



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

<b>[General Module Information]</b>	
<b>Module Manufacturer:</b>	Kingston
<b>Module Part Number:</b>	KF552C40BB2K2-64 (Kit of 2) KF552C40BB2-32 (x2) KF552C40BB2AK2-64 (Kit of 2) KF552C40BB2A-32 (x2)
<b>Serial Number:</b>	N/A
<b>Module Revision:</b>	1
<b>Module Size:</b>	32GB
<b>Ranks per channel:</b>	1
<b>JEDEC Memory Speed:</b>	4800
<b>Module Type:</b>	Unbuffered DIMM (UDIMM)
<b>RDIMM RCD Vendor:</b>	N/A
<b>SDRAM Manufacturer:</b>	Samsung
<b>SPD Byte 552:</b>	80
<b>SPD Byte 553:</b>	CE
<b>DRAM Stepping:</b>	M
<b>SPD Byte 554:</b>	4D
<b>SPD Byte 530:</b>	33
<b>PMIC Vendor:</b>	RichTek
<b>Error Check/Correction:</b>	None

<b>[AMD EXPO Profile Support]</b>	
<b>AMD EXPO Version</b>	1
<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>	
SDRAM VDD (V)	1.25V
SDRAM VDDQ (V)	1.25V
SDRAM VPP (V)	1.8V

<b>[EXPO Profile 0 Timing]</b>		
DDR Data Rate MT/S	5200(MT/s)	
tCK (ps / nCK)	384 ps	
tCAS (ps / nCK)	14285 ps	40 nCK
tRCD (ps / nCK)	14285 ps	40 nCK
tRP (ps / nCK)	14285 ps	40 nCK
tRAS (ps / nCK)	28571 ps	80 nCK
tRC (ps / nCK)	42857 ps	120 nCK
tRW (ps / nCK)	30000 ps	78 nCK
tRFC1 (ns)	410 ns	
tRFC2 (ns)	220 ns	
tRFCsb (ns)	190 ns	

<b>[EXPO Profile 0 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	

<b>[EXPO Profile 1 Voltage]</b>	
SDRAM VDD (V)	1.1V
SDRAM VDDQ (V)	1.1V
SDRAM VPP (V)	1.8V



<b>[EXPO Profile 1 Timing]</b>		
DDR Data Rate MT/S	4800(MT/s)	
tCK (ps / nCK)	416 ps	
tCAS (ps / nCK)	15833 ps	38 nCK
tRCD (ps / nCK)	15833 ps	38 nCK
tRP (ps / nCK)	15833 ps	38 nCK
tRAS (ps / nCK)	29166 ps	70 nCK
tRC (ps / nCK)	48333 ps	116 nCK
tRW (ps / nCK)	30000 ps	72 nCK
tRFC1 (ns)	410 ns	
tRFC2 (ns)	220 ns	
tRFCsb (ns)	190 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	

<b>[EXPO Tested Platforms]</b>	<b>[BIOS Version]</b>	<b>[Processor]</b>	<b>[ProcODT2]</b>	<b>[RTT2]</b>	<b>[DrvStr2]</b>
ASRock X870E Taichi	3.20	Ryzen9 9900X	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.*
- 3. Diagnostics used:  
MemTest86 (6.2 or later) for a minimum of 12 hours or 100 loops;*



*Prime 95(30.8 build 17 or later) Large FFT torture test for a minimum of 12 hours;  
3DMark(2.16.7117 or later) Firestrike stress test for a minimum of 12 hours or 5000  
loops;*

*Reboot test for a minimum of 50 cycles to ensure ACPI state transition stability.*

*AMD uses MemTestPro and 3DMark Firestrike and recommends MemTestPro version  
6.2 or later and 3DMark Dandia version 2.16.7117 or later.*

*In addition, a reboot test (for example, one with 50 reboot cycles) should be  
performed to ensure ACPI state transition stability.*