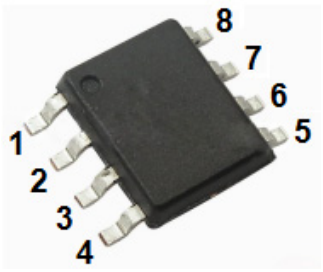
BRCM24C04SC SOP-8 4 Kbit I²C

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

16

128
5ms
100 100 ESD HBM 6KV
+/-200mA;



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

			mA
ˆ ˜			V

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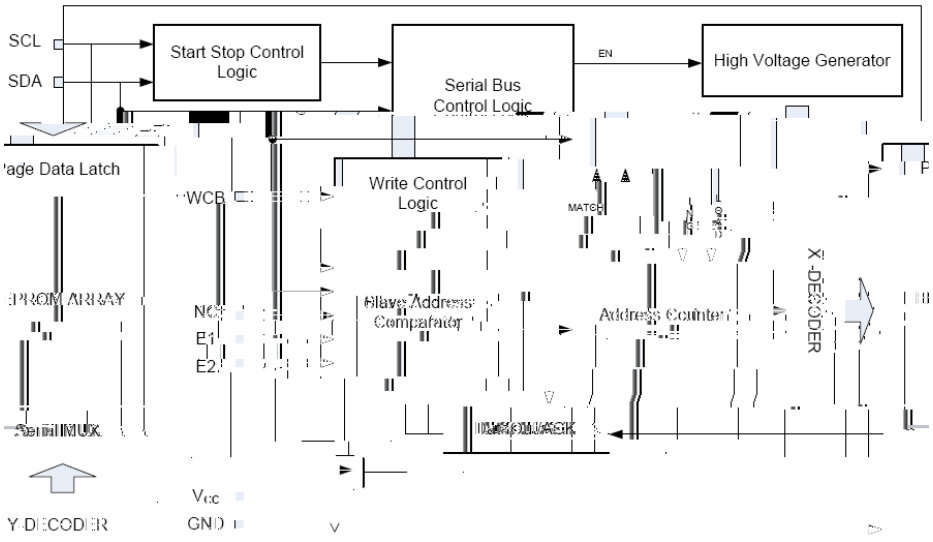
		°				
		°				

		≤			≤			

		≤			≤ ≤			

≤


SCL
SDA
Start Stop Control Logic
Serial Bus Control Logic
EN
High Voltage Generator
Write Control Logic
WCB
Slave Address Comparator
Address Counter
X -DECODER
E1
E2
Vcc
GND

p

SDA SDA SCL (1) SCL
SDA (1)

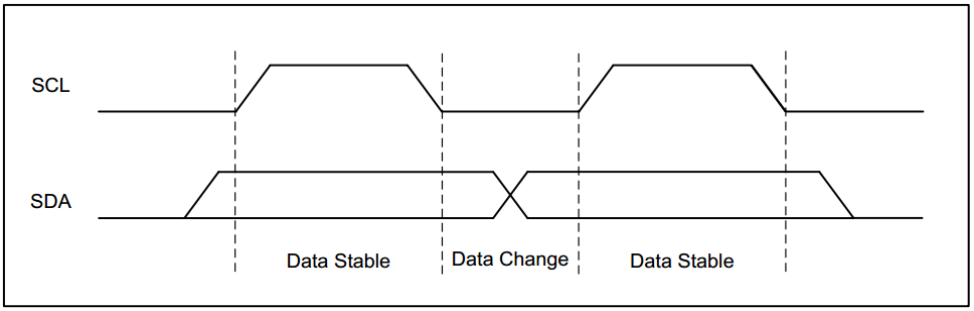


Figure 1 Data Validity

p

SCL SDA
2

.

p

SCL SDA
BRCM24C04SC

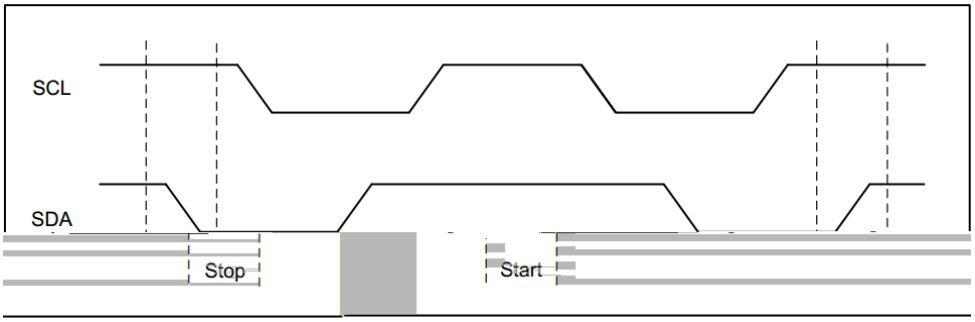


Figure 2 Start and Stop Definition

p

BRCM24C04SC BRCM24C04SC “ 0 ”
ACK 9

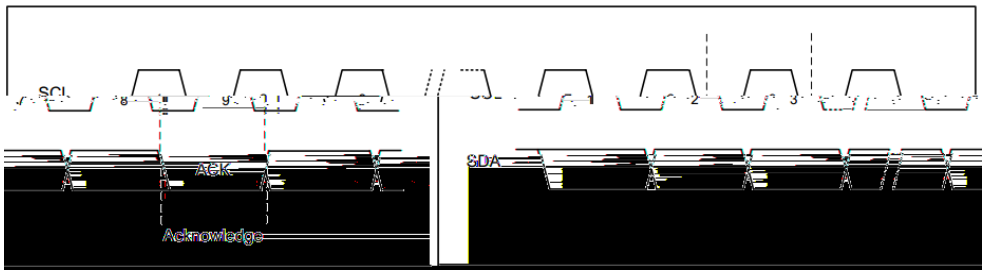


Figure 3 Output Acknowledge

p

BRCM24C04SC :(a) ,(b)

E2 E1 4 E2 E1

8 /

0 1 0

p

BRCM24C04SC WCB Vcc

p

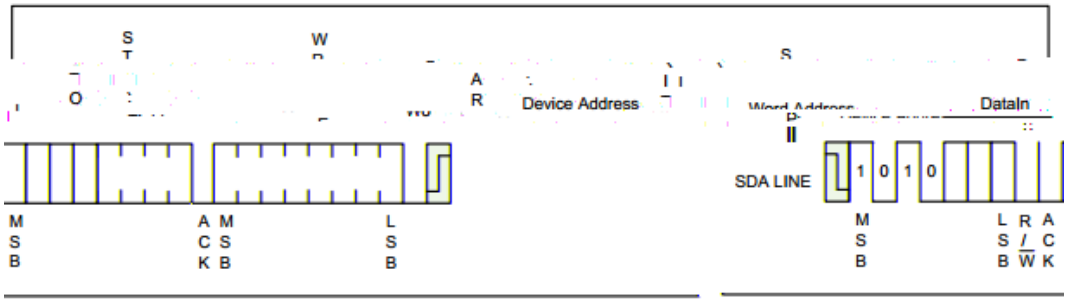
8

BRCM24C04SC “ 0 ” 8 8

BRCM24C04SC “ 0 ”

BRCM24C04SC BRCM24C04SC

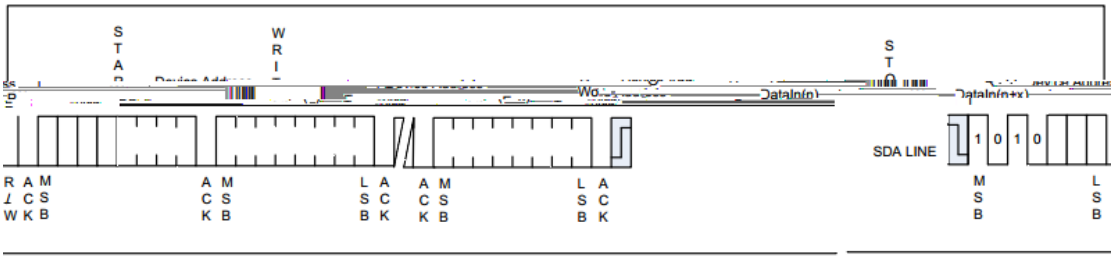
(5)



p

BRCM24C04SC BRCM24C04SC

“ 0 ”



4

BRCM24C04SC 16

p

BRCM24C04SC

/ BRCM24C04SC

“ 0 ”

p

16

(a) 1011b

(b) A5 / A4 0 1 A7 / A6 “ 00 ”

(c) A3 / A0

NoACK

p

ID Lock ID

(a) 1011b;

(b) A6 1 ;

(c) xxxx xx1x x 0 1

p

/ / “ 1 ”

;

p

1

/ “ 1 ” BRCM24C04SC

“ 0 ” 7

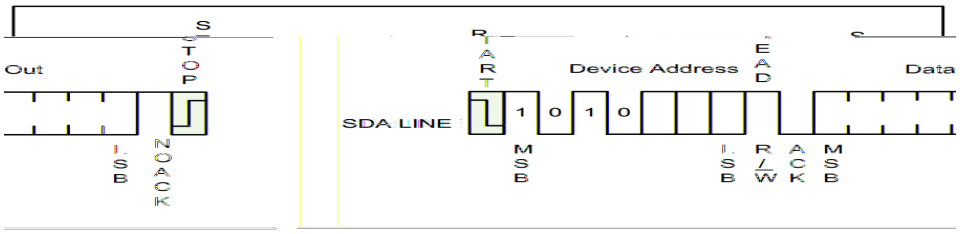


Figure 7

p

“ ”

BRCM24C04SC /

BRCM24C04SC

“ 0 ” 8

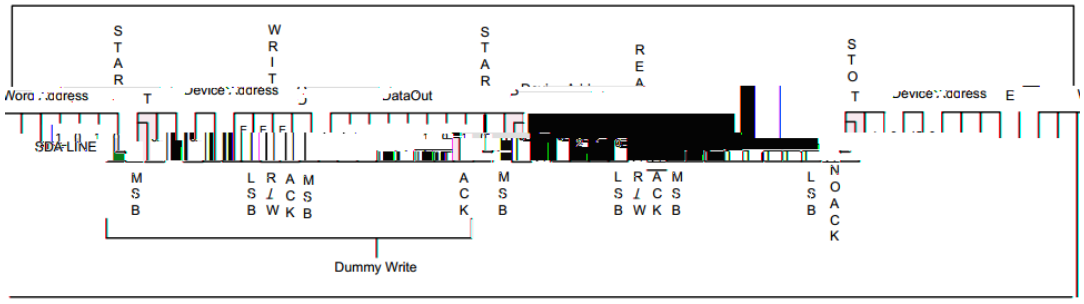


Figure 8 Random Address Read

p

BRCM24C04SC

“ 0 ”

9

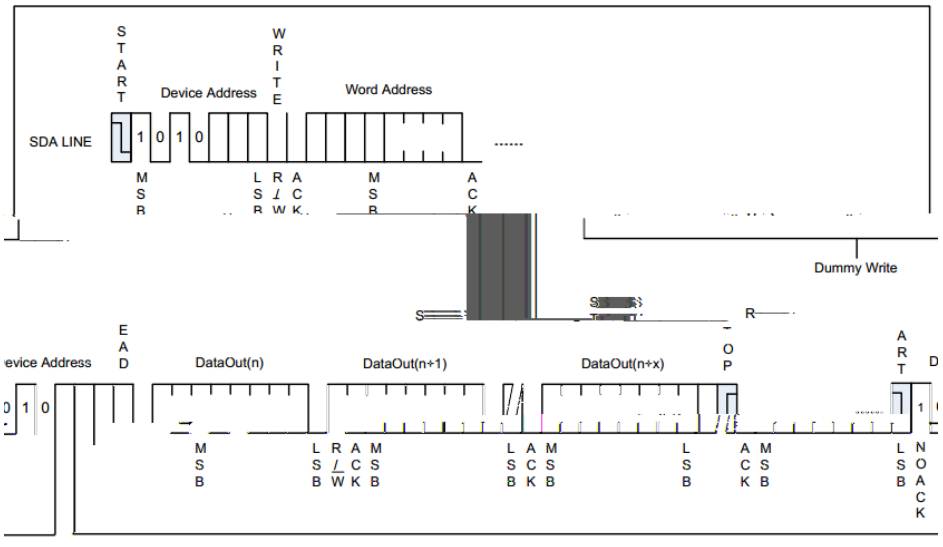


Figure 9

p

16

1011b A7 / A6 0 A5 A4 / A0 ID

10d 6 ID

16

p

[+] /

ACK NoACK,(10)

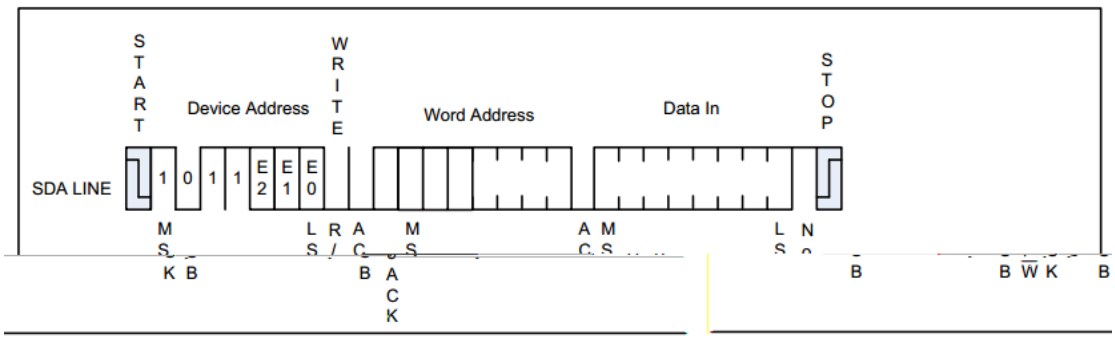


Figure 10 Lock Status Read (When Identification page locked, return NoACK after one data byte)

p

16

1

128

EEPROM “ ”

EEPROM

1

A7 A6 “ 10 ” 2 “ 10 ”

80h

128 16

128 ACK

7

□

□

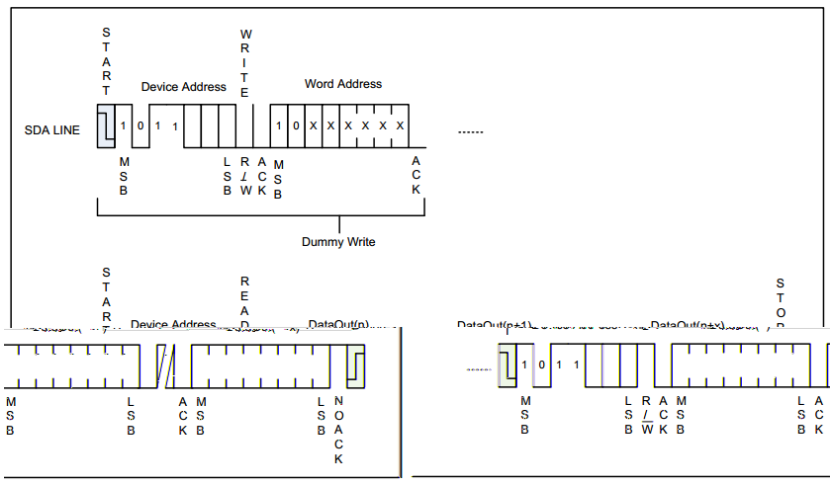
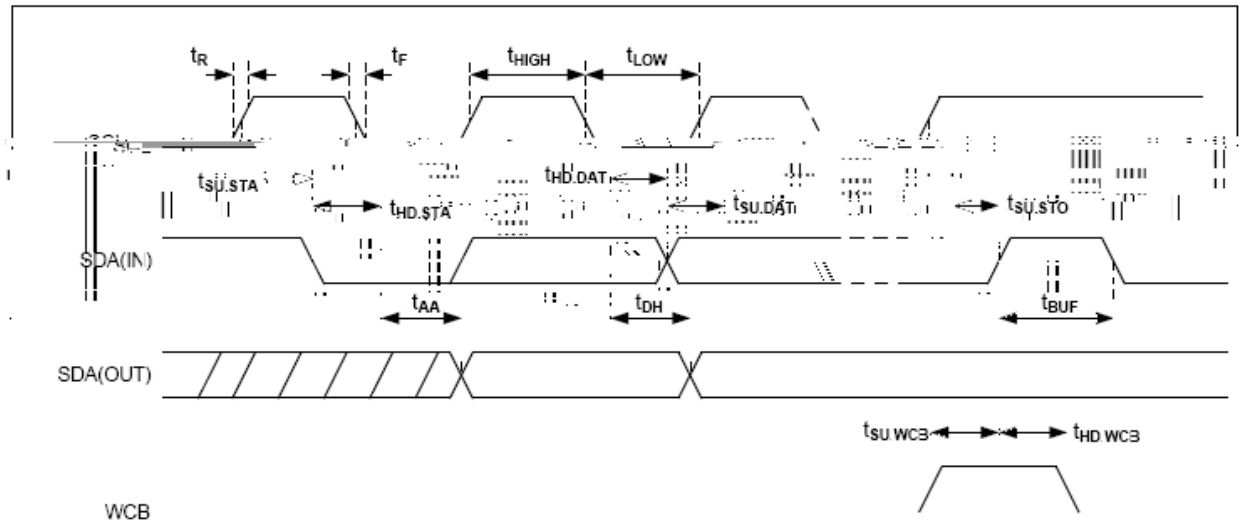
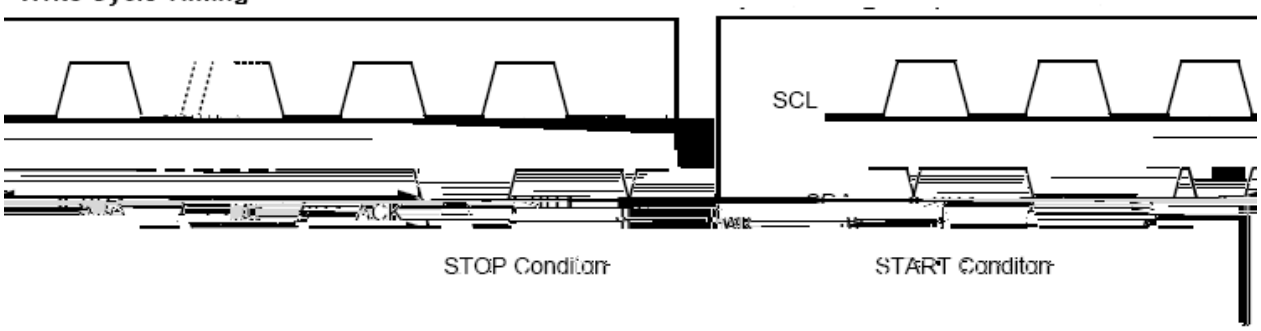


Figure 11 Sequential Read

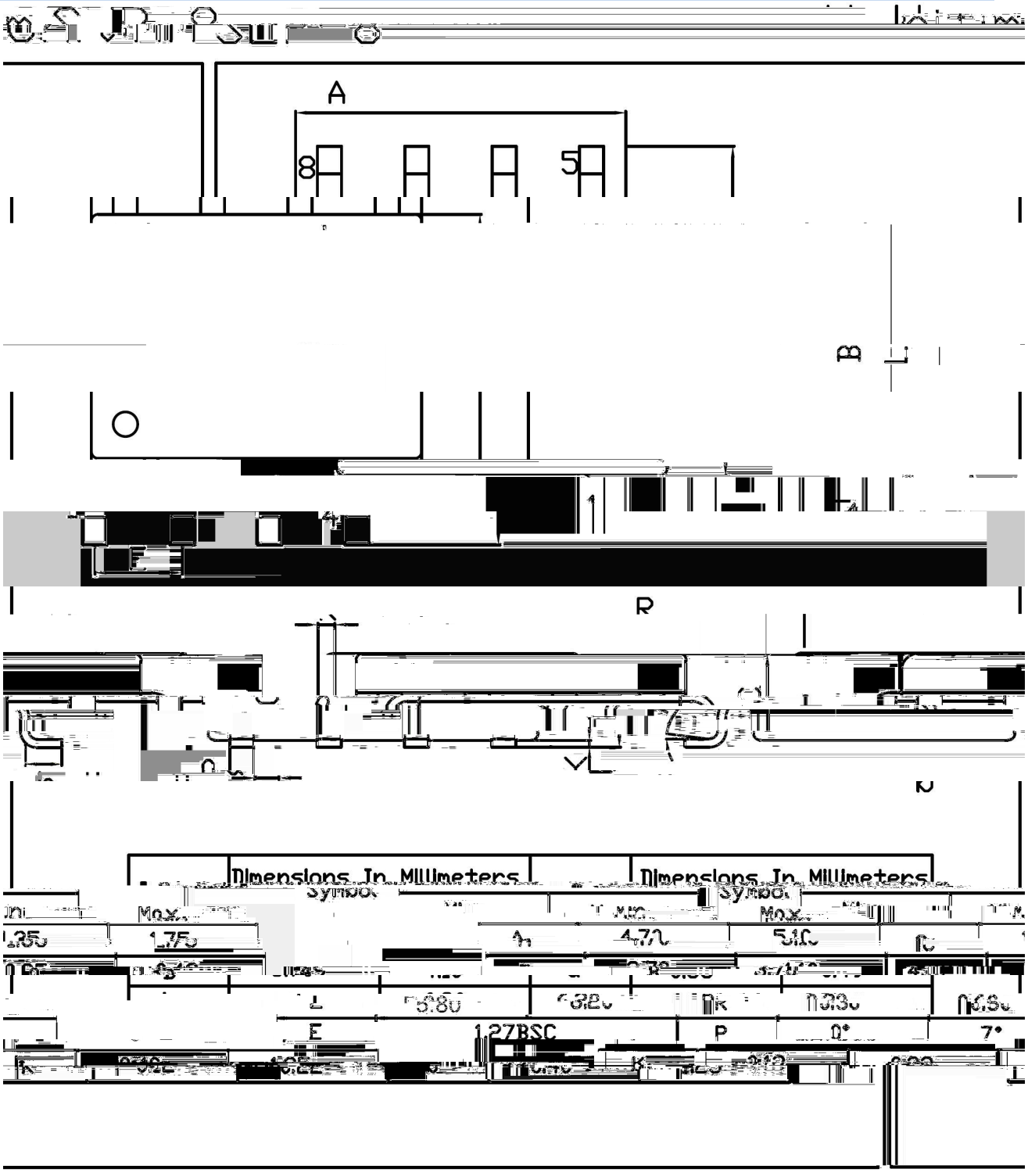
Bus Timing

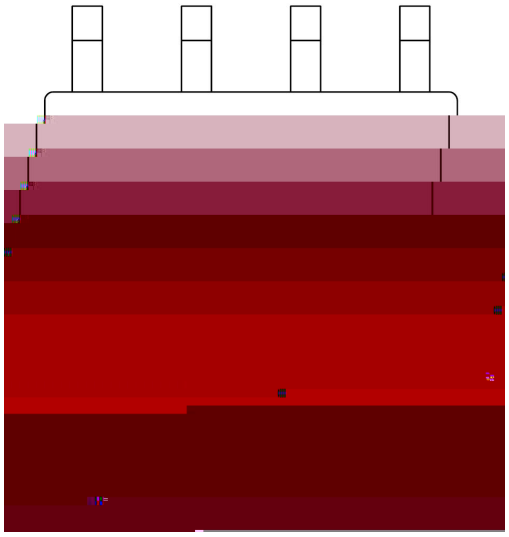


Write Cycle Timing



Note: The write-cycle time t_{WR} is the time from a valid stop condition of a write sequence to the end of the internal clear/write cycle.


A
B
R
Dimensions In Millimeters
Dimensions In Millimeters
Symbol
Min.
Max.
1.75
4.70
5.10
5.80
1.27BSC
0°
7°



24C04

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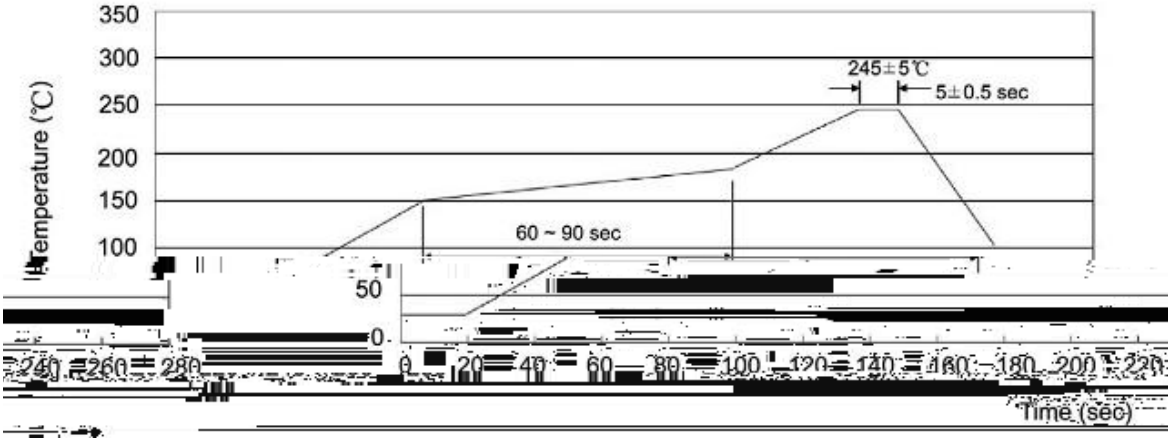

± ± ± ±

± ± ± ±

封装形式	包装数量					包装尺寸 :		
	只卷盘	卷盘盒	只盒	盒箱	只箱		盒	箱
						ρ		