

AS4C512M16D3LA-10BIN vs A3T8GF43BBF-HPLI Comparison

Part Number & result Parameter	AS4C512M16D3LA-10BIN	A3T8GF43BBF-HPLI	Comparison Result
Product Description	DDR3L SDRAM	DDR3L SDRAM	Same
Density/Memory Size	8Gb	8Gb	Same
Memory Organization	64Meg x 16 x 8 banks	64Meg x 16 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 PowerSupply	VDD/Q=1.35V (1.283~1.45V)	VDD/Q=1.35V (1.283~1.45V)	Same
DDR3 Compatibility	Yes (VDD/Q= 1.425V ~1.575V)	Yes (VDD/Q= 1.425V ~1.575V)	Same
Operating Temperature	Industrial (-40°C ≤ TC ≤ +95°C)	Industrial (-40°C ≤ TC ≤ +95°C)	Same
Max. Clock Frequency	933 Mhz	933 Mhz	Same
Max Data Rate (MT/s)	1866 Mbps	1866 Mbps	Same
CL-nRCD-nRP	13-13-13	13-13-13	Same
tRCD/tRP (ns)	13.91	13.91	Same
Pin to Pin Compatible	Single ODT, CKE, ZQ & CS\ pin	Single ODT, CKE, ZQ & CS\ pin	Same
AC/DC Characteristics	Same	Same	Meet JEDEC
IDD Specification			
IDD0 (mA)	96	77	
IDD1 (mA)	125	105	
IDD2P0/1 (mA)	16/30	13/15	
IDD2Q/N (mA)	50/50	47/48	
IDD2NT (mA)	58	52	
IDD3P/3N (mA)	54/62	42/64	
IDD4R (mA)	200	220	
IDD4W (mA)	360	230	
IDD5B (mA)	477	285	
IDD6 (mA)	24	22	
IDD6E (mA)	32	30	
IDD7 (mA)	270	265	
IDD8 (mA)	20	13	
Package	96b FBGA (9mm x 13.5mm)	96b FBGA (9mm x 13mm)	Comparable. Ball Matrix Same
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same