

Zentel-Europe SDRAM IC 2026 Product Range

Type	Density	Config	Voltage	Package	Base Part Number	-speed grade suffixes = MHz internal clock	Industrial Grade Price adder	Automotive Temp Price adder	MoQ - Tray		MoQ - Tape&Reel	
					click for datasheet	@ appropriate CAS Latency			Inner Box	Outer Box	Inner Box	Outer Box
DDR1	512Mb	32Mx16	2.5V	TSOP11-66	A3S12D40GTP	-50 = 200MHz @ CL3 (Note) Covers „-60 = 166MHz @ CL2.5" & "-75 = 133MHz @ CL2"	30 %	NA	1.080	6.480	1.000	5.000
DDR2	512Mb	32Mx16	1.8V	FBGA-84	A3R12E40DBF	AH = 1066MHz @ CL7, 8E = 800MHz @ CL5	30 %	60 %	2.000	12.000	2.000	10.000
DDR2	512Mb	64Mx8	1.8V	FBGA-60	A3R12E30DBF		30 %	60 %	2.420	14.520	2.000	10.000
DDR2	1Gb	64Mx16	1.8V	FBGA-84	A3R1GE40JBF		30 %	60 %	2.000	12.000	2.500	12.500
DDR2	1Gb	128Mx8	1.8V	FBGA-60	A3R1GE30JBF		30 %	60 %	2.420	14.520	2.000	10.000
DDR3	1Gb	64Mx16	1.5V	FBGA-96	A3T1GF40CBF	HP = 1866 @CL13, GM = 1600 @CL11	30 %	60 %	1.900	11.400	2.000	10.000
DDR3	1Gb	128Mx8	1.5V	FBGA-78	A3T1GF30CBF	HP = 1866 @CL13, GM = 1600 @CL11	30 %	60 %	2.200	13.200	2.000	10.000
DDR3L	1Gb	64Mx16	1.35V/1.5V	FBGA-96	A3T1GF40CBF	GML = 1600 @CL11	30 %	60 %	1.900	11.400	2.000	10.000
DDR3L	1Gb	128Mx8	1.35V/1.5V	FBGA-78	A3T1GF30CBF	GML = 1600 @CL11	30 %	60 %	2.200	13.200	2.000	10.000
DDR3L	2Gb	128Mx16	1.35V/1.5V	FBGA-96	A3T2GF40CBF	HP = 1866 @CL13	30 %	NA	2.090	12.540	2.000	10.000
DDR3L	2Gb	256Mx8	1.35V/1.5V	FBGA-78	A3T2GF30CBF	HP = 1866 @CL13	30 %	NA	2.420	14.520	2.000	10.000
DDR3	2Gb	128Mx16	1.5V	FBGA-96	A3T2GF40CBF	JR = 2133 @ CL14	30 %	NA	2.090	12.540	2.000	10.000
DDR3L	2Gb	128Mx16	1.35V/1.5V	FBGA-96	A3T2GF40CBF	JRL = 2133 @ CL14	30 %	NA	2.090	12.540	2.000	10.000
DDR3	2Gb	256Mx8	1.5V	FBGA-78	A3T2GF30CBF	JR = 2133 @ CL14	30 %	NA	2.420	14.520	2.000	10.000
DDR3L	2Gb	256Mx8	1.35V/1.5V	FBGA-78	A3T2GF30CBF	JRL = 2133 @ CL14	30 %	NA	2.420	14.520	2.000	10.000
DDR3L	4Gb	256Mx16	1.35V/1.5V	FBGA-96	A3T4GF40BBF	HP = 1866 @CL13	30 %	NA	2.090	12.540	2.000	10.000
DDR3L	4Gb	512Mx8	1.35V/1.5V	FBGA-78	A3T4GF30BBF	HP = 1866 @CL13	30 %	NA	2.420	14.520	2.000	10.000
DDR3	4Gb	256Mx16	1.5V	FBGA-96	A3T4GF40BBF	JR = 2133 @ CL14	30 %	NA	2.090	12.540	2.000	10.000
DDR3L	4Gb	256Mx16	1.35V/1.5V	FBGA-96	A3T4GF40BBF	JRL = 2133 @ CL14	30 %	NA	2.090	12.540	2.000	10.000
DDR3	4Gb	512Mx8	1.5V	FBGA-78	A3T4GF30BBF	JR = 2133 @ CL14	30 %	NA	2.420	14.520	2.000	10.000
DDR3L	4Gb	512Mx8	1.35V/1.5V	FBGA-78	A3T4GF30BBF	JRL = 2133 @ CL14	30 %	NA	2.420	14.520	2.000	10.000
DDR3L	4Gb ECC	256Mx16	1.35V/1.5V	FBGA-96	A3T4GF40CBF	GM = 1600 @CL11, HP = 1866 @CL13	30 %	60 %	1.900	11.400	2.000	10.000
DDR3L	4Gb ECC	512M x 8	1.35V/1.5V	FBGA-78	A3T4GF30CBF	GM = 1600 @CL11, HP = 1866 @CL13	30 %	60 %	2.200	13.200	2.000	10.000
DDR3L	8Gb	512Mx16	1.35V/1.5V	FBGA-96	A3T8GF43BBF	HPL = 1866 @CL13	30 %	NA	1.900	11.400	2.000	10.000
DDR3L	8Gb	1Gx8	1.35V/1.5V	FBGA-78	A3T8GF33BBF	HPL = 1866 @CL13	30 %	NA	2.200	13.200	2.000	10.000
DDR4	4Gb	256Mx16	1.2V	FBGA-96	A3F4GH40ABF	WD = 2666 @CL19	30 %	NA	2.090	12.540	2.000	10.000
DDR4	4Gb	256Mx16	1.2V	FBGA-96	A3F4GH40DBF	WD = 2666 @CL19, WC = 3200 @CL22	NA	NA	2.090	12.540	N/A	N/A
DDR4	8Gb	512Mx16	1.2V	FBGA-96	A3F8GH40BBF	KD = 2666 @CL19, MC = 3200 @CL22	NA	NA	2.090	12.540	N/A	N/A

Zentel Japan Corporation - Unique Feature (JEDEC-compliant): cyber-resilient/-secure (Row-Hammer-free) 2, 4 and 8 Gbit DDR3L DRAM ICs