

AS4C128M8D2-25BIN vs AS4C128M8D2A-25BIN Comparison

Part Number & result Parameter	AS4C128M8D2-25BIN	AS4C128M8D2A-25BIN	Comparison Result
Product Description	DDR2 SDRAM	DDR2 SDRAM	Same
Capacity	1Gb (128M x 8)	1Gb (128M x 8)	Same
Memory Organization	16M, x8bits, x8 banks	16M, x8bits, x8 banks	Same
Operating Power Supply	V _{DD} & V _{DDQ} = 1.8V (+/-0.1V)	V _{DD} & V _{DDQ} = 1.8V (+/-0.1V)	Same
Operating Temperature	Industrial (-40°C to 95°C)	Industrial (-40°C to 95°C)	Same
Clock Frequency	400MHz	400MHz	Same
Data Rate (MT/s)	800	800	Same
CAS Latency	5	5	Same
tRCD & tRP (ns)	12.5	12.5	Same
Average Refresh Period	8192 cycles/64ms	8192 cycles/64ms	Same
I/O Capacitance	CIO: 2.5pf to 3.5pf	CIO: 2.5pf to 3.5pf	Same
Pin to Pin Compatible	Pin to Pin Compatible		Same
AC/DC Characteristics	Same	Same	Meet JEDEC
IDD Specification			
IDD Spec conditions	-40C ≤ Tc ≤ 95C	-40C ≤ Tc ≤ 95C	Same
I _{DD0} (mA)	70	65	Comparable
I _{DD1} (mA)	85	75	Comparable
I _{DD2P} (mA)	10	10	same
I _{DD2Q} (mA)	35	35	same
I _{DD2N} (mA)	40	35	Comparable
I _{DD3Pf} (mA)	30	25	Comparable
I _{DD3Ps} (mA)	10	20	Comparable
I _{DD3N} (mA)	50	45	Rev. A Better
I _{DD4R} (mA)	120	95	Rev. A Better
I _{DD4W} (mA)	120	100	Rev. A Better
I _{DD5} (mA)	175	100	Rev. A Better
I _{DD6} (mA)	9	10	Comparable
I _{DD7} (mA)	250	170	Rev. A Better
Package 60b FBGA	8 x 10 x1.2mm Ball Array : 6.4 x 8.0 x 0.8mm	8 x 10 x1.2mm Ball Array : 6.4 x 8.0 x 0.8mm	Same
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same