

BRCM24C32SC

Rev.B Dec.-2018



DATA SHEET

BRCM24C32SC SOP-8 32 Kbit I²C

The BRCM24C32SC is 32Kbit I²C-compatible Serial EEPROM (Electrically Erasable Programmable Read-Only Memory) device in a SOP-8 Plastic Package. Halogen-free Product.

1.7V	2.5~ 5.5V	1Mhz	1.7~ 2.5V
400Khz			
CMOS	400uA	1.6mA	

/ Pinning

Pin	Name	Type	Description
1	EO	Input	
2	E1	Input	
3	E2	Input	
4	GND	Ground	
5	SDA	I/O	/
6	SCL	Input	
7	WCB	Input	
8	VCC	Power	

/ Marking

/ See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Storage Temperature	T _{stg}	-65~+150	
Operation Temperature	T _{opr}	-40~+85	
Maximum Operation Voltage	V _{cc}	6.25	V
Voltage on Any Pin with Respect to Ground	V _{pin}	-1.0~ V _{cc} +1.0	V
DC Output Current	I _{out}	5.0	mA
Electro-Static discharge HBM mode	ESD	6000	V

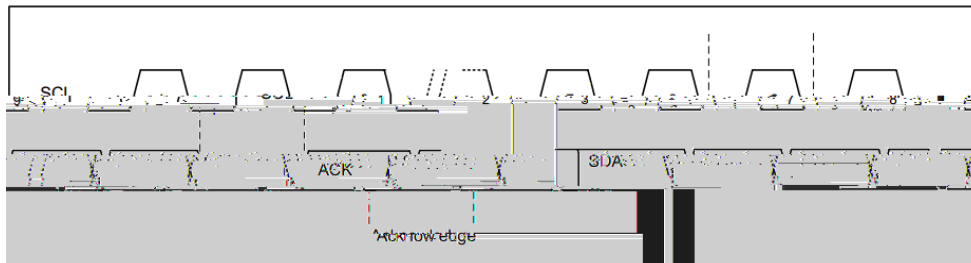
/ Reliability Characteristic

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Endurance	EDR	25 3.3V Page mode	1,000,000			Write cycles
Data retention	DRET		100			Years

Parameter	Symbol	1.7V Vcc<2.5V	2.5V Vcc 5.5V	Unit
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/ Functional Description

All addresses and data words are serially transmitted to and from the BRCM24C32SC in 8-bit words. The BRCM24C32SC sends a “0” to acknowledge that it has received each word. This happens during the ninth clock cycle.



/ Functional Description

The lower five bits of the data word address are internally incremented following the receipt of each data word. The higher data word address bits are not incremented, retaining the memory page row location. When the word address, internally generated, reaches the page boundary, the following byte is placed at the beginning of the same page. If more than 32 data words are transmitted to the BRCM24C32SC, the data word address will roll-over, and previous data will be overwritten. The address roll-over during write is from the last byte of the current page to the first byte of the same page.

/ Acknowledge Polling

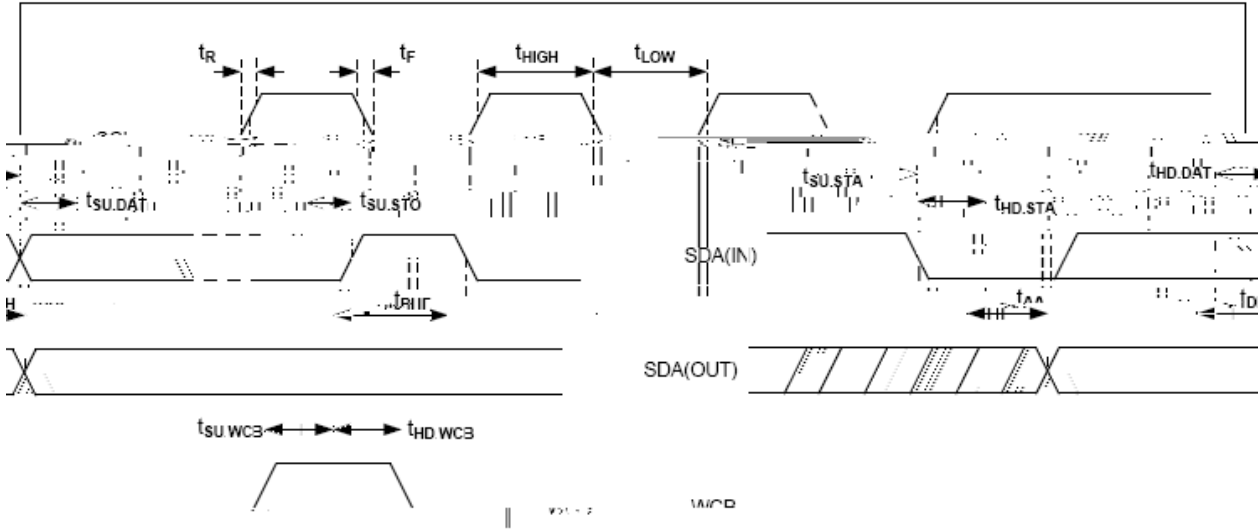
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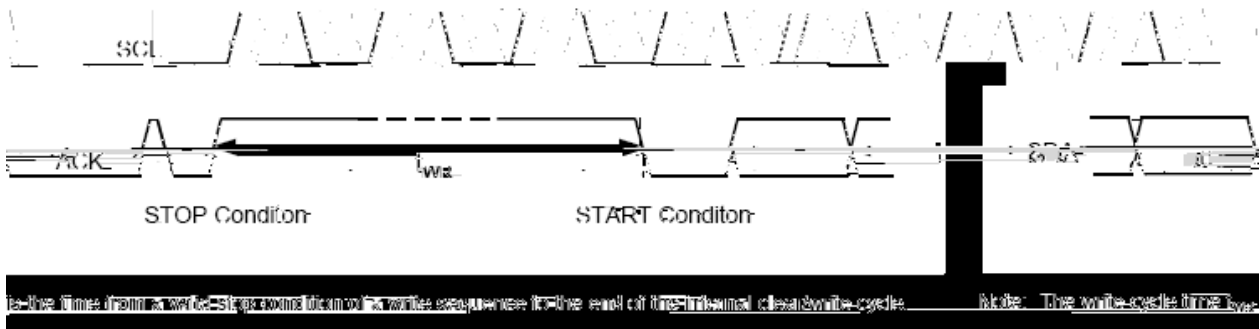
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/ Time Sequence Diagram

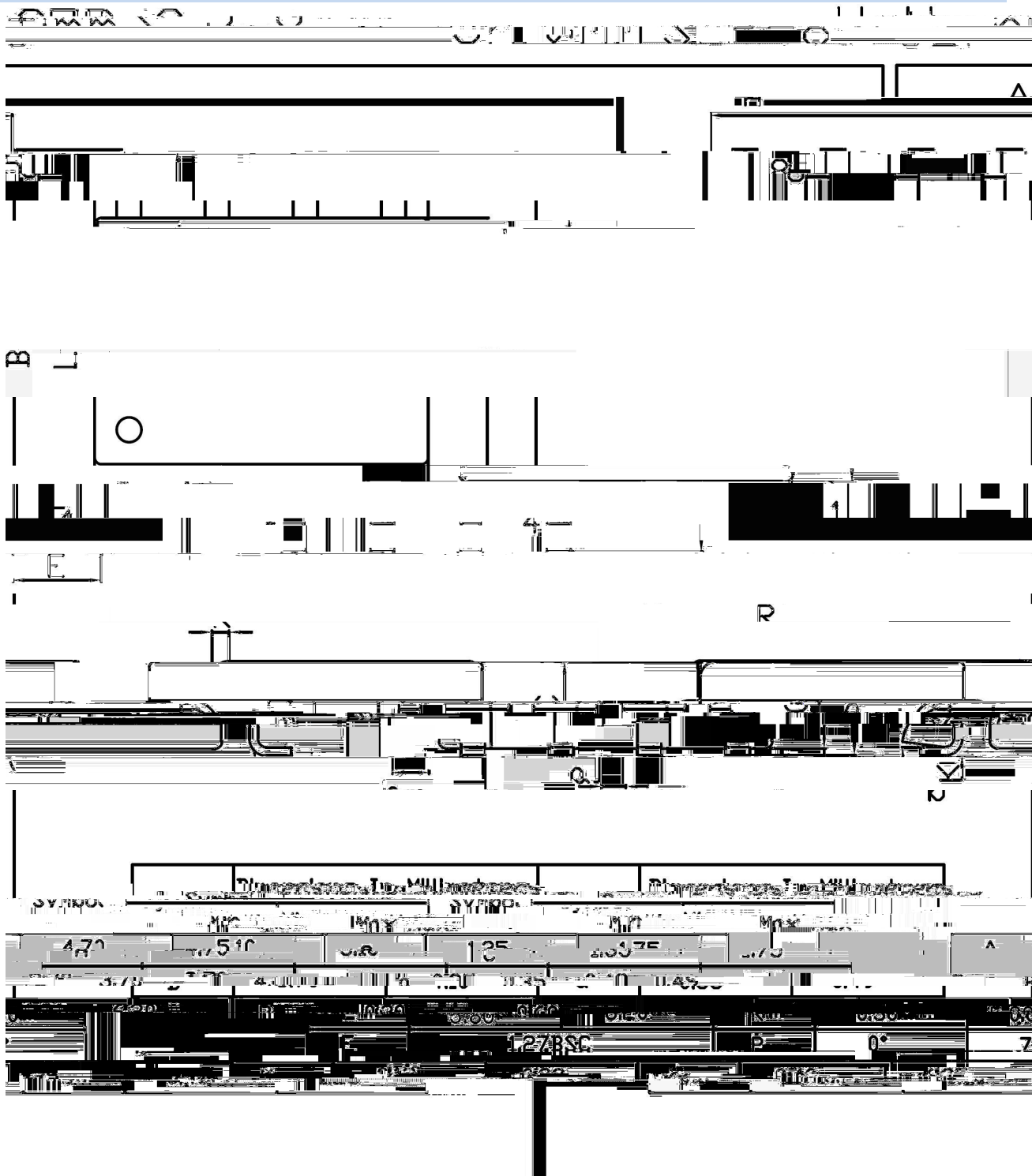
Bus Timing



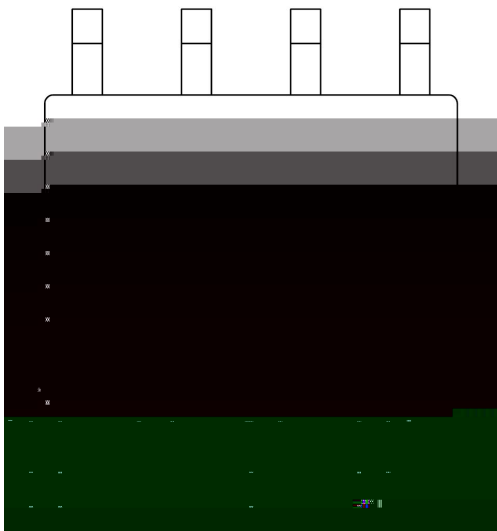
Write Cycle Timing



/ Package Dimensions



/ Marking Instructions



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24C32

Note:

BR: Company Code.

24C32: Product Type.

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