

AS4C16M16SA-6TCN vs MT48LC16M16A2P-6A:G Comparison

Part Number & result Parameter	AS4C16M16SA-6TCN	MT48LC16M16A2P-6A:G	Comparison Result
Product Description	SDRAM	SDRAM	Same
Capacity	256Mb (16M x 16)	256Mb (16M x 16)	Same
Memory Organization	4M, x16 bits, x4 banks	4M, x16 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	Commercial (0°C to 70°C)	Commercial (0°C to 70°C)	Same
Clock Frequency	166.66MHz	167MHz	Comparable
Clock Cycle time (ns)	6	6	Same
CAS Latency	3	3	Same
tRCD & tRP (ns)	18	18	Same
Average Refresh Period	8192 cycles/64ms	8192 cycles/64ms	Same
I/O Capacitance	CIO: 4pf to 6pf	CIO: 4pf to 6pf	Same
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 ≤ 105C VDD/Q = 3.3V ±0.3V	Different
I _{DD1} (mA)	60	100	Alliance Better
I _{DD2N} (mA)	25	NA	NA
I _{DD2NS} (mA)	18	NA	NA
I _{DD2P} (mA)	2	2.5	Comparable
I _{DD2PS} (mA)	2	2.5	Comparable
I _{DD3N} (mA)	35	35	Comparable
I _{DD3NS} (mA)	35	35	Comparable
I _{DD4} (mA)	62	100	Alliance Better
I _{DD5} (mA)	75	150	Alliance Better
I _{DD6} (mA)	2	3	Comparable
Package	54p TSOP II (400mils)	54p TSOP II (400mils)	Same
Package Material	Pb & Halogen Free	Pb Free	Same