

AS4C16M16SA-6TCN vs IS42S16160G-6TL Comparison

Part Number & result Parameter	AS4C16M16SA-6TCN	IS42S16160G-6TL	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
Operating Power Supply	$V_{DD} \& V_{DDQ} = 3.3V \pm 0.3V$	$V_{DD} \& V_{DDQ} = 3.3V \pm 0.3V$	Same
Operating Temperature	Commercial (0°C to 70°C)	Commercial (0°C to 70°C)	Same
Clock Frequency	166MHz	166MHz	Same
CAS Latency	2 or 3	2 or 3	Same
tRCD & tRP (ns)	18	18	Same
Average Refresh Period	8192 cycles/64ms	8192 cycles/64ms	Same
I/O Capacitance	CIO: 4pf to 6pf	CIO: 4pf to 6pf	Same
Pin to Pin Compatible	Pin to Pin Compatible		Same
AC/DC Characteristics	Omit.(See datasheet)	Omit.(See datasheet)	Comparable ,Meet JEDEC
IDD Specification			
IDD Spec conditions	$0C \leq T_c \leq 70C$ $V_{DD} = 3.3 \pm 0.3V$	$0C \leq T_c \leq 70C$ $V_{DD} = 3.3 \pm 0.3V$	Same
I_{DD1} (mA)	60	130	Alliance Better
I_{DD2N} (mA)	25	25	Same
I_{DD2NS} (mA)	18	20	Alliance Better
I_{DD2P} (mA)	2	4	Alliance Better
I_{DD2PS} (mA)	2	4	Alliance Better
I_{DD3N} (mA)	35	30	ISSI Better
I_{DD3NS} (mA)	35	15	ISSI Better
I_{DD4}(mA)	62	160	Alliance Better
I_{DD5} (mA)	75	160	Alliance Better
I_{DD6} (mA)	2	5	Alliance Better
Package	54pin TSOP II	54pin TSOP II	Same
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same