

AS4C64M16D3B-12BCN vs MT41J64M16JT-15E:G Comparison

Part Number & result Parameter	AS4C64M16D3B-12BCN	MT41J64M16JT-15E:G	Comparison Result
Product Description	DDR3 SDRAM	DDR3 SDRAM	Same
Capacity	1Gb (64M x 16)	1Gb (64M x 16)	Same
Memory Organization	8Meg, x16bits, x8 banks	8Meg, x16bits, x8 banks	Same
Operating Power Supply	V _{DD} & V _{DDQ} = 1.5V (+/-0.075V)	V _{DD} & V _{DDQ} = 1.5V (+/-0.075V)	Same
Operating Temperature	Commercial (Tc=0°C to 95°C)	Commercial (Tc=0°C to 95°C)	Same
Clock Frequency	800MHz	666.5MHz	Alliance better
Data Rate (MT/s)	1600	1333	Alliance better
CAS Latency	11	9	Alliance better
tRCD & tRP (ns)	13.75	13.5	Alliance better
Average Refresh Period	8192 cycles/64ms upto 85C	8192 cycles/64ms upto 85C	Same
I/O Capacitance	Comparable		Same
Pin to Pin Compatible	Pin to Pin Compatible		Same
AC/DC Characteristics	Same	Same	Meet JEDEC
IDD Specification			
IDD Spec conditions	0C to 95C	0C to 85C	Different
I_{DD0} (mA)	56	80	Alliance better
I_{DD1} (mA)	72	110	Alliance better
I_{DD2P0} (mA)	8	12	Alliance better
I_{DD2P1} (mA)	16	30	Alliance better
I_{DD2N} (mA)	35	40	Alliance better
I_{DD2Q} (mA)	35	35	Same
I_{DD3P} (mA)	28	30	Alliance better
I_{DD3N} (mA)	43	45	Alliance better
I_{DD4R} (mA)	140	165	Alliance better
I_{DD4W} (mA)	150	180	Alliance better
I_{DD5B} (mA)	95	165	Alliance better
I_{DD6} (mA)	8	8	Same
I_{DD6ET} (mA)	10	10	Same
I_{DD7} (mA)	195	265	Alliance better
I_{DD8} (mA)	10	14	Alliance better
Package 96b FBGA	(9mm x 13mm x 1.2mm) BallArray (mm): 12x 6.4 x 0.8	(8mm x 14mm x 1.2mm) BallArray (mm): 12x 6.4 x 0.8	Comparable
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same