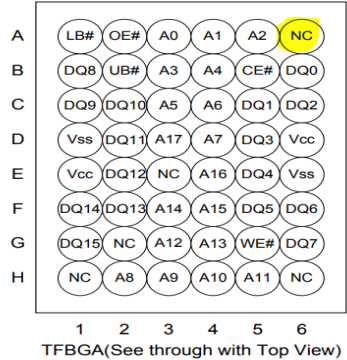


AS6C4016-55BIN vs AS6C4016A-55BIN vs AS6CE4016B-45BIN Comparison

Part Number & result Parameter	AS6C4016-55BIN	AS6C4016A-55BIN	AS6CE4016B-45BIN
Product Description	Low Power ASRAM	Low Power ASRAM	Low Power ASRAM with ECC
Capacity	4Mb	4Mb	4Mb
Memory Organization	256K x 16bits	256K x 16bits	256K x 16bits
Operating Power Supply	V _{CC} = 2.7V ~ 5.5V	V _{CC} = 2.7V ~ 3.6V	V _{CC} = 2.7V ~ 3.6V
Operating Temperature	Industrial (-40°C to 85°C)	Industrial (-40°C to 85°C)	Industrial (-40°C to 85°C)
I/O Capacitance	CIO: 8pf (max.)	CIO: 10pf (max.)	CIO: 8pf(max.)
Read Cycle Time (tRC)	55ns (min.)	55ns (min.)	45ns (min.)
Write Cycle Time (tWC)	55ns (min.)	55ns (min.)	45ns (min.)
Addr Access Time(tAA)	55ns (max.)	55ns (max.)	45ns (max.)
OE Access Time (tOE)	30ns (max.)	30ns (max.)	25ns (max.)
V_{OH} (V) @ -1.0mA	2.4 (min.)	2.4 (min.)	2.2 (min.)
V_{OL} (V) @ 2mA	0.6 (max.)	0.6 (max.)	0.4 (max.)
V_{IH} (V)	2.4 (min.)	2.2 (min.)	2.2 (min.)
V_{IL} (V)	0.6 (max.)	0.6 (max.)	0.6 (max.)
I_{LI} / I_{LO}(uA)	1 (max.)	1 (max.)	1 (max.)
I_{CC} (Cycle Time=Min) Operating Current	60mA @ 5.5V 40mA @ 3.6V	35mA (max.)	20mA (max.)
I_{CC1} (Cycle Time=1uS) Operating Current	10mA @ 5.5V 6mA @ 5.5V	3mA (max.)	5mA (max.)
I_{sb1} (Standby Current)	4uA (Typ) @ 3.3V/25C 50uA (max.) @ 5.5V	0.25uA (Typ) @ 3.3V/25C 4uA (max.) @ 3.6V	2.5uA (Typ) @ 3.3V/25C 20uA (max.)
V_{DR}	1.5V	1.5V	1.5V
Package	6mm x 8mm FBGA	6mm x 7mm FBGA	6mm x 8mm BGA
Package Material	Pb and Halogen Free	Pb and Halogen Free	Pb and Halogen Free
Pin to Pin Compatible	Single Chip Enable	Single Chip Enable	Single Chip Enable
	 TFPGA(See through with Top View)		