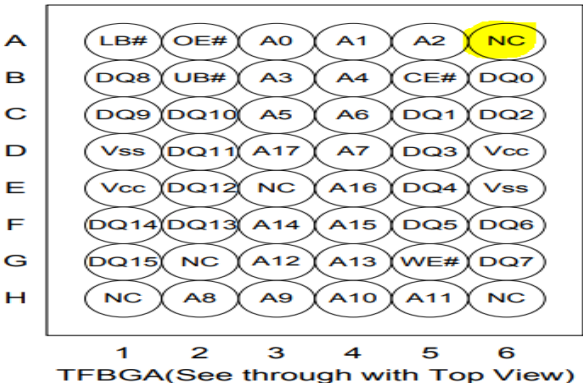


AS6C4016A-45BIN vs AS6C4016B-45BIN vs AS6CE4016B-45BIN Comparison

Part Number & result Parameter	AS6C4016A-45BIN	AS6C4016B-45BIN	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 ~ 3.6V	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: 10pf (max.)	CIO: 8pf(max.)	CIO: 8pf(max.)
Read Cycle Time (t _{RC})	45ns (min.)	45ns (min.)	45ns (min.)
Write Cycle Time (t _{WC})	45ns (min.)	45ns (min.)	45ns (min.)
Addr Access Time(t _{AA})	45ns (max.)	45ns (max.)	45ns (max.)
OE Access Time (t _{OE})	25ns (max.)	25ns (max.)	25ns (max.)
V _{OH} (V) @ -1.0mA	2.4 (min.)	2.2 (min.)	2.2 (min.)
V _{OL} (V) @ 2mA	0.6 (max.)	0.4 (max.)	0.4 (max.)
V _{IH} (V)	2.2 (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	35mA (max.)	20mA (max.)	20mA (max.)
I _{CC1} (Cycle Time=1uS) Operating Current	3mA (max.)	4mA (max.)	5mA (max.)
I _{sb1} (Standby Current)	0.25uA (Typ) @ 3.3V/25C 4uA (max.) @ 3.6V	2uA (Typ) @ 3.3V/25C 12uA (max.)	2.5uA (Typ) @ 3.3V/25C 20uA (max.)
V _{DR}	1.5V	1.5V	1.5V
Package	6mm x 7mm FBGA	6mm x 8mm BGA	6mm x 8mm BGA
Package Material	Pb and Halogen Free	Pb and Halogen Free	Pb and Halogen Free
Pin to Pin Compatible	Yes, Single Chip Enable		
	 TFBGA(See through with Top View)		