

AS6C1616-55BIN & AS6C1616B-55BIN Comparison

Part Number & result Parameter	AS6C1616-55BIN	AS6C1616B-55BIN	Comments
Product Description	Low Power ASRAM Rev.0	Low Power ASRAM Rev.B	Different Revisions and Process IPs
Fab / Process Technology	GF / 150nm	HHGSMC / 90nm	Different Fab and Technology
Capacity	16Mb	16Mb	Same
Memory Organization	1024K x 16bits	1024K x 16bits	Same
Oper. Power Supply	V _{CC} =2.7V ~ 3.6V	V _{CC} =2.7V ~ 3.6V	Same
Operating Temperature	Industrial (-40°C to 85°C)	Industrial (-40°C to 85°C)	Same
I/O Capacitance	CIO: 8pf (Max.)	CIO: 8pf (Max.)	Same
Read Cycle Time (tRC)	55ns (Min.)	55ns (Min.)	Same
Write Cycle Time (tWC)	55ns (Min.)	55ns (Min.)	Same
Addr Access Time(tAA)	55ns (Max.)	55ns (Max.)	Same
OE Access Time (tOE)	30ns (Max.)	30ns (Max.)	Same
V_{OH}(V) @ -1.0mA	2.2 (Min.)	2.2 (Min.)	Same
V_{OL}(V) @ 2mA	0.4 (Max.)	0.4 (Max.)	Same
V_{IH}(V)	2.2 (Min.)	2.2 (Min.)	Same
V_{IL}(V)	0.6 (Max.)	0.6 (Max.)	Same
I_{LI} / I_{LO}(uA)	1 (Max.)	1 (Max.)	Same
Oper. Current (Cycle Time=55ns)	I _{CC} = 60mA	I _{CC} = 18mA	Rev.B better
Oper. Current (Cycle Time=1us)	I _{CC1} = 16mA (Max.)	I _{CC1} = 5mA (Max.)	Rev.B better
StandbyCurrent Isb1	40uA (Max.)	40uA (Max.)	Same
V_{DR}	1.2 (Min.)	1.5V (Min.)	Rev.0 better
Package TFBGA Outer Dimensions	6mm x 8mm	6mm x 8mm	Same
Ball pitch and array	0.75mm, 3.75 x 5.25mm	0.75mm, 3.75 x 5.25mm	Same
Package Material	Pb and Halogen Free		Same
Pin to Pin Compatible	Yes	Yes	Same