

AS4C32M8SA-7TCN vs MT48LC32M8A2P-75 Comparison

Part Number & result Parameter	AS4C32M8SA-7TCN	MT48LC32M8A2P-75	Comparison Result
Product Description	SDRAM	SDRAM	Same
Capacity	256Mb (32M x 8)	256Mb (32M x 8)	Same
Memory Organization	8M, x8 bits, x4 banks	8M, x8 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~+70°C)	Commercial (0°C~+70°C)	Same
Clock Frequency	143MHz	133MHz	Alliance Better
Clock Cycle time (ns)	7	7.5	Comparable
CAS Latency	2 or 3	2 or 3	Same
tRCD & tRP (ns)	21	20	Comparable
Refresh Cycles	8192 refresh 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	0C ≤ Ta ≤ 70C VDD/Q = 3.3V ±0.3V	0C ≤ Ta ≤ 70C VDD/Q = 3.3V ±0.3V	Same
IDD1 (mA)	55	125	Alliance Better
IDD2N (mA)	30	NA	
IDD2NS (mA)	18	NA	
IDD2P (mA)	2	2.0	Same
IDD2PS (mA)	2	NA	
IDD3N (mA)	40	40	Same
IDD3NS (mA)	40	NA	
IDD4 (mA)	60	135	Alliance Better
IDD5 (mA)	75	270	Alliance Better
IDD6 (mA)	2	3.5	Comparable
Package	54p TSOP II (400mils) Plastic	54p TSOP II (400mils) Plastic	Same
Package Material	Pb & Halogen Free	Pb & Halogen Free	Same