TI MCU TM4C1290NCZAD：I2C Master Data Read rev6

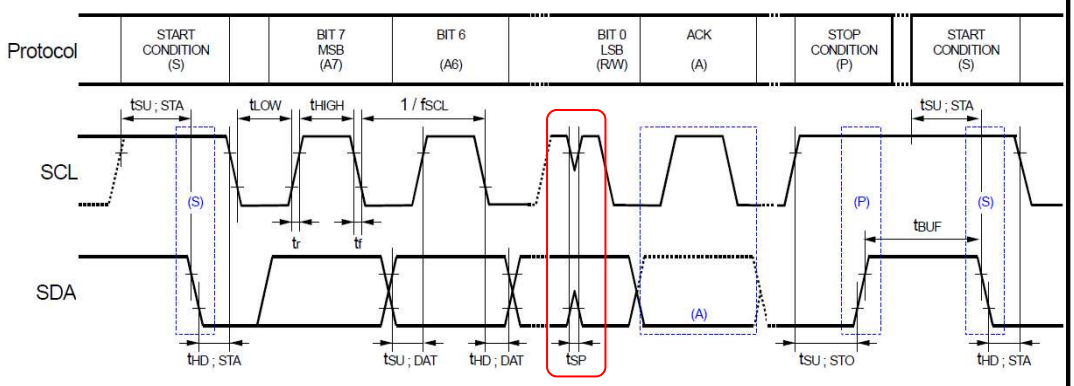
EIZO Co. 2019.12.26

1. Revised Question 6

TM4C129 has a specification of “Allowable spike time” like below example?

example

*Unless otherwise specified, GND = 0 V , V_{DD}= 1.6 V ~ 5.5 V , Ta = −40°C ~ +85°C

Item	Symbol	Standard-Mode (f_{SCL}=100kHz)		Fast-Mode (f_{SCL}=400kHz)		Unit
		Min.	Max.	Min.	Max.	
SCL clock frequency	f_{SCL}		100		400	kHz
Start condition setup time	$t_{SU;STA}$	4.7		0.6		µs
Start condition hold time	$t_{HD;STA}$	4.0		0.6		µs
Data setup time	$t_{SU;DAT}$	250		100		ns
Data hold time	$t_{HD;DAT}$	0		0		ns
Stop condition setup time	$t_{SU;STO}$	4.0		0.6		µs
Bus idle time between start condition and stop condition	t_{BUF}	4.7		1.3		µs
Time when SCL = "L"	t_{LOW}	4.7		1.3		µs
Time when SCL = "H"	t_{HIGH}	4.0		0.6		µs
Rise time for SCL and SDA	t_r		1.0		0.3	µs
Fall time for SCL and SDA	t_f		0.3		0.3	µs
Allowable spike time on bus	t_{SP}		50		50	ns

- Timing chart