AMD EXPO™ Technology Memory Profile Self-Certification Report

[General Module Information]	
Module Manufacturer:	G.SKILL International Enterprise Co., Ltd.
Module Part Number:	F5-6400J3239G16GX2-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)	1.40 V
SDRAM VDDQ (V)	1.40 V
SDRAM VPP (V)	1.80 V

[EXPO Profile 0 Timing]		
DDR Data Rate MT/S	6400 MT/s	
tCK (ps / nCK)	312	
tCAS (ps / nCK)	9987	32 nCK
tRCD (ps / nCK)	12172	39 nCK
tRP (ps / nCK)	12172	39 nCK
tRAS (ps / nCK)	3121	102 nCK
tWR (ps / nCK)	29963	96 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]
ASUS ROG CROSSHAIR X670E GENE	1602	7950X	Auto	Auto	Auto
ASUS ROG CROSSHAIR X670E HERO	1602	7800X3D	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.*