

AS4C4M32SA-6TIN vs MT48LC4M32B2P-6G Comparison

Part Number & result Parameter	AS4C4M32SA-6TIN	MT48LC4M32B2P-6G	Comparison Result
Product Description	SDRAM	SDRAM	Same
Capacity	128Mb (4M x 32)	128Mb (8M x 16)	Same
Memory Organization	1M, x32 bits, x4 banks	1M, x32 bits, x4 banks	Same
Operating Power Supply	$V_{DD} \& V_{DDQ} = 3.3V$ (+/-0.3V)	$V_{DD} \& V_{DDQ} = 3.3V$ (+/-0.3V)	Same
Operating Temperature	Industrial (-40°C to 85°C)	Industrial (-40°C to 85°C)	Same
Clock Frequency	166.66MHz	166.66MHz	Same
Clock Cycle time (ns)	6	6	Same
CAS Latency	2 or 3	2 or 3	Same
tRCD & tRP (ns)	18	18	Same
Refresh Cycles	4096 refresh cycles/64ms	4096 cycles/64ms	Same
I/O Capacitance	CIO: 5.5pf to 7.5pf	CIO: 4pf to 6pf	Comparable
Pin to Pin Compatible	Pin to Pin Compatible		Same
AC/DC Characteristics	Same	Same	Meet JEDEC
IDD Specification			
IDD Spec conditions	-40C ≤ Ta ≤ 85C VDD/Q = 3.3V ±0.3V	-40C ≤ Ta ≤ 85C VDD/Q = 3.3V ±0.3V	Same
IDD1 (mA)	160	190	Alliance Better
IDD2N (mA)	50	NA	
IDD2NS (mA)	30	NA	
IDD2P (mA)	3	2	Comparable
IDD2PS (mA)	3	2	Comparable
IDD3N (mA)	60	65	Comparable
IDD3NS (mA)	50	65	Alliance Better
IDD4 (mA)	200	195	Comparable
IDD5 (mA)	260	320	Alliance Better
IDD6 (mA)	3	2	Comparable
Package	86p TSOP II (400mils) Plastic	86p TSOP II (400mils) Plastic	Same
Package Material	Pb & Halogen Free	Pb Free	Same