12815 NE 124th St STE#D, Kirkland, WA-98034

AS4C256M16D3LC-12BIN vs AS4C256M16D3LD-10BIN Comparison

Part Number & result / Parameter	AS4C256M16D3LC-12BIN	AS4C256M16D3LD-10BIN	Comparison Result
Product Description	DDR3L SDRAM	DDR3L SDRAM	Same
Capacity	4Gb (256M x 16)	4Gb (256M x 16)	Same
Memory Organization	32Meg, x16bits, x8 banks	32Meg, x16bits, x8 banks	Same
Operating Power Supply	V_{DD} & V_{DDQ} = 1.35V (1.283V to 1.45V)	V_{DD} & V_{DDQ} = 1.35V (1.283V to 1.45V)	Same
DDR3 Compatibility	Compatible to 1.5±0.075	Compatible to 1.5±0.075	Same
Operating Temperature	Industrial (-40°C to 95°C)	Industrial (-40°C to 95°C)	Same
Clock Frequency (Max)	800MHz	933MHz, 800MHz	RevD better
Data Rate (MT/s)	1600	1866, 1600	RevD better
CAS Latency	11	13, 11	RevD better
tRCD & tRP (ns)	13.75	13.91, 13.75	RevD better
Average Refresh Period	8192 cycles/64ms upto 85C	8192 cycles/64ms upto 85C	Same
I/O Capacitance	Comparable		Same
Pin to Pin Compatible	Pin to Pin Compatible		Same
AC/DC Characteristics	Same	Same	Meet JEDEC
IDD Specification			
IDD Spec conditions	-40C to 95C	-40C to 95C	Same
I_{DD0} (mA)	57	120	RevC better
I_{DD1} (mA)	81	140	RevC better
I_{DD2P0} (mA)	8	52	RevC better
I_{DD2P1} (mA)	14	78	RevC better
I_{DD2N} (mA)	24	85	RevC better
I_{DD2Q} (mA)	24	85	RevC better
I_{DD3P} (mA)	26	85	RevC better
I_{DD3N} (mA)	38	110	RevC better
I_{DD4R} (mA)	155	220	RevC better
I_{DD4W} (mA)	155	220	RevC better
I_{DD5B} (mA)	235	200	RevD better
I_{DD6} (mA)	12	40	RevC better
I_{DD7}(mA)	190	280	RevC better
I_{DD8} (mA)	10	30	RevC better
Package 96b FBGA	(7.5mm x 13.5mm x 1.2mm) Ball Array (mm): 12x 6.4 x 0.8	(7.5mm x 13.0mm x 1.0mm) BallArray (mm): 12x 6.4 x 0.8	Comparable
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same