



## AMD EXPO™ Technology Memory Profile Self-Certification Report

| <b>[General Module Information]</b> |   |
|-------------------------------------|---|
| <b>Module Manufacturer:</b>         | KINGSTON  |
| <b>Module Part Number:</b>          | KF560C36BBEAK2-16 (Kit of 2)<br>KF560C36BBEA-8 (x2) |
| <b>Module Revision:</b>             | 1.0   |
| <b>Module Size:</b>                 | 8 GBytes  |
| <b>Ranks per channel:</b>           | 1   |
| <b>JEDEC Memory Speed:</b>          | DDR5-4800   |
| <b>Module Type:</b>                 | Unbuffered DIMM (UDIMM)                             |
| <b>SDRAM Manufacturer:</b>          | SK Hynix  |
| <b>DRAM Stepping:</b>               | A   |
| <b>Error Check/Correction:</b>      | None  |

| <b>[AMD EXPO Profile Support]</b>       |     |
|---|-----|
| <b>AMD EXPO Version</b>                 | 1.0 |
| <b>Profile 0 Enabled</b>                | Yes |
| <b>Profile 0 DIMMs per Channel</b>      | 1   |
| <b>Profile 1 Enhanced Block Enabled</b> | No  |
| <b>Profile 1 Enabled</b>                | Yes |
| <b>Profile 1 DIMMs per Channel</b>      | 1   |
| <b>Profile 1 Enhanced Block Enabled</b> | No  |

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

| <b>[EXPO Profile 0 Timing]</b> |           |        |
|--------------------------------|-----------|--------|
| <b>DDR Data Rate MT/S</b>      | 6000 MT/s |        |
| <b>tCK (ps / nCK)</b>          | 333 ps    |        |
| <b>tCAS (ps / nCK)</b>         | 12000 ps  | 36 nCK |
| <b>tRCD (ps / nCK)</b>         | 12666 ps  | 38 nCK |
| <b>tRP (ps / nCK)</b>          | 12666 ps  | 38 nCK |
| <b>tRAS (ps / nCK)</b>         | 26666 ps  | 80 nCK |
| <b>tRW (ps/ nCK)</b>           | 30000ps   | 90 nCK |
| <b>tRFC1 (ns)</b>              | 295 ns    |        |
| <b>tRFC2 (ns)</b>              | 160 ns    |        |
| <b>tRFCsb (ns)</b>             | 130 ns    |        |

| <b>[EXPO Profile 0 Enhanced Timing]</b> |     |  |
|---|-----|--|
| <b>tRRD_L (ps / nCK)</b>                | N/A |  |
| <b>tCCD_L (ps / nCK)</b>                | N/A |  |
| <b>tCCD_L_WR (ps / nCK)</b>             | N/A |  |
| <b>tCCD_L_WR2 (ps / nCK)</b>            | N/A |  |
| <b>tFAW (ps / nCK)</b>                  | N/A |  |
| <b>tWTR_L (ps / nCK)</b>                | N/A |  |
| <b>tWTR_S (ps / nCK)</b>                | N/A |  |
| <b>tRTP (ps / nCK)</b>                  | N/A |  |



| <b>[EXPO Profile 1 Voltage]</b> |        |
|---------------------------------|--------|
| SDRAM VDD (V)                   | 1.25 V |
| SDRAM VDDQ (V)                  | 1.25 V |
| SDRAM VPP (V)                   | 1.80 V |

| <b>[EXPO Profile 1 Timing]</b> |           |         |
|--------------------------------|-----------|---------|
| DDR Data Rate MT/S             | 5600 MT/s |         |
| tCK (ps / nCK)                 | 357 ps    |         |
| tCAS (ps / nCK)                | 12857 ps  | 36 nCK  |
| tRCD (ps / nCK)                | 13571 ps  | 38 nCK  |
| tRP (ps / nCK)                 | 13571 ps  | 38 nCK  |
| tRAS (ps / nCK)                | 28571 ps  | 80 nCK  |
| tRC (ps / nCK)                 | 42142 ps  | 118 nCK |
| tRW (ps / nCK)                 | 30000ps   | 84 nCK  |
| tRFC1 (ns)                     | 295 ns    |         |
| tRFC2 (ns)                     | 160 ns    |         |
| tRFCsb (ns)                    | 130 ns    |         |

| <b>[EXPO Profile 1 Enhanced Timing]</b> |     |  |
|---|-----|--|
| tRRD_L (ps / nCK)                       | N/A |  |
| tCCD_L (ps / nCK)                       | N/A |  |
| tCCD_L_WR (ps / nCK)                    | N/A |  |
| tCCD_L_WR2 (ps / nCK)                   | N/A |  |
| tFAW (ps / nCK)                         | N/A |  |
| tWTR_L (ps / nCK)                       | N/A |  |
| tWTR_S (ps / nCK)                       | N/A |  |
| tRTP (ps / nCK)                         | N/A |  |



| [EXPO Tested Platforms1]           | [BIOS Version1] | [Processor1]  | [ProcODT2] | [RTT2] | [DrvStr2] |
|------------------------------------|-----------------|---------------|------------|--------|-----------|
| ASUS-ROG STRIX X670E-E GAMING WIFI | 0805            | Ryzen 9 7900X | Auto       | Auto   | Auto      |
| MSI-PRO X670-P                     | 1.52            | Ryzen 7 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.*