

ZenTimings 1.35					
File Tools Help					
AMD Ryzen 9 7900X3D 12-Core Processor					
ROG CROSSHAIR X670E HERO BIOS 2806 (84.79.225)					
Speed	6400 MT/s	Capacity	32GB	MCLK	3200.00
BGS	Enabled	BGS Alt	Disabled	FCLK	2133.33
GDM	Disabled	Cmd2T	1T	UCLK	3200.00
tCL	28	tRDRDCL	5	VSOC (SMU)	1.2350V
tRCDWR	38	tWRWRSCl	9	CLDO VDDP	1.0833V
tRCDRD	38	tCWL	26	VDDG CCD	N/A
tRP	37	tRTP	12	VDDG IOD	N/A
tRAS	53	tRDWR	14	MEM VDD	1.3950V
tRC	90	tWRRD	1	MEM VDDQ	1.3500V
tRRDS	8	tRDRDSC	1	CPU VDDIO	1.3960V
tRRDL	12	tRDRDSD	1	MEM VPP	1.8000V
tFAW	32	tRDRDDD	1	VDD MISC	1.1000V
tWTRS	7	tWRWRSC	1		
tWTRL	16	tWRWRSD	1	ProcOdt	34.3 Ω
tWR	48	tWRWRDD	1	ProcCaDs	30.0 Ω
tRFC (ns)	130	tCKE	0	ProcDqDs	34.3 Ω
tRFC	416	tREFI	65535	DramDqDs	48.0 Ω
tRFC2	226	tREFI (ns)	20479.688		
tRFCsb	183	tSTAG	7	RttNomWr	RZQ/3 (80)
tMOD	45	tMRD	45	RttNomRd	RZQ/3 (80)
tMODPDA	32	tMRDPDA	32	RttWr	RZQ/6 (40)
tPHYWRD	6	tPHYRDL	35	RttPark	RZQ/5 (48)
tPHYWRL	13	PowerDown	Disabled	RttParkDqs	RZQ/6 (40)
A2: F5-6000J2636G16G (16GB, SR)					DDR5