

AS4C16M16SB-7TCN vs IS42S16160A-7T Comparison

	AS4C16M16SB-7TCN	IS42S16160A-7T	Comparison Result
Product Description	SDRAM	SDRAM	Same
Capacity	256Mb (16M x 16)	256Mb (16M x 16)	Same
Memory Organization	4M, x16bits, x4 banks	4M, x16bits, x4 banks	Same
OperatingPower Supply	V _{DD} & V _{DDQ} = 3.3V ± 0.3V	V _{DD} & V _{DDQ} = 3.3V ± 0.3V	Same
Operating Temperature	Commercial (0°C to 70°C)	Commercial (0°C to 70°C)	Same
Clock Frequency(Max)	143MHz	143MHz	Same
CAS Latency	2 or 3	2 or 3	Same
tRCD & tRP (ns)	21	20	comparable
Average Refresh Period	8192 cycles/64ms	8192 cycles/64ms	Same
I/O Capacitance	CIO: 4pf to 6pf	CIO: 4pf to 6.5pf	comparable
AC/DC Characteristics	Comparable ,Meet JEDEC		
IDD Specification			
IDD Spec conditions	0C ≤ Tc ≤ 70C	0C ≤ Tc ≤ 70C	Same
I _{DD1} (mA)	55	130	Alliance Better
I _{DD2N} (mA)	30	20	ISSI better
I _{DD2NS} (mA)	18	15	ISSI better
I _{DD2P} (mA)	2	2	Same
I _{DD2PS} (mA)	2	2	Same
I _{DD3N} (mA)	40	30	ISSI Better
I _{DD3NS} (mA)	40	20	ISSI Better
I _{DD4} (mA)	60	160	Alliance Better
I _{DD5} (mA)	75	160	Alliance Better
I _{DD6} (mA)	2	3	Alliance Better
Package	54pin TSOP II	54pin TSOP II	Same
Package Material	Pb and Halogen Free	Leaded Part	Alliance Better

