

AS4C512M16D3LC-10BIN vs AS4C512M16D3LA-10BIN Comparison

Part Number & result Parameter	AS4C512M16D3LC-10BIN (Rev.C)	AS4C512M16D3LA-10BIN (Rev.A)	Comparison Result
Product Description	DDR3L SDRAM	DDR3L SDRAM	Same
Density/Memory Size	8Gb	8Gb	Same
Memory Organization	64Mb x 16 IOs x 8 banks	64Mb x 16 IOs x 8 banks	Same
Data Bus Width	16 bits	16 bits	Same
Row / Column Address	A[15:0] / A[9:0]	A[15:0] / A[9:0]	Same
Page Size	2KB	2KB	Same
Operating Power Supply	VDD/Q=1.35V (1.283~1.45V)	VDD/Q=1.35V (1.283~1.45V)	Same
DDR3 Compatibility	Yes backward compatible	Yes backward compatible	Same
Operating Temperatures	Industrial Grade (-40C ~ +95C)	Industrial Grade (-40C ~ +95C)	Same
Clock Frequencies offered	933MHz	933MHz	Same
Data Rates (MT/s)	1866Mbps	1866Mbps	Same
tRCD / tRP (ns)	13.91	13.91	Same
CL	13	13	Same
I/O Capacitance	CIO :2.1pF Max	CIO : 2.2pF Max	comparable
Pin to Pin Compatible	Yes	Yes	Same
IDD Specifications	933MHz	933MHz	
IDD0(mA)	96	96	Same
IDD1(mA)	125	125	Same
IDD2P0 (mA)	16	16	Same
IDD2P1 (mA)	30	30	Same
IDD2N (mA)	50	50	Same
IDD2Q (mA)	50	50	Same
IDD3P (mA)	54	54	Same
IDD3N (mA)	62	62	Same
IDD4R (mA)	200	200	Same
IDD4W (mA)	360	360	Same
IDD5B (mA)	477	477	Same
IDD6 (mA)	24	24	Same
IDD6ET (mA)	32	32	Same
IDD7 (mA)	270	270	Same
IDD8 (mA)	20	20	Same
Package Dimension	96b FBGA (9 x 13 x 1.2mm)	96b FBGA (9 x 13.5 x 1.2mm)	RevC smaller
Package Ball Matrix	12 x 6.4 x 0.8mm	12 x 6.4 x 0.8mm	Same
Pb & Halogen Free	Yes	Yes	Yes

PART NUMBERING SYSTEM									
AS4C	512M16	D3L	C	-	10/12	B	C/I/A	N	XX
AS : Alliance Memory 4C : DRAM Product Line	Memory Organization 512M16: 8Gb (512Mx16)	Product D3L : DDR3L	A : Die Rev.A C : Die Rev.C	-	Max Clock 10: 933MHz 12: 800MHz	Package B: FBGA	Temperature C : Commercial I : Industrial	N: Lead Free & Halogen Free	Packing Media None: Tray TR : Reel