BRCM24C32SC SOP-8 32 Kbit I²C

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

/ Pinning

Pin	Name	Type	Description
1	E0	Input	
2	E1	Input	
3	E2	Input	
4	GND	Ground	
5	SDA	I/O	/
6	SCL	Input	
7	WCB	Input	
8	VCC	Power	

/ Marking

/ Absolute Maximum Ratings(Ta=25)

			mA
			V

/ Reliability Characteristic

		≤	≤ ≤	

/ Functional Description

/ Data Input

SDA SDA SCL (1) SCL
SDA (1)

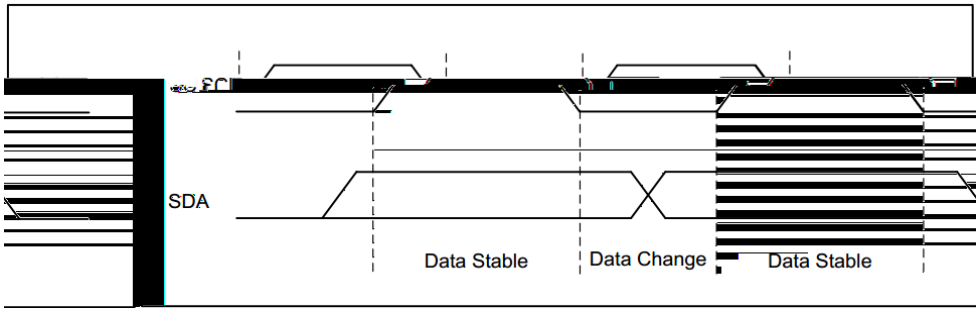


Figure 1 Data Validity

/ Start Condition

SCL SDA
2

.

/ Stop Condition

SCL SDA
BRCM24C32SC

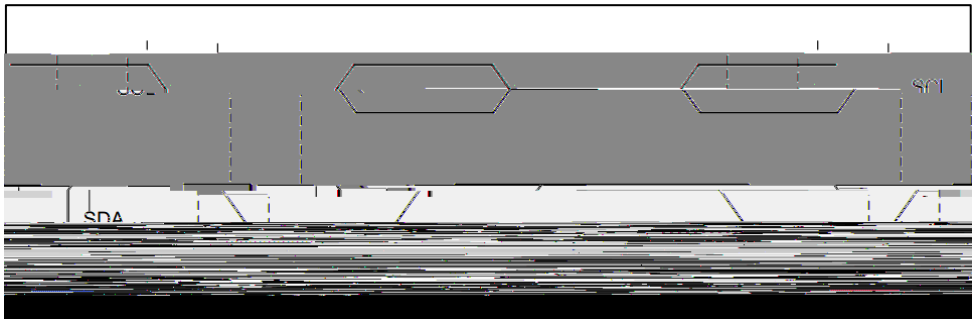
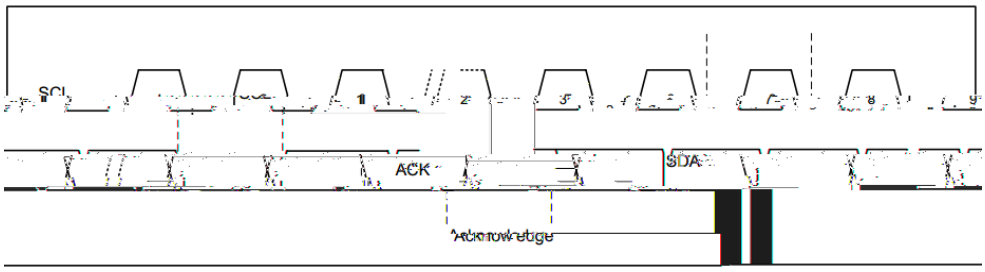


Figure 2 Start and Stop Definition

ACK / Acknowledge

BRCM24C32SC BRCM24C32SC “ 0 ”
ACK 9

/ Functional Description



/ Functional Description

E2 E1 E0 8 E2 E1 E0 8 /

0 1 0

/ Data Security

BRCM24C32SC WCB Vcc

/ Byte Write

8

BRCM24C32SC “0” 8 8

BRCM24C32SC “0”

BRCM24C32SC BRCM24C32SC

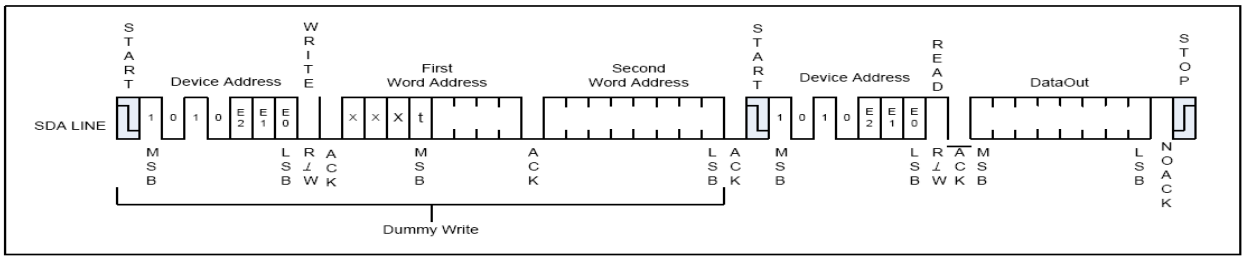
(5)

/ Functional Description

/ Acknowledge Polling

BRCM24C32SC

/ Functional Description



Notes: [1] x means don't care bits.

[2] t means don't care bit for BRCM24C32SC

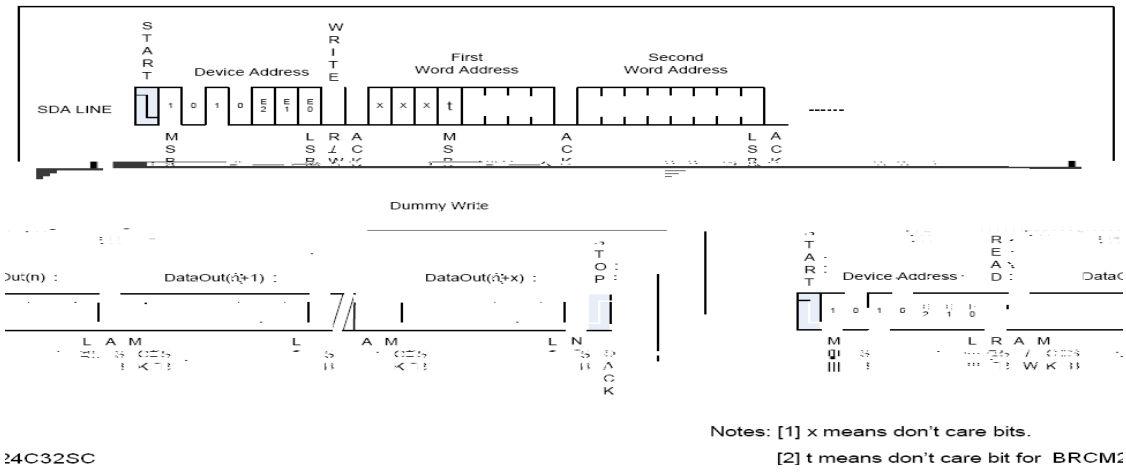
Figure 8 Random Address Read

/ Sequential Read

BRCM24C32SC

" 0 "

9



Notes: [1] x means don't care bits.

[2] t means don't care bit for BRCM24C32SC

Figure 9

/ Functional Description

/ Read Identification Page

32

1011b A15 / A5 A4 / A0 ID

10d 22 ID

32

/ Read the Lock Status

[+] /

ACK NoACK,(10)

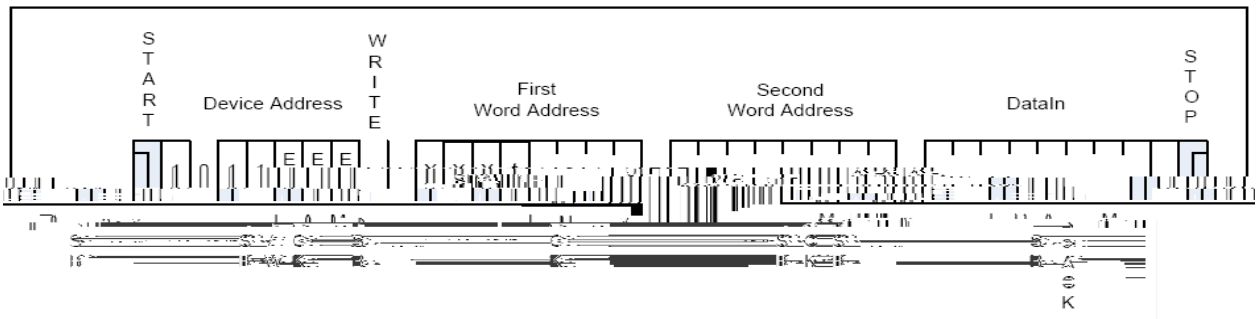


Figure 10 Lock Status Read (When Identification page locked, return NoACK after one data byte)

/ Read Serial Number

1

128

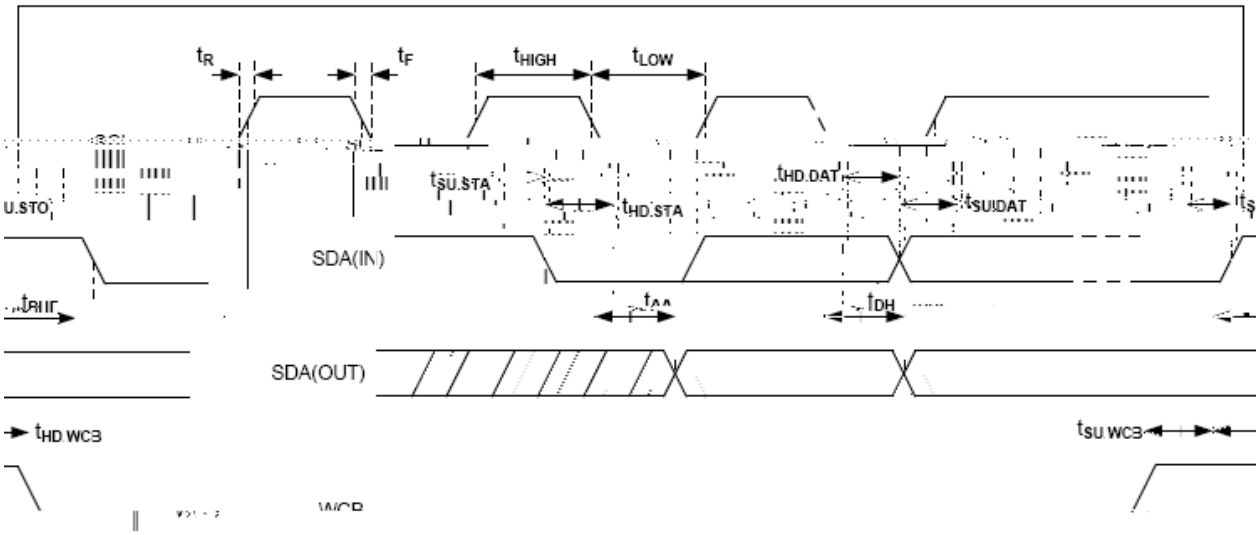
EEPROM “ ”

EEPROM

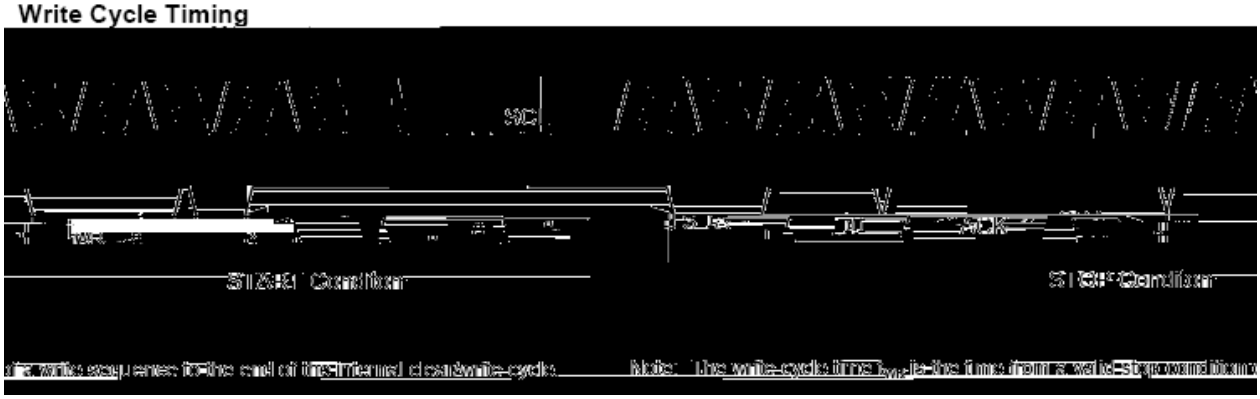
1

/ Time Sequence Diagram

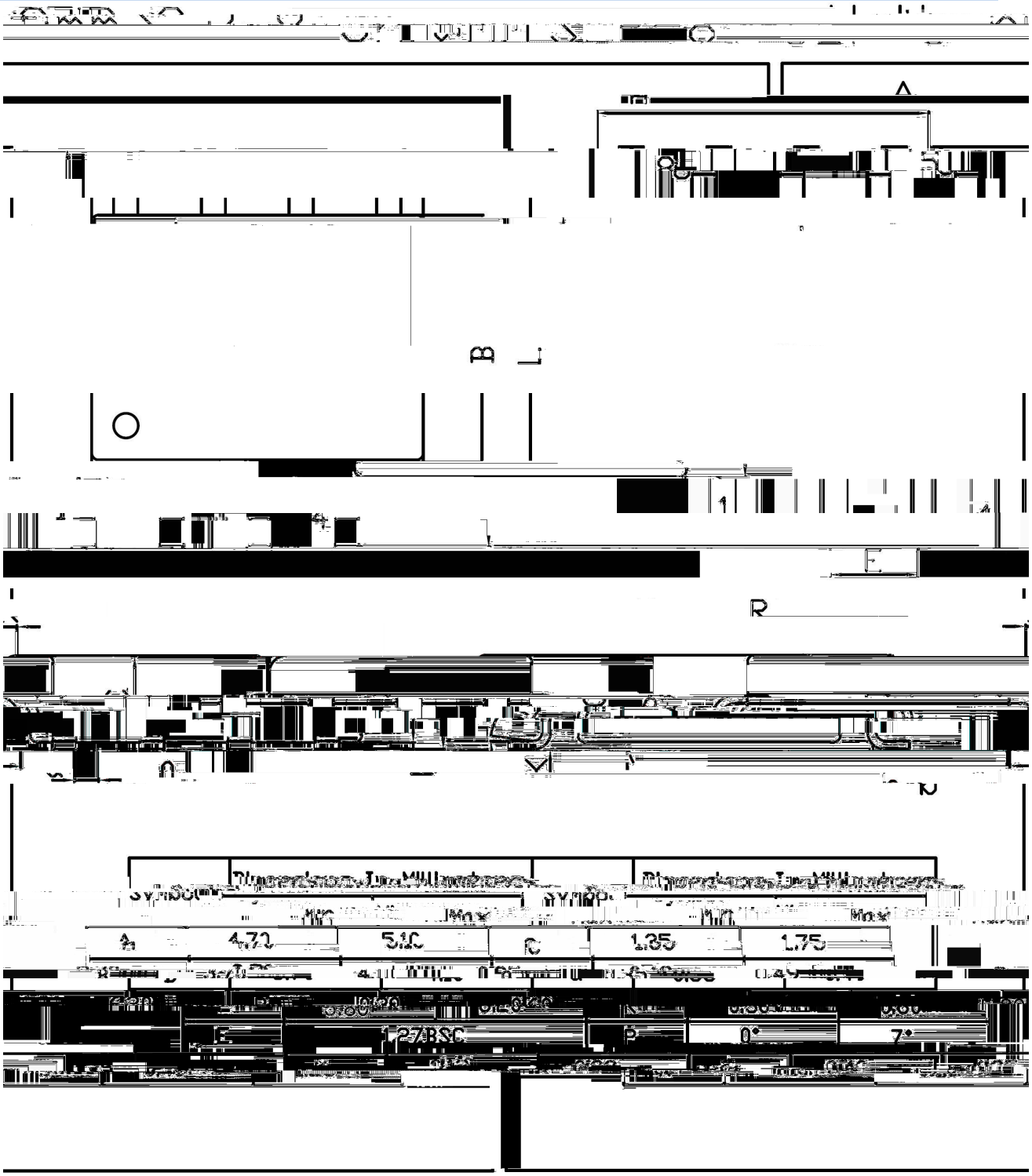
Bus Timing



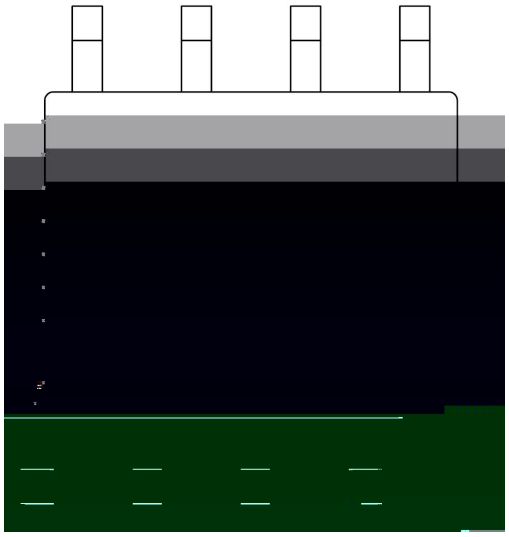
Write Cycle Timing



/ Package Dimensions



/ Marking Instructions



24C32

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BRCM24C32SC