

**AS4C256M16D3LD-10BIN vs MT41K256M16TW-107IT P Comparison**

Part Number & result Parameter	AS4C256M16D3LD-10BIN	MT41K256M16TW-107 IT	Comparison Result
<b>Product Description</b>	<b>DDR3L SDRAM</b>	<b>DDR3L SDRAM</b>	Same
<b>Capacity</b>	4Gb (256M x 16)	4Gb (256M x 16)	Same
<b>Memory Organization</b>	32Meg, x16bits, x8 banks	32Meg, x16bits, x8 banks	Same
<b>Operating Power Supply</b>	V <sub>DD</sub> & V <sub>DDQ</sub> = 1.35V (1.283V to 1.45V)	V <sub>DD</sub> & V <sub>DDQ</sub> = 1.35V (1.283V to 1.45V)	Same
<b>DDR3 Compatibility</b>	Compatible to 1.5±0.075	Compatible to 1.5±0.075	Same
<b>Operating Temperature</b>	Industrial (-40°C to 95°C)	Industrial (-40°C to 95°C)	Same
<b>Clock Frequency</b>	933MHz	933MHz	Same
<b>Data Rate (MT/s)</b>	1866	1866	Same
<b>CAS Latency</b>	13	13	Same
<b>tRCD &amp; tRP (ns)</b>	13.91	13.91	Same
<b>Average Refresh Period</b>	8192 cycles/64ms upto 85C	8192 cycles/64ms upto 85C	Same
<b>I/O Capacitance</b>	Comparable		Same
<b>Pin to Pin Compatible</b>	Pin to Pin Compatible		Same
<b>AC/DC Characteristics</b>	Same	Same	Meet JEDEC
<b>IDD Specification</b>			
<b>IDD Spec conditions</b>	-40C to 95C	-40C to 85C	Different
<b>I<sub>DD0</sub> (mA)</b>	130	73	
<b>I<sub>DD1</sub> (mA)</b>	160	91	
<b>I<sub>DD2P0</sub> (mA)</b>	52	18	
<b>I<sub>DD2P1</sub> (mA)</b>	85	37	
<b>I<sub>DD2N</sub> (mA)</b>	90	35	
<b>I<sub>DD2Q</sub> (mA)</b>	90	35	
<b>I<sub>DD3P</sub> (mA)</b>	90	41	
<b>I<sub>DD3N</sub> (mA)</b>	115	49	
<b>I<sub>DD4R</sub> (mA)</b>	240	252	
<b>I<sub>DD4W</sub> (mA)</b>	240	190	
<b>I<sub>DD5B</sub> (mA)</b>	207	242	
<b>I<sub>DD6</sub> (mA)</b>	45	20	
<b>I<sub>DD7</sub> (mA)</b>	300	274	
<b>I<sub>DD8</sub> (mA)</b>	10	20	
<b>Package 96b FBGA</b>	(7.5mm x 13.0mm x 1.0mm) Ball Array : 12 x 6.4 x 0.8mm	(8mm x 14mm x 1.2mm) BallArray (mm): 12x 6.4 x 0.8	Alliance better
<b>Package Material</b>	Pb and Halogen Free	Pb and Halogen Free	Same