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

AS4C256M16D3LB-10 & AS4C256M16D3LC-10 Comparison

(4Gb – 256M x 16, DDR3L rev.B vs rev.C Comparison)

Part Number & result / Parameter	AS4C256M16D3LB-10BCN AS4C256M16D3LB-10BIN	AS4C256M16D3LC-10BCN AS4C256M16D3LC-10BIN	Comparison Result
Fab Process Technology	**30nm**	**25nm**	Different
Capacity	4Gb (256M x 16)	4Gb (256M x 16)	Same
Memory Organization	32Mwords, x16bits, x8 banks	32Mwords, 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±0.075V	Compatible to 1.5±0.075V	Same
Operating Temperature	Commercial (0°C to 95°C) Industrial (-40 ~ 95°C)	Commercial (0°C to 95°C) Industrial (-40 ~ 95°C)	Same
Clock Frequency	933MHz	933MHz	Same
CAS Latency	13	13	Same
tRCD & tRP (ns)	13.91	13.91	Same
AC/DC Characteristics	Same	Same	Same
IDD Specification			
I_{DD0} (mA)	60	59	Comparable
I_{DD1} (mA)	80	84	Comparable
I_{DD2P0} (mA)	12	8	Comparable
I_{DD2P1} (mA)	19	16	Comparable
I_{DD2N} (mA)	25	26	Comparable
I_{DD2NT} (mA)	30	30	Comparable
I_{DD2Q} (mA)	25	26	Comparable
I_{DD3P} (mA)	22	28	Comparable
I_{DD3N} (mA)	34	40	Comparable
I_{DD4R} (mA)	150	165	RevC better
I_{DD4W} (mA)	165	165	Comparable
I_{DD5B} (mA)	160	242	RevB better
I_{DD6} (mA)	12	12	Comparable
I_{DD6ET} (mA)	17	16	Comparable
I_{DD7} (mA)	215	200	RevC better
I_{DD8} (mA)	12	10	Comparable
Package	96-ball FBGA package (9 x 13.5 x 1.1mm)	96-ball FBGA package (7.5 x 13.5 x 1.2mm)	Ball matrix dimension same
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same
Reliability & QA	Same	Same	Same