | elixir | 8GB | M2X8G64CB8HB5N-DG | DS | | | v | v | v |
| G16C1 | GEIL | 2GB | GET38GB1600C9QC | DS | | | v | v | v |
| GET16C2 | GEIL | 2GB | GET34GB1600C7DC | DS | | | v | v | v |
| GET16D1 | GEIL | 4GB | GEP38GB1750C9DC | DS | | | v | v | v |
| GSET16C3 | G.SKILL | 2GB | F3-12800CL9D-4GBXL | DS | | | v | v | v |
| GSET16D4 | G.SKILL | 4GB | F3-12800CL9Q-16GBXL | DS | | | v | v | v |
| GSET16D6 | G.SKILL | 4GB | F3-12800CL9Q-16GBZL | DS | | | v | v | v |
| GSET16D7-C | G.SKILL | 4GB | F3-12800CL9S-4GBXL | DS | | | v | v | v |
| GSET16E1 | G.SKILL | 8GB | F3-1600C10Q-32GAO | DS | | | v | v | v |

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|-----------|-----------------|-----|----------------------|----|---------|---------------|---|---|---|
| GSET16E2 | G.SKILL | 8GB | F3-1600C9Q-32GXM | DS | | | v | v | v |
| GSET16E3 | G.SKILL | 8GB | F3-1600C9D-16GXM | DS | | | v | v | v |
| GSET16E4 | G.SKILL | 8GB | F3-12800CL10D-16GBXL | DS | | | v | v | v |
| GSET16E5 | G.SKILL | 8GB | F3-12800CL10Q-32GBXL | DS | | | v | v | v |
| GSET16E6 | G.SKILL | 8GB | F3-1600C11S-8GNT | DS | | | v | v | v |
| H16D1_ECC | Hynix | 4GB | HMT351U7CFR8C | DS | | | v | v | v |
| KET16C6-C | Kingston | 2GB | KHX1600C9D3K2/4GX | DS | | | v | v | v |
| KET16D4 | Kingston | 4GB | KHX1600C9D3K8/32GX | DS | | | v | v | v |
| KET16D5 | Kingston | 4GB | KHX1600C9D3LK2/8GX | DS | | | v | v | v |
| KET16D6-C | Kingston | 4GB | KHX1600C9D3K2/8GX | DS | | | v | v | v |
| KMET16C2 | KingMax | 2GB | FLGE85F-B8KG9 | DS | KingMax | KFB8FNGXF-ANX | v | v | v |
| KMET16D1 | KingMax | 4GB | FLGF65F-C8KL9A | DS | | | v | v | v |
| KTET16C1 | KINGTIGER | 2GB | KTG2G1600PG3 | DS | | | v | v | v |
| O16C3 | OCZ | 2GB | OCZ3P1600C9ELV6GK | DS | | | v | v | v |
| O16C4 | OCZ | 2GB | OCZ3P1600ELV4GK | DS | | | v | v | v |
| O16D1 | OCZ | 2GB | OCZ3P1600LV8GK | DS | | | v | v | v |
| MU16C1 | mushkin | 2GB | 995659 | DS | | | v | v | v |
| P16D1 | PSC | 4GB | AL9F8L93B-GN2E | SS | | | v | v | v |
| P16E1 | PSC | 8GB | ALAF8L93B-GN2E | DS | | | v | v | v |
| PAET16D3 | PATRIOT | 4GB | PGQ316G1600ELQK | DS | | | v | v | v |
| PAET16D4 | PATRIOT | 4GB | PGD38G1600ELK | DS | | | v | v | v |
| PAET16D5 | PATRIOT | 4GB | PV38G160C9KRD | DS | | | v | v | v |
| PAET16D6 | PATRIOT | 4GB | PV316G160C9QKRD | DS | | | v | v | v |
| PAET16E1 | PATRIOT | 8GB | PGD316G1600ELK | DS | | | v | v | v |
| S16D1 | Samsung | 4GB | M379B5273DH0-YK0 | DS | | | v | v | v |
| STET16C2 | SUPER TALENT | 2GB | WP160UX4G9 | DS | | | v | v | v |
| SPET16C1 | S-POWER | 2GB | SP002GBLTU160V02 | DS | | | v | v | v |
| TAET16E3 | Team | 8GB | TLD316G1600HC9DC01 | DS | | | v | v | v |
| TA16E1 | Team | 8GB | TED38GM1600C11BK | DS | | | v | v | v |
| W16C1 | Winchip | 2GB | DFC2GBHHLG16900E | DS | | | v | v | v |
| WET16C2 | Winchip | 2GB | DFC2GBIILJ16800E | DS | | | v | v | v |

DDR3 1333

| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
|----------|-----------------|------|----------------------|-------|------------|--------------------|----------------|--------------|------------|
| A13E2 | ADATA | 8GB | AD3U133W8G9-B | DS | | | v | v | v |
| AM13C1 | AMD | 2GB | AE32G1339U1-U | SS | | | v | v | v |
| AM13D1 | AMD | 4GB | AE34G1339U2-U | DS | | | v | v | v |
| AP13C4 | Apacer | 2GB | 78.A1GC6.9L1 | DS | Apacer | AM5D5808FEQSBG | v | v | v |
| AP13C5-C | Apacer | 2GB | AU02GFA33C9NBGC | DS | | | v | v | v |
| AP13D2-C | Apacer | 4GB | AU04GFA33C9QBGC | DS | | | v | v | v |
| C13D1 | CORSAIR | 4GB | CMV8GX3M2A1333C9 | DS | | | v | v | v |
| CR13E1 | Crucial | 8GB | CT102464BA1339.16FDD | DS | Micron | 1ND22D9PCH | v | v | v |
| CR13D1 | Crucial | 4GB | CT51264BD1339.16FMR | DS | | | v | v | v |
| EX13D2 | elixir | 4GB | M2F4G64CB8HD5N-CG | DS | elixir | N2CB2G80DN-CG | v | v | v |
| G13C1-C | GEIL | 2GB | AF16H5664H2AHTCKT | DS | | | v | v | v |
| G13D1 | GEIL | 4GB | GVP34GB1333C9SC | DS | | | v | v | v |
| GS13D1 | G.SKILL | 4GB | F3-10666CL9D-8GBRL | DS | | | v | v | v |
| GS13E1 | G.SKILL | 4GB | F3-10666CL9S-8GBNT | DS | | | v | v | v |
| K13D1-C | Kingston | 4GB | KVR1333D3N9/4G | DS | | | v | v | v |
| K13E1 | Kingston | 8GB | KVR1333D3N9H/8G | DS | | | v | v | v |
| GS13E1 | G.SKILL | 8GB | F3-10666CL9S-8GBNT | DS | | | v | v | v |
| KM13C2 | KingMax | 2GB | FLFE85F-C8KM9 | SS | KingMax | KFC8FNM1XF-BXX-15A | v | v | v |
| KM13D1 | KingMax | 4GB | FLFF65F-C8KM9 | DS | KingMax | KFC8FNM1XF-BXX-15A | v | v | v |
| KT13C1-C | KINGTIGER | 2GB | KTG2G1333PW3 | DS | | | v | v | v |
| M13D1 | MARKVISION | 4GB | BMD34096M1333C9-1202 | DS | | | v | v | v |
| O13D1 | OCZ | 4GB | OCZ3G1333LV8GK | DS | | | v | v | v |
| P13C1 | PQI | 2GB | MFACR423PA0103 | DS | PQI | PQC32808E15R | v | v | v |
| PA13D1 | PATRIOT | 4GB | PGQ316G1333ELQK | DS | | | v | v | v |
| PA13E1 | PATRIOT | 8GB | PGD316G1333ELK | DS | | | v | v | v |
| PA13E2 | PATRIOT | 8GB | PGQ332G1333ELQK | DS | | | v | v | v |
| R13D1-C | Ramax | 4GB | RMR1870EC58E9F | DS | | | v | v | v |
| S13C1-C | Samsung | 2GB | M378B5773CHO-CH9 | SS | | | v | v | v |
| S13D1-C | Samsung | 4GB | M378B5273DHO-CH9 | DS | | | v | v | v |
| S13E1 | Samsung | 8GB | M378B1G73AHO | DS | | | v | v | v |
| SP13B1 | S-POWER | 1GB | SP001GBLTU133S02 | SS | S-POWER | 10YT3N0 0919 | v | v | v |
| SP13C2 | S-POWER | 2GB | SP002GBLTU133V02 | DS | S-POWER | 20YT3N1 1051Y | v | v | v |
| TG13D1-C | tigo | 4GB | T12AA4K3762 | DS | | | v | v | v |

| W13D1 | Winchip | 4GB | GDF4GB28L150C9-24GK | DS | | | v | v | v |
|-----------|-----------------|------|---------------------|-------|------------|-----------------|----------------|--------------|------------|
| DDR3 1066 | | | | | | | | | |
| No. | Module Supplier | Size | Module P/N. | SS/DS | Comp. Used | Component P/N. | Single-channel | Dual-channel | 4-Channels |
| P10B1 | PATRIOT | 1GB | PSD31G106681 | SS | Micron | 7GB12 Z9HWQ | v | v | v |
| T10B1 | Transcend | 1GB | TS128MLK64V1U | SS | Samsung | K4B1G0846D HCF8 | v | v | v |