

AS6C4016A-45BIN vs AS6C4016-55BIN Comparison

Part Number & result Parameter	AS6C4016A-45BIN	AS6C4016-55BIN	Comparison Result
Product Description	Low Power ASRAM	Low Power ASRAM	Same
Capacity	4Mb	4Mb	Same
Memory Organization	256K x 16bits	256K x 16bits	Same
OperatingPower Supply	V _{CC} =2.7V ~ 3.6V	V _{CC} =2.7V ~ 5.5V	Different
Operating Temperature	Industrial (-40°C to 85°C)	Industrial (-40°C to 85°C)	Same
I/O Capacitance	CIO: 10pf(MAX.)	CIO: 8pf(MAX.)	Different
Read Cycle Time (tRC)	45ns Min	55ns Min	Different
Write Cycle Time (tWC)	45ns Min	55ns Min	Different
Addr Access Time(tAA)	45ns Max	55ns Max	Different
OE Access Time (tOE)	20ns Max	30ns Max	Different
V _{OH} (V) @ -1.0mA	2.4 (min.)	2.4 (min.)	Same
V _{OL} (V) @ 2mA	0.4 (max.)	0.4 (max.)	Same
V _{IH} (V)	2.2 (min.)	2.4 (min.)	Comparable
V _{IL} (V)	0.6 (max.)	0.6 (max.)	Same
I _{LI} / I _{LO} (uA)	1 (max.)	1 (max.)	Same
I _{CC} (Cycle Time=Min) Operating Current	<u>ICC2</u> 35mA(Max)@45ns, @3.6V, @85C	<u>ICC</u> 30mA (Typ.) @ 3.3V @ 25C 60mA(Max)@55ns,@5.5V, 85C	Symbol Different
I _{CC1} (Cycle Time=1uS) Operating Current	<u>ICC1</u> 3mA (Max) @ 3.6V @ 85C	<u>ICC1</u> 10mA (Max) @ 5.5V @ 85C	Symbol Different
I _{sb1} (Standby Current)	0.25uA (Typ) @ 3.3V @ 25C 4uA (Max) @ 3.6V @85C	4uA (Typ) @ 3.3V @ 25C 50uA (Max) @ 5.5V @85C	Different
V _{DR}	1.5V	1.5V	Same
Package	6mm x 7mm	6mm x 8mm BGA	Ball matrix same
Package Material	Pb and Halogen Free	Pb and Halogen Free	Same
Pin to Pin Compatible	Yes	Yes	Same