

AS4C256M16D4A-62BIN vs MT40A256M16LY-062E:ITF Comparison

Part Number & result Parameter	AS4C256M16D4A-62BIN	MT40A256M16LY-062E:ITF	Comparison Result
Product Description	DDR4 SDRAM	DDR4 SDRAM	Same
Capacity	4Gb (256M x 16)	4Gb (256M x 16)	Same
Memory Organization	32Meg, x16bits,x4banks x2grps	32Meg,x16bits,x4banks x2grps	Same
Bank Group Address	BG0	BG0	Same
Bank Address	BA[1:0]	BA[1:0]	Same
Row Addressing	32K (A[14:0])	32K (A[14:0])	Same
Column Addressing	1K (A[9:0])	1K (A[9:0])	Same
Page Size	2KB	2KB	Same
Operating Power Supply	V _{DD} & V _{DDQ} = 1.2V (+/-0.06V) V _{pp} = +2.5V(-0.125V/+0.25V)	V _{DD} & V _{DDQ} = 1.2V (+/-0.06V) V _{pp} = +2.5V(-0.125V/+0.25V)	Same
Operating Temperature	Industrial (-40°C ≤ T _c ≤ 95°C)	Industrial (-40°C ≤ T _c ≤ 95°C)	Same
Max.Clock Freq.(MHz)	1600	1600	Same
Data Rate (MT/s)	3200	3200	Same
CAS Latency	22	22	Same
tRCD & tRP (ns)	13.75	13.75	Same
Average Refresh Period 8192 cycles @	64ms upto 85C 32ms >85C to 95C	64ms upto 85C 32ms >85C to 95C	Same
I/O Capacitance (C_{IO})	1.0pf	1.0pf	Same
Pin to Pin Compatible	Pin to Pin Compatible		Same
AC/DC Characteristics	Same	Same	Meet JEDEC
IDD Specification			
I_{DD0} (mA)	101	54	Micron better
I_{DD1} (mA)	109	80	Micron better
I_{DD2P} (mA)	39	22	Micron better
I_{DD2Q} (mA)	57	26	Micron better
I_{DD2N} (mA)	61	33	Micron better
I_{DD3P} (mA)	48	34	Micron better
I_{DD3N} (mA)	98	44	Micron better
I_{DD4R} (mA)	209	312	Alliance better
I_{DD4W} (mA)	242	250	Alliance better
I_{DD6E} (mA)	33	44	Alliance better
I_{DD7} (mA)	233	270	Alliance better
Package 96b FBGA	7.5mm x 13mm	7.5mm x 13.5mm	comparable
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same