

## Training evaluation report

**Training session:** Embedded Linux Training (public session)

**Training dates:** May 31 - June 4, 2010 (5 days)

**Country:**

**Number of participants:** 8

**Returned evaluation forms:** 7

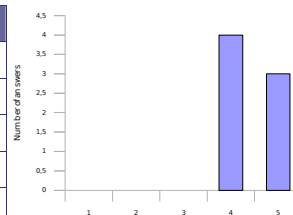
Thank you for having organized a Free Electronics training session!

Here is a wrap-up of evaluations from participants.

### Learning objectives

#### 1. How well did the course meet your learning objectives?

Rating	Answers	Description
1	0	Not met
2	0	
3	0	
4	4	
5	3	Fully met

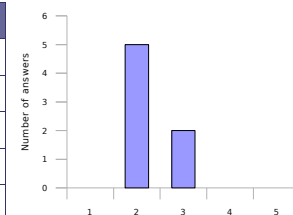


4 - U-boot wasn't covered as deep as I hope it would, but the training pointed me to the right documentation to get started if necessary.

4 - Need to retrace course / slides and labs after returning in order to retain knowledge and expand it.

#### 2. How was the duration of the course?

Rating	Answers	Description
1	0	Too short. Couldn't learn enough in such a short time.
2	5	A little too short
3	2	Just fine
4	0	A little too long
5	0	Definitely too long. The concepts could be learned in much less time.

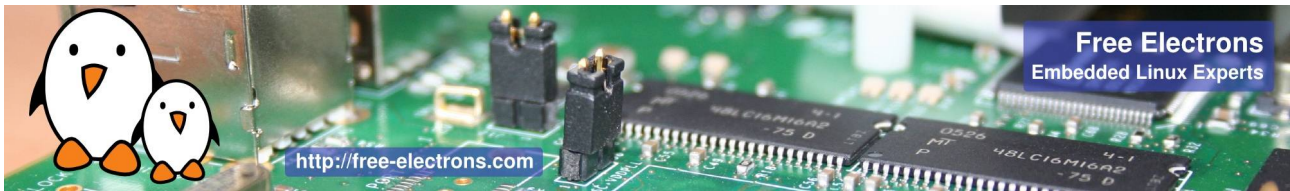


2 - Especially if you have to leave before the end. Very interesting stuff at the end.

2 - We weren't able to do all labs and slides, but covered nearly all the important stuff.

2 - The labs take a lot of time when something fails. But you learn a lot of them!

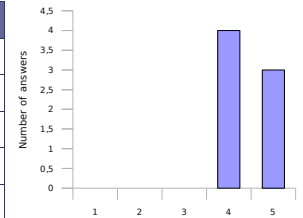
2 - Appreciate very much the friendly and cordial atmosphere at lunch and the breaks. Given the amount of material to be covered, the breaks should be made shorter to allow for more lecture and lab time so the entire course or as much of it gets covered.



## Lecture materials

### 3. How helpful were the lecture materials?

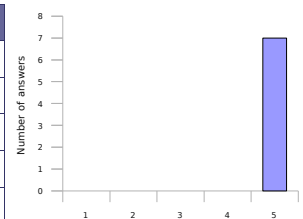
Rating	Answers	Description
1	0	Not helpful. Made things more difficult to learn and understand.
2	0	
3	0	
4	4	
5	3	Really made things easier to understand and learn.



4 - A little more explanation in the slides (10%-15% more)

### 4. Will you recommend these materials to others?

Rating	Answers	Description
1	0	No. Not helpful without following the sessions.
2	0	
3	0	
4	0	
5	7	Definitely

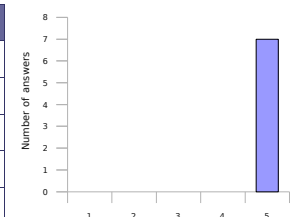


5 - They are easily reusable.

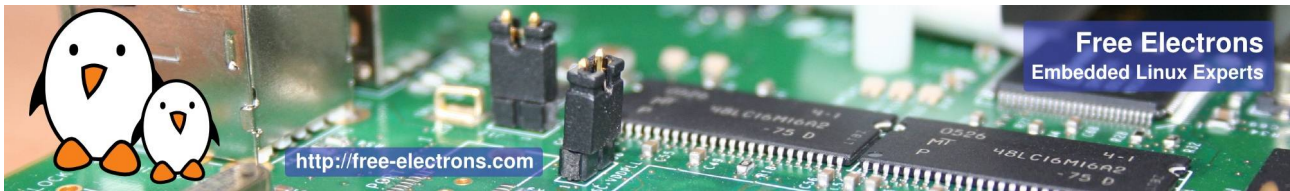
6 - Absolutely. You have designed this course very well. The labs are the backbone of this course, keep it that way.

### 5. If you have Linux project opportunities, will you use these materials again?

Rating	Answers	Description
1	0	No. I will look for other sources of information.
2	0	
3	0	
4	0	
5	7	Definitely



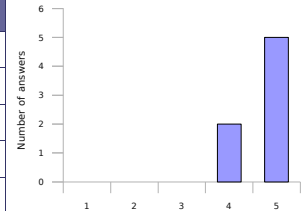
5 - Great source for looking up things. Will surely help me a lot.



## Instructor added value

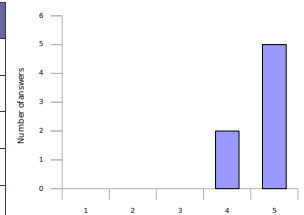
6. How knowledgeable was the instructor?

Rating	Answers	Description
1	0	Not enough for my own technical experience.
2	0	
3	0	
4	2	
5	5	More than enough for my own experience.



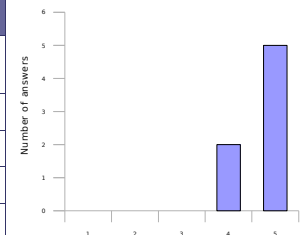
7. Did instructor oral explanations add value to the lecture materials?

Rating	Answers	Description
1	0	No added value to reading the materials.
2	0	
3	0	
4	2	
5	5	Yes. The instructor really made very useful oral explanations.



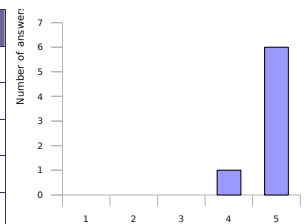
8. How well did the instructor answer questions from the audience?

Rating	Answers	Description
1	0	Poorly. Didn't try to understand the questions well or rarely managed to find useful answers.
2	0	
3	0	
4	2	
5	5	Answered very well to questions from the audience



9. Was the instructor helpful with practical labs?

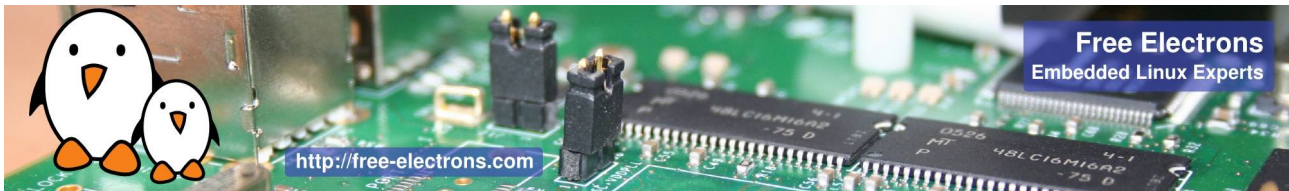
Rating	Answers	Description
1	0	No, not enough available and helpful during the labs.
2	0	
3	0	
4	1	
5	6	Yes. The instructor definitely helped to make labs a learning opportunity.



5 - No issue he hasn't solved! And for what I saw, the labs are evolving with encountered issues.

5 - Good: reuse of the learned topics.

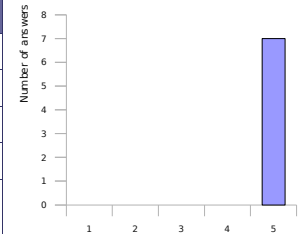
5 - The labs are what make people absorb the concepts. And absorbing concepts is what this course should be about. The labs are the backbone, should be instructor's most important priority.



## Training labs

### 10. How useful were the training labs?

Rating	Answers	Description
1	0	Not useful. Didn't add significant value to the lectures.
2	0	
3	0	
4	0	
5	7	Very useful. Helped to highlight things not understood and build useful experience.



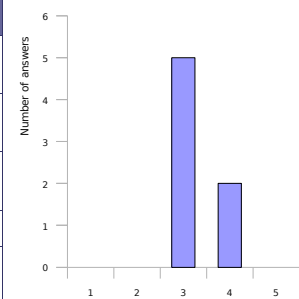
5 - All of them

5 - Sometimes I would have liked more explanation about what and/or why we are doing the labs for.

5 - See previous comments (*about the importance of labs*)

### 11. How difficult were the training labs?

Rating	Answers	Description
1	0	Too difficult. Didn't help or even discouraged a beginner to get more familiar with the tools and concepts.
2	0	A bit too difficult. Would be better if the lab instructions gave a bit more details about explanations.
3	5	Just fine. Prompted me to look for answers, get my own experience and find my own solutions.
4	2	Too easy for my own technical level.
5	0	Too easy for everyone. Should challenge participants more and help everyone to practice on real issues.



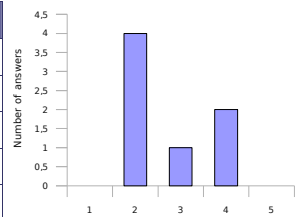
4 - Maybe a bit too much guide by the material, but I already had experience with embedded Linux beforehand, so I think for newbies they are perfect.

3 - I would have liked a little more time with the labs. I fell behind and was behind the whole week despite efforts to catch up.

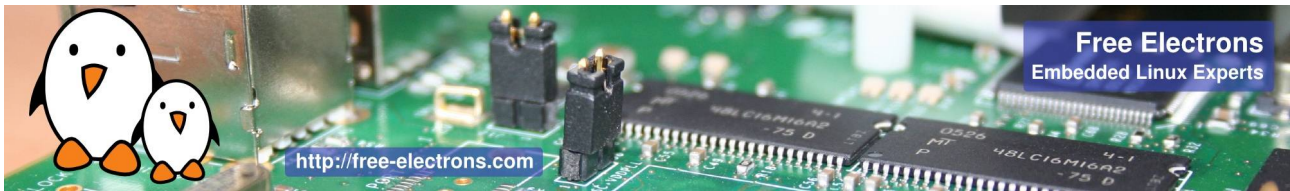
3 - But time is too short!

### 12. Was enough time dedicated to the practical labs?

Rating	Answers	Description
1	0	No. More practice is needed
2	4	A little bit more time would help.
3	1	Just fine
4	2	A little bit less time would be enough.
5	0	Don't need to spend so much time on labs. On-the-job practice is best



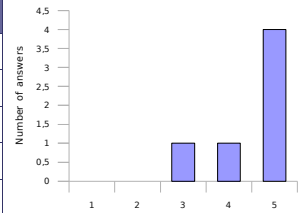
4 - Finished my labs nearly all in time and had time left to investigate some issues. Other group members needed more time, so it seems to be a question of experience and it's not easy to merge that to a perfect lab.



## Training conditions

13. How do you rate training conditions (room size, equipment, environment...)?

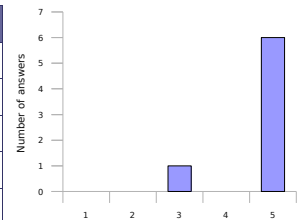
Rating	Answers	Description
1	0	Poor.
2	0	
3	1	
4	1	
5	4	Very good.



5 - It'll be hard for me to get used to my normal living standard. Special hotel price in Vence is great :)  
N/A - A little more desk space would be appreciated.

14. How do you rate the training equipment (mainly computers)?

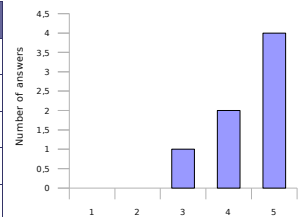
Rating	Answers	Description
1	0	Poor. Not powerful enough to execute practical labs.
2	0	
3	1	
4	0	
5	6	Very good. Very little time waiting, more time learning.



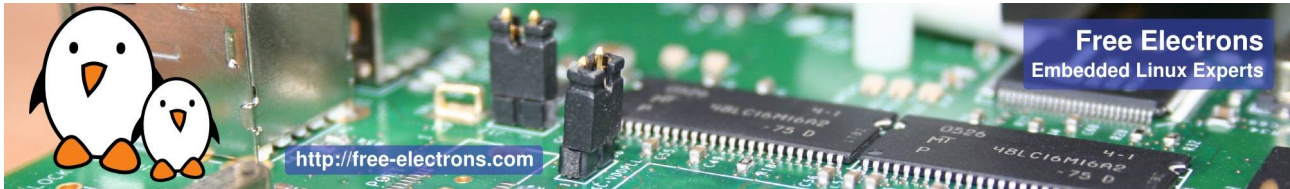
5 - They seem completely supported.  
3 - No problems.

15. How well was the course organized (program, registration, meeting the schedule...)?

Rating	Answers	Description
1	0	Not well
2	0	
3	1	
4	2	
5	4	Very well



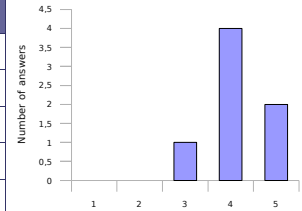
3 - Not enough time in the classes. Breaks should be a bit shorter.



## Overall rating

16. How much did you learn?

Rating	Answers	Description
1	0	Definitely not much
2	0	
3	1	
4	4	
5	2	Definitely more than I expected.



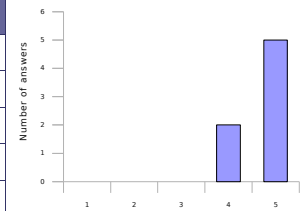
3 - But it structured what I already knew, filled the gap, ...

4 - It showed me the big picture. Formerly I had knowledge, but not that much interconnection between different problems. Helped me a lot to see things clearer.

4 - Will have to retrace the course again as soon as I return to the office to make the concepts stick and need to use the course as guideline for further self study.

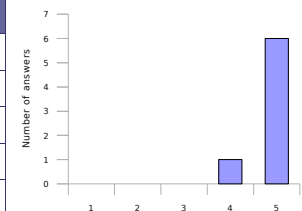
17. How useful will this course be in your daily job?

Rating	Answers	Description
1	0	Not useful.
2	0	
3	0	
4	2	
5	5	Very useful. Will make my job easier and more productive.

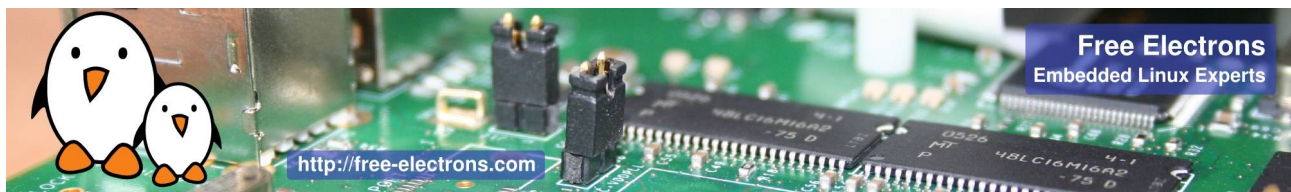


18. Would you recommend this course to others?

Rating	Answers	Description
1	0	No.
2	0	
3	0	
4	1	
5	6	Yes, definitely

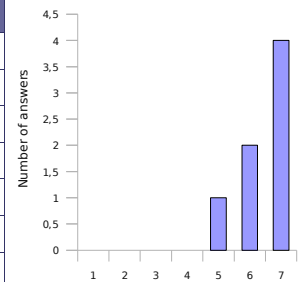






## 19. Overall rating

Rating	Answers	Description
1	0	Very disappointing
2	0	Disappointing
3	0	A little bit disappointing
4	0	OK
5	1	Pretty good
6	2	Very good
7	4	Excellent

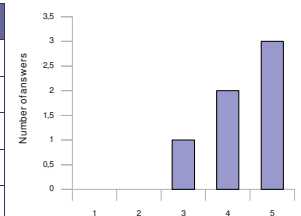


6 Thanks! ;-)

6 - As mentioned, since we ran out of time, the breaks should have been made shorter and students could gather socially after training in the evening.

## 20. An extra session?

Rating	Answers	Description
1	0	No
2	0	
3	1	
4	2	
5	3	Yes, definitely



4 - Inetd

5 - You may want to dedicate more time (2 weeks / 10 days) so everything is covered thoroughly. This would make the course more expensive, but could be worthwhile.

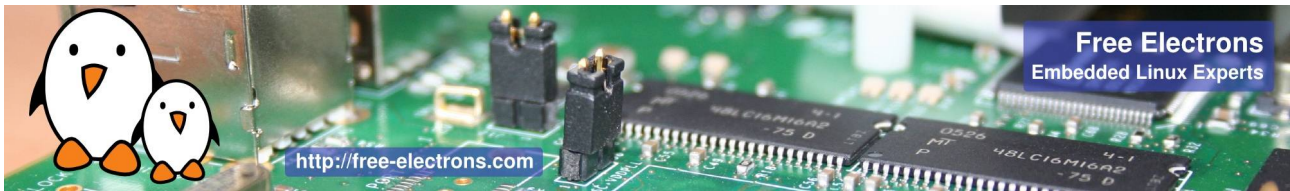
## Number of votes for topics in an extra session

Understanding the Linux kernel	Linux device driver development	Linux board support packages	Embedded system development	Miscellaneous needs
Process management	2 USB device drivers	4 Processor specific code	1 Lightweight tools	Java
Filesystem implementation	2 USB host drivers	5 Board specific code	3 Embedded system development tools	Real-time
Memory management	PCI drivers	3 Board specific interrupt support code	2 Cross-compiling toolchains	1 Audio
Scheduling implementation	2 Network drivers	5 DMA support	1 Debugging solutions	1 Video
Bootstrap code	2 Block drivers	4 Bootloader development	3 Software development tools	2 uClinux
	Flash drivers	3	Programming with graphical libraries	2 Voice over IP
	I2S drivers	3	POSIX API	1
	Input drivers	4	System optimization	1
	Sound drivers	2	Root filesystem creation	
	Video drivers	3		

## Free Electrons comments

Thanks to the (sometimes oral) suggestions from the audience, we will improve future training sessions...

- By removing less important slides, to leave more time for practical labs.
- By making sure that breaks don't exceed 15 minutes.



## Life after training

After this training session, do not hesitate to get back to us! Here are things we could do to support you in your embedded Linux projects:

- More training: you may be interested in the other training sessions that we propose, either embedded Linux system development or Linux kernel and driver development, depending on the course you have already taken. See <http://free-electrons.com/training> for details.
- If some people in your organization missed the session, and you don't have enough requests to organize another session, they can choose to go to our public training sessions. See <http://free-electrons.com/training/sessions> for details.
- Linux kernel porting. Adding Linux support to your boards, or supporting you in doing this.
- Having your board support code merged in mainstream sources (Linux, U-boot), so that your sources are maintained by the community. This also means for customers that your boards will be supported for a long time.
- System development and integration. Creating demos and prototypes.
- System optimization: improving system performance and features (power consumption, speed, size...)
- Investigating and fixing nasty bugs that you don't have time to cope with by yourselves.

See <http://free-electrons.com/services> for details.