

AS7C38098A-10BIN vs IS61WV51216BLL-10MLI Comparison

Part Number & result Parameter	AS7C38096A-10BIN	IS61WV51216BLL-10MLI	Comparison Result
Product Description	FAST ASRAM	FAST ASRAM	Same
Capacity	8Mb	8Mb	Same
Memory Organization	512K, x16bits, 1 Chip Select	512K, x16bits, 1 Chip Select	Same
Operating Power Supply	V _{CC} =2.7V ~ 3.6V	V _{CC} =2.4V ~ 3.6V	Comparable
Operating Temperature	Industrial (-40°C to 85°C)	Industrial (-40°C to 85°C)	Same
I/O Capacitance	CIO: 10pf(MAX.)	CIO: 8pf(MAX.)	Comparable
Pin to Pin Compatible	Pin to Pin Compatible		Same
Access time (ns)	10	10	Same
tRC & tWC (ns)	10	10	Same
tAA (ns)	10	10	Same
DC Characteristics			
Spec conditions	-40C ≤ TA ≤ 85C V _{CC} = 2.7V ~ 3.6V	-40C ≤ TA ≤ 85C V _{CC} = 2.4V ~ 3.6V	Comparable
V_{OH} (V)	2.4 (min.)	1.8 (min.)	Comparable
V_{OL} (V)	0.4 (max.)	0.4 (max.)	Same
V_{IH} (V)	2.2(min.)	2.0(min.)	Comparable
V_{IL} (V)	0.8(max.)	0.8(max.)	Same
I_{LI} (uA)	1 (max.)	1 (max.)	Same
I_{LO}(uA)	1 (max.)	1 (max.)	Same
I_{CC} (mA)	130 (max.)	95 (max.)	ISSI Better
I_{CC1}(mA)	100 (max.)	90 (max.)	ISSI Better
I_{SB1} (mA)	40 (max.)	35 (max.)	ISSI Better
I_{SB2} (mA)	25 (max.)	25 (max.)	Same
V_{DR}	1.5V (min.)	1.2V (min.)	ISSI Better
I_{DR}	25mA	20mA	ISSI Better
Package (Outer Dimensions)	48ball TFBGA (6mm x 8mm)	48ball TFBGA (9mm x 11mm)	Alliance Smaller
Package (Ball Matrix/Dimensions)	3.75mm x 5.25mm x 0.75mm	3.75mm x 5.25mm x 0.75mm	Same
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same