



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

AS4C64M16D3B-12BCN vs IS43TR16640CL-125JBL Comparison

Part Number & result Parameter	AS4C64M16D3B-12BCN	IS43TR16640CL-125JBL	Comparison Result
Product Description	DDR3 SDRAM	DDR3 SDRAM	Same
Capacity	1Gb (64M x 16)	1Gb (64M x 16)	Same
Memory Organization	8M, x16bits, x8 banks	8M, x16bits, x8 banks	Same
Operating Power Supply	V _{DD} & V _{DDQ} = 1.5V (± 0.075V)	V _{DD} & V _{DDQ} = 1.5V (± 0.075V)	Same
Operating Temperature	Commercial (0°C to 95°C)	Commercial (0°C to 95°C)	Same
Clock Frequency	800MHz	800MHz	Same
Data Rate (MT/s)	1600	1600	Same
CAS Latency	11	11	Same
tRCD & tRP (ns)	13.75	13.75	Same
Average Refresh Period	8192 cycles/64ms	8192 cycles/64ms	Same
I/O Capacitance	CIO: 1.4pf to 2.3pf	CIO: 1.4pf to 2.3pf	Same
Pin to Pin Compatible	Pin to Pin Compatible		Same
AC/DC Characteristics	Same	Same	Meet JEDEC
IDD Specification			
IDD Spec conditions	0C ≤ Tc ≤ 95C V _{DD} & V _{DDQ} = 1.5V (± 0.075V)	0C ≤ Tc ≤ 95C V _{DD} & V _{DDQ} = 1.5V (± 0.075V)	Same
I _{DD0} (mA)	56	70	Alliance Better
I _{DD1} (mA)	72	100	Alliance Better
I _{DD2P 0} (mA)	8	14	Alliance Better
I _{DD2P 1} (mA)	16	21	Alliance Better
I _{DD2Q} (mA)	35	38	Alliance Better
I _{DD2N} (mA)	35	41	Alliance Better
I _{DD3N} (mA)	43	70	Alliance Better
I _{DD3P} (mA)	28	42	Alliance Better
I _{DD4R} (mA)	140	180	Alliance Better
I _{DD4W} (mA)	150	200	Alliance Better
I _{DD5B} (mA)	95	165	Alliance Better
I _{DD6} (mA)	8	14	Alliance Better
I _{DD6ET} (mA)	10	15	Alliance Better
I _{DD7} (mA)	195	280	Alliance Better
I _{DD8} (mA)	10	-	
Package 96b FBGA	9 x 13 x 1.2mm	9 x 13 x 1.2mm	Same
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same