

Tutorial 2

October 9, 2026

Organisation

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- ▶ This tutorial:
 - ▶ A few words on lab 1
 - ▶ The I²C protocol

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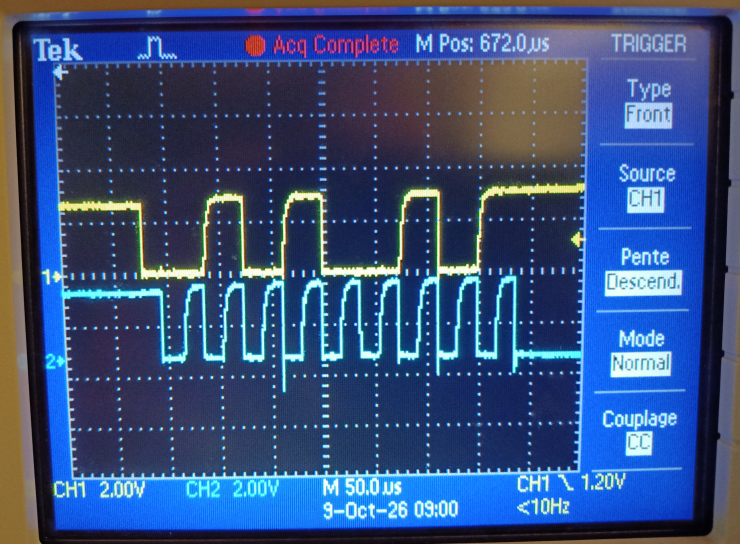
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Exercise 1

Decode the following I²C sequence.



Exercise 2

A microcontroller connected to an I²C bus wishes to know whether there is a device of adress 0x3A on the bus. How can it do this ?
Draw a small diagram showing the transaction.

Exercise 3

Assume that three devices are connected to an I²C bus and that devices 1 and 2 simultaneously try to initiate a transaction with device 3, both in the same direction (e.g. master sender). What will happen? Give an example where this would be an issue. Design a protocol on top of I²C that solves this issue.