

AS4C32M32MD1A-5BIN vs MT46H32M32LFB5-5 IT:B Comparison

Part Number & result Parameter	AS4C32M32MD1A-5BIN	MT46H32M32LFB5-5 IT:B	Comparison Result
Product Description	LPDDR1 SDRAM	LPDDR1 SDRAM	Same
Density	1Gb	1Gb	Same
Memory Organization	8Meg x 32DQs x 4 banks	8Meg x 32DQs x 4 banks	Same
Bank Address	BA0-BA1	BA0-BA1	Same
Row / Column Address	8K (A0-A12) / 1K (A0-A9)	8K (A0-A12) / 1K (A0-A9)	Same
Operating Power Supply	VDD/Q = 1.70~1.95V	VDD/Q = 1.70~1.95V	Same
Operating Temperature	-40°C~85°C (Industrial Grade)	-40°C~85°C (Industrial Grade)	Micron better
Clock Frequency	200 MHz	200 MHz	Same
Data Rate	400 Mbps	400 Mbps	Same
CL	3	3	Same
tRCD / tRP (ns)	15 (Min)	15 (Min)	Same
I/O Capacitance	CIO : 5pF Max	CIO : 4.5pF (Max)	Comparable
Pin to Pin Compatible	Yes	Yes	Same
AC/DC Characteristics	Same	Same	Meet JEDEC
IDD Specification (VDD1 / VDD2 / VDDQ)			
I_{DD0} (mA)	95	95	Same
I_{DD2P/S} (uA)	600	600	Same
I_{DD2N} (mA)	18	18	Same
I_{DD2NS} (mA)	14	14	Same
I_{DD3P/S} (mA)	3.6	3.6	Same
I_{DD3N} (mA)	20	20	Same
I_{DD3NS} (mA)	16	16	Same
I_{DD4R} (mA)	150	150	Same
I_{DD4W} (mA)	150	150	Same
I_{DD5} (mA)	100	100	Same
I_{DD5a} (mA)	15	15	Same
I_{DD6a} (mA)	1.3	1.3	Same
I_{DD7} (uA)	15	10	Comparable
Package 90b FBGA	8 x 13 x 0.8mm	8 x 13 x 1mm	Same
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same