

Zentel-Europe SDRAM ICs

Type	Density	Config	Voltage	Package	Base P/N	Speed options	Industrial Grade Price adder	Automotive Price adder	Qty per tray	MPQ- Tray		MPQ- Tape&Reel	
										Inner Box	Outer Box	Inner Box	Outer Box
SDR	64Mb	4Mx16	3.3V	TSOPII-54	A3V64S40GTP	-60 = 166MHz @CL3 (Note) (Note) Cover "-70 = 143MHz @CL3" & "-75 = 133MHz @CL3"	30 %	NA	108	1.080	6.480	1.000	5.000
SDR	128Mb	8Mx16	3.3V	TSOPII-54	A3V28S40JTP		30 %	NA	108	1.080	6.480	1.000	5.000
SDR	256Mb	16Mx16	3.3V	TSOPII-54	A3V56S40GTP		30 %	NA	108	1.080	6.480	1.000	5.000
SDR	256Mb	32Mx8	3.3V	TSOPII-54	A3V56S30GTP		30 %	NA	108	1.080	6.480	1.000	5.000

DDR2	256Mb	16Mx16	1.8V	FBGA-84	A3R56E40ABF	AH = 1066 @CL7, 8E = 800 @CL5	30 %	60 %	200	2.000	12.000	2.000	10.000
DDR2	512Mb	32Mx16	1.8V	FBGA-84	A3R12E40DBF		30 %	60 %	200	2.000	12.000	2.000	10.000
DDR2	512Mb	64Mx8	1.8V	FBGA-60	A3R12E30DBF		30 %	60 %	242	2.420	14.520	2.000	10.000
DDR2	1Gb	64Mx16	1.8V	FBGA-84	A3R1GE40JBF		30 %	60 %	200	2.000	12.000	2.500	12.500
DDR2	1Gb	128Mx8	1.8V	FBGA-60	A3R1GE30JBF		30 %	60 %	242	2.420	14.520	2.000	10.000
DDR2	2Gb	128Mx16	1.8V	FBGA-84	A3R2GE43JBF		NA	NA	200	2.000	12.000	2.000	10.000

DDR3	1Gb	64Mx16	1.5V	FBGA-96	A3T1GF40CBF	HP = 1866 @CL13, GM = 1600 @CL11	30 %	60 %	190	1.900	11.400	2.000	10.000
DDR3	1Gb	128Mx8	1.5V	FBGA-78	A3T1GF30CBF	HP = 1866 @CL13, GM = 1600 @CL11	30 %	60 %	220	2.200	13.200	2.000	10.000
DDR3	1Gb	64Mx16	1.35V	FBGA-96	A3T1GF40CBF	GML = 1600 @CL11	30 %	60 %	190	1.900	11.400	2.000	10.000
DDR3	1Gb	128Mx8	1.35V	FBGA-78	A3T1GF30CBF	GML = 1600 @CL11	30 %	60 %	220	2.200	13.200	2.000	10.000

DDR3	2Gb	128Mx16	1.35V/1.5V	FBGA-96	A3T2GF40CBF	HP = 1866 @CL13	30 %	NA	209	2.090	12.540	2.000	10.000
DDR3	2Gb	256Mx8	1.35V/1.5V	FBGA-78	A3T2GF30CBF	HP = 1866 @CL13	30 %	NA	242	2.420	14.520	2.000	10.000
DDR3	2Gb	128Mx16	1.5V	FBGA-96	A3T2GF40CBF	JR = 2133 @ CL14	30 %	NA	242	2.420	14.520	2.000	10.000
DDR3	2Gb	128Mx16	1.35V	FBGA-96	A3T2GF40CBF	JRL = 2133 @ CL14	30 %	NA	242	2.420	14.520	2.000	10.000
DDR3	2Gb	256Mx8	1.5V	FBGA-78	A3T2GF30CBF	JR = 2133 @ CL14	30 %	NA	242	2.420	14.520	2.000	10.000
DDR3	2Gb	256Mx8	1.35V	FBGA-78	A3T2GF30CBF	JRL = 2133 @ CL14	30 %	NA	242	2.420	14.520	2.000	10.000
DDR3	4Gb	256Mx16	1.35V/1.5V	FBGA-96	A3T4GF40BBF	HP = 1866 @CL13	30 %	NA	209	2.090	12.540	2.000	10.000
DDR3	4Gb	512Mx8	1.35V/1.5V	FBGA-78	A3T4GF30BBF	HP = 1866 @CL13	30 %	NA	242	2.420	14.520	2.000	10.000
DDR3	4Gb	128Mx16	1.5V	FBGA-96	A3T4GF40BBF	JR = 2133 @ CL14	30 %	NA	242	2.420	14.520	2.000	10.000
DDR3	4Gb	128Mx16	1.35V	FBGA-96	A3T4GF40BBF	JRL = 2133 @ CL14	30 %	NA	242	2.420	14.520	2.000	10.000
DDR3	4Gb	256Mx8	1.5V	FBGA-78	A3T4GF30BBF	JR = 2133 @ CL14	30 %	NA	242	2.420	14.520	2.000	10.000
DDR3	4Gb	256Mx8	1.35V	FBGA-78	A3T4GF30BBF	JRL = 2133 @ CL14	30 %	NA	242	2.420	14.520	2.000	10.000
DDR3	8Gb	256Mx16	1.35V/1.5V	FBGA-96	A3T8GF43BBF	HPL = 1866 @CL13 ; GML = 1600 @CL11	30 %	NA	190	1.900	11.400	2.000	10.000
DDR3	8Gb	512Mx8	1.35V/1.5V	FBGA-78	A3T8GF33BBF	HPL = 1866 @CL13 ; GML = 1600 @CL11	30 %	NA	220	2.200	13.200	2.000	10.000

DDR4	4Gb	256Mx16	1.2V	FBGA-96	A3F4GH40ABF	WE = 2400 @CL17, WD = 2666 @CL19	NA	NA	209	2.090	12.540	2.000	10.000
DDR4	4Gb	512Mx8	1.2V	FBGA-78	A3F4GH30ABF	WE = 2400 @CL17, WD = 2666 @CL19	NA	NA	242	2.420	14.520	2.000	10.000

Datasheet by clicking Base P/N

Yellow highlighted DDR3 devices are Row-Hammer-free