

Weekly Report 4

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Dissertation: Vital Helmet – Towards a sensorized helmet for First Responders

Supervisor: Associate Professor (with “Agregação”) João Paulo Cunha

Week: 16-03-2015 to 30-03-2015

Development:

- Development of I2C protocol. In order to achieve it, I use an Explorer 16 Development Board from Microchip using PIC24F128FJGA010 as a Master and an Arduino as a Slave.

Problems:

- According to my logical analyzer, the PIC is writing everything as it's supposed to: writes the slave address, receives an ACK and then starts writing a string. However, I'm using the Wire library example from the Arduino and it doesn't seem to ACK when it gets information.

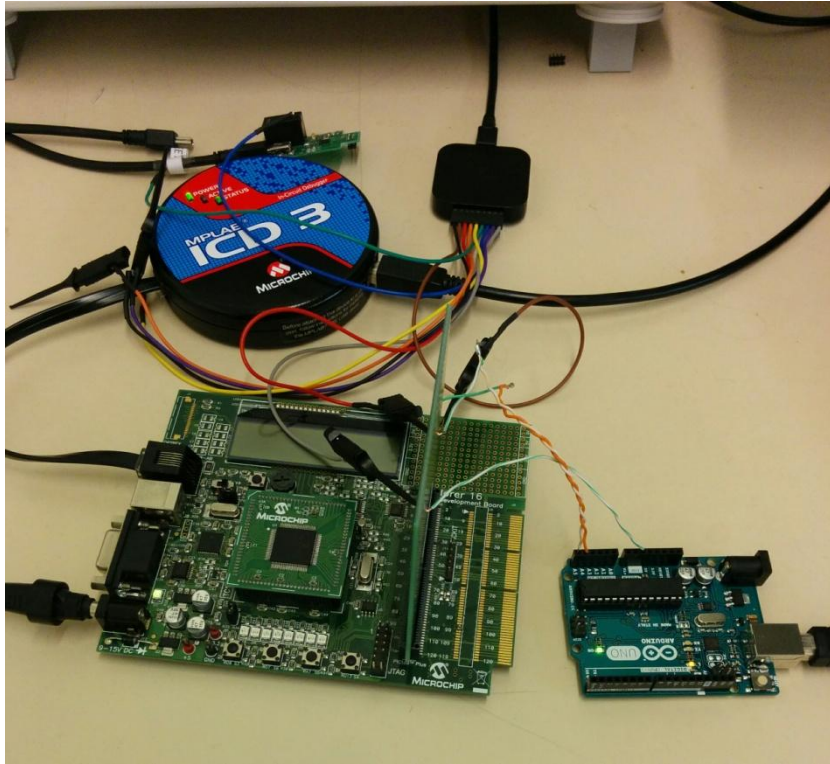


Fig.1 Test I2C communication

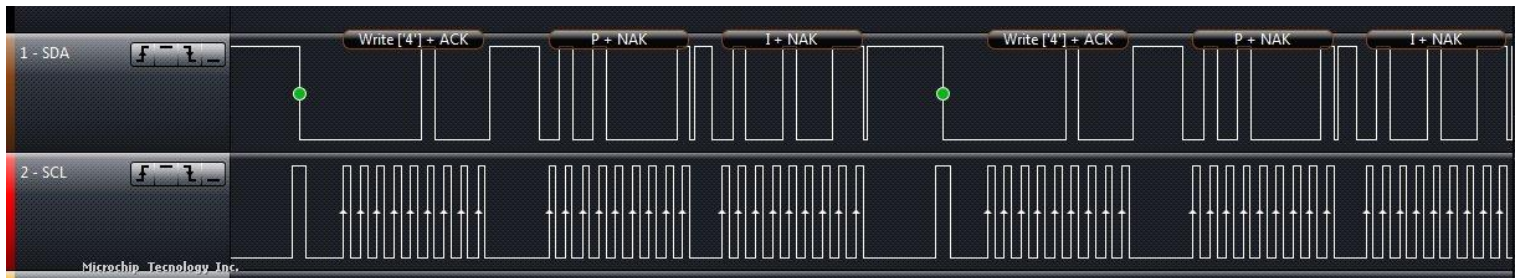


Fig.2 Logic Software Output