# Supervisor assessment of Bachelor's Thesis

Student:Cuadrado JorgeTitle:Automatic Thermometer (id 19034)Supervisor:Kolář Dušan, doc. Dr. Ing., UIFS FIT VUT

# 1. Assignment comments

The aim of the thesis is to develop an application that provides automatic programmable temperature measurement with simple result presentation and automatic result delivery on required server. Moreover, power saving modes should have been investigated and implemented. The thesis is not continuation of any other previous work. Moreover, the thesis was devoted just for summer term. The thesis is of regular complexity, just the part of power saving modes is a bit tricky as extender to Raspberry Pi 2 platform must be used. This part is, unfortunately, quite incomplete. There are two reasons - one of them is the fact that the module was not working correctly, it had to be replaced with another one. The other reason was the fact the module directly did not support CPU wake-up, nevertheless, small modification could do that (this is not completed). On the other hand, features of the RP 2 board are such that almost no power saving is possible in "halt" mode, switch off is impossible in the actual design at all. Thus, this part is not, obviously, fully working. Nevertheless, some power modes were implemented and switching between them too. Moreover, some safety features were taken into account in the implementation. To conclude - the application is working as much as possible under given conditions and the work is completed and fine. Nevertheless, I would expect a bit greater involvement of the student in solving issues with communication to extender and programming of it for CPU wake-up and testing of the application.

# 2. Literature usage

Student was very active and working independently.

#### 3. Assignment activity, consultation, communication

Due to quite late start (not even the whole summer term) the activity was high during the whole period, but on a very good and proactive basis.

### 4. Assignment finalisation

The activity was the same all the time, high. Due to my engagement in exams I could not follow the last days precisely, maybe we could solve more problems. Nevertheless, I was able to provide at least some feedback to the text.

# 5. Publications, awards N/A

# 6. Total assessment

The work was completed with some exceptions mentioned above. All the other activities were provided on a quite good basis. From my point of view the valuation C is correct.

In Brno 1. June 2016

signature

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