

AS4C2M32SA - 6TxN vs MT48LC2M32B2P - 6A Comparison

Part Number & result Parameter	AS4C2M32SA - 6TCN AS4C2M32SA-6TIN	MT48LC2M32B2P-6A MT48LC2M32B2P-6A IT	Comparison Result
Product Description	SDRAM	SDRAM	Same
Capacity	64Mb (2M x 32)	64Mb (2M x 32)	Same
Memory Organization	512K, x32 bits, x4 banks	512K, 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) Commercial (0°C~+70°C)	Industrial (- 40°C to 85°C) Commercial (0°C~+70°C)	Same
Clock Frequency	166MHz	167MHz	Comparable
Clock Cycle time (ns)	6	6	Same
CAS Latency	2 or 3	1 or 2 or 3	Comparable
tRCD & tRP (ns)	18	18	Same
Refresh Cycles	4096 refresh cycles/64ms	4096 cycles/64ms	Same
I/O Capacitance	CIO: 4pf to 6pf	CIO: 4pf to 6.5pf	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)	95	120	Alliance Better
IDD2N (mA)	25	NA	
IDD2NS (mA)	15	NA	
IDD2P (mA)	2	2	Same
IDD2PS (mA)	2	NA	
IDD3N (mA)	35	45	Alliance Better
IDD3NS (mA)	30	NA	
IDD4 (mA)	100	120	Alliance Better
IDD5 (mA)	130	180	Alliance Better
IDD6 (mA)	2	3	Comparable
Package	86p TSOP II (400mils) Plastic	86p TSOP II (400mils) Plastic	Same
Package Material	Pb & Halogen Free	Pb & Halogen Free	Same