# AMD EXPO™ Technology Memory Profile Self-Certification Report

| [General Module Information] | |
|---|---|
| Module Manufacturer: | G.SKILL International Enterprise Co., Ltd. |
| Module Part Number: | F5-6000J3038F16GX2-TZ5NR |
| Module Revision: | 1.0 |
| Module Size: | 2 x 16 Gbytes |
| Ranks per channel: | 1 |
| JEDEC Memory Speed: | DDR5-4800 |
| Module Type: | Unbuffered DIMM (UDIMM) |
| SDRAM Manufacturer: | SKHynix |
| DRAM Stepping: | |
| Error Check/Correction: | None |

| [AMD EXPO Profile Support] | |
|---|---|
| AMD EXPO Version | 1.0 |
| Profile 0 Enabled | Yes |
| Profile 0 DIMMs per Channel | 1 |
| Profile 0 Enhanced Block Enabled | NO |
| Profile 1 Enabled | NO |
| Profile 1 DIMMs per Channel | None |
| Profile 1 Enhanced Block Enabled | NO |

| [EXPO Profile 0 Voltage] | |
|---|---|
| SDRAM VDD (V) | 1.35 V |
| SDRAM VDDQ (V) | 1.35 V |
| SDRAM VPP (V) | 1.80 V |

| [EXPO Profile 0 Timing] | | |
|---|---|---|
| DDR Data Rate MT/S | 6000 MT/s | |
| tCK (ps / nCK) | 333 | |
| tCAS (ps / nCK) | 9993 | 30 nCK |
| tRCD (ps / nCK) | 12659 | 38 nCK |
| tRP (ps / nCK) | 12659 | 38 nCK |
| tRAS (ps / nCK) | 31980 | 96 nCK |
| tWR (ps / nCK) | 29981 | 90 nCK |
| tRFC1 (ps / nCK) | 295 ns | |
| tRFC2 (ps / nCK) | 160 ns | |
| tRFCsb (ps / nCK) | 130 ns | |

| [EXPO Profile 0 Enhanced Timing] | | |
|---|---|---|
| tRRD_L (ps / nCK) | None | |
| tCCD_L (ps / nCK) | None | |
| tCCD_L_WR (ps / nCK) | None | |
| tCCD_L_WR2 (ps / nCK) | None | |
| tFAW (ps / nCK) | None | |
| tWTR_L (ps / nCK) | None | |
| tWTR_S (ps / nCK) | None | |
| tRTP (ps / nCK) | None | |

| [EXPO Profile 1 Voltage] | |
|---|---|
| SDRAM VDD (V) | None |
| SDRAM VDDQ (V) | None |
| SDRAM VPP (V) | None |

| [EXPO Profile 1 Timing] | | |
|---|---|---|
| DDR Data Rate MT/S | None | |
| tCK (ps / nCK) | None | |
| tCAS (ps / nCK) | None | |
| tRCD (ps / nCK) | None | |
| tRP (ps / nCK) | None | |
| tRAS (ps / nCK) | None | |
| tWR (ps / nCK) | None | |
| tRFC1 (ps / nCK) | None | |

| tRFC2 (ps / nCK) | None | |
|---|---|---|
| tRFCsb (ps / nCK) | None | |

**[EXPO Profile 1 Enhanced Timing]**

| tRRD_L (ps / nCK) | None | |
|---|---|---|
| tCCD_L (ps / nCK) | None | |
| tCCD_L_WR (ps / nCK) | None | |
| tCCD_L_WR2 (ps / nCK) | None | |
| tFAW (ps / nCK) | None | |
| tWTR_L (ps / nCK) | None | |
| tWTR_S (ps / nCK) | None | |
| tRTP (ps / nCK) | None | |

| [EXPO Tested Platforms1] | [BIOS Version1] | [Processor1] | [ProcODT2] | [RTT2] | [DrvStr2] |
|---|---|---|---|---|---|
| AsRock X670E Steel Legend | 1.29.AS01 | 7950X | Auto | Auto | Auto |
| AsRock X670E Taichi | 1.29.AS01 | 7950X | Auto | Auto | Auto |
| ASUS ROG CROSSHAIR X670E GENE | 1602 | 7950X | Auto | Auto | Auto |
| ASUS ROG CROSSHAIR X670E HERO | 1602 | 7800X3D | Auto | Auto | Auto |
| ASUS ROG STRIX B650E-F GAMING WIFI | 1654 | 7800X3D | Auto | Auto | Auto |
| Gigabyte B650E AORUS Master | F8d | 7900X | Auto | Auto | Auto |
| Gigabyte X670 AORUS ELITE AX | F11d | 7800X3D | Auto | Auto | Auto |
| Gigabyte X670E AORUS Master | F13d | 7700X | Auto | Auto | Auto |
| MSI MAG B650 TOMAHAWK WIFI | 170 | 7700X | Auto | Auto | Auto |
| MSI MPG B650 CARBON WIFI | 160 | 7700X | Auto | Auto | Auto |
| MSI PRO B650-P WIFI | 170 | 7700X | Auto | Auto | Auto |
| MSI PRO X670-P WIFI | 1A0 | 7700X | Auto | Auto | Auto |

Notes:

1. The list of tested platforms (which includes the Motherboard, BIOS, and Processor configurations) is not an exhaustive list of supported configurations. It is solely a set of tested configurations to demonstrate AMD EXPO™ profile viability on actual hardware.

2. ProcODT, RTT, and DrvStr values per configuration, Auto, or selected value.