

## Training evaluation report

**Training session:** Embedded Linux Training

**Training dates:** Sep. 20-24, 2010 (5 days)

**Country:** France (Public session in Nice)

**Number of participants:** 8

**Returned evaluation forms:** 8

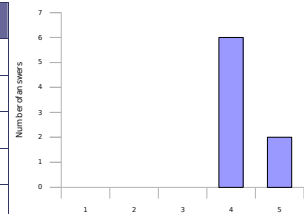
Thank you for having organized a Free Electronics training session!

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	6	
5	2	Fully met



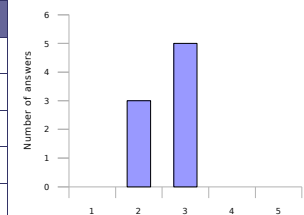
4 - Good course. It gives a good overview of Linux system development. Sometimes, it's a little bit fast but we have a correct overview

4 - I was expecting bit more about boot time optimization...

4 - I would have liked the course to cover compiling packages and dependency issues

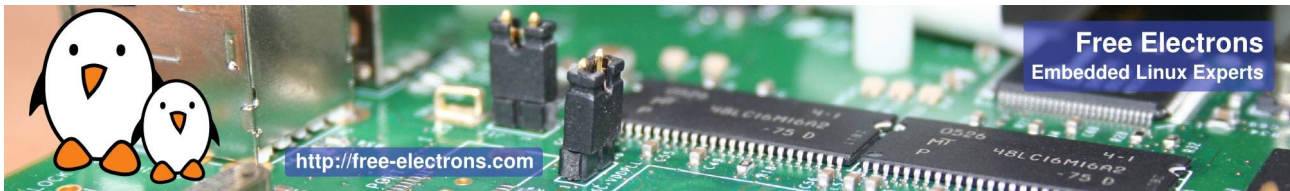
#### 2. How was the duration of the course?

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



2 - Short time for a very beginner to learn all topics

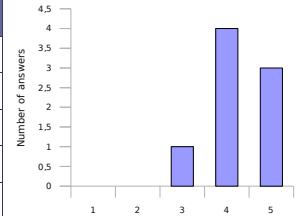
3 - One or two more days could be better



## Lecture materials

3. How helpful were the lecture materials?

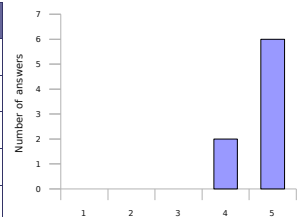
Rating	Answers	Description
1	0	Not helpful. Made things more difficult to learn and understand.
2	0	
3	1	
4	4	
5	3	Really made things easier to understand and learn.



4 - Nice that you keep the slides updated all the time

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	2	
5	6	Definitely

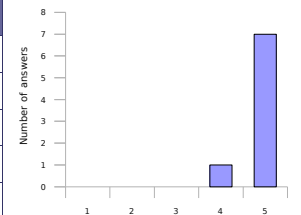


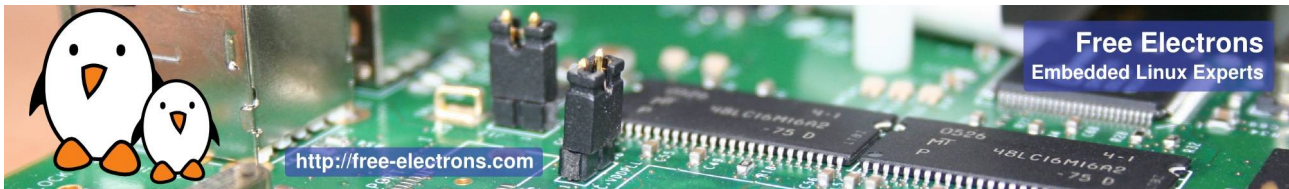
5 - Make sure you mark outdated slides as OUTDATED because Google lists old slides on your webpage

5 - Yes

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	1	
5	7	Definitely

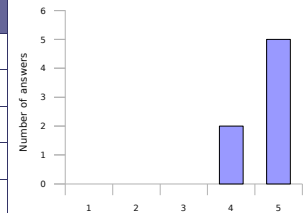




## Instructor added value

6. How knowledgeable was the instructor?

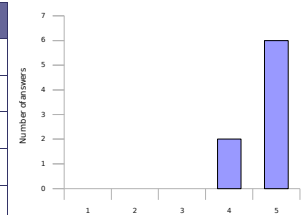
Rating	Answers	Description
1	0	Not enough for my own technical experience.
2	0	
3	0	
4	2	
5	5	More than enough for my own experience.



4 - We need more experimental issues concerning saving boot time (boot time optimization)

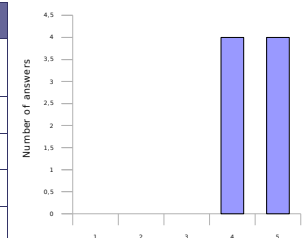
7. Did instructor oral explanations add value to the lecture materials?

Rating	Answers	Description
1	0	No added value to reading the materials.
2	0	
3	0	
4	2	
5	6	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	4	
5	4	Answered very well to questions from the audience

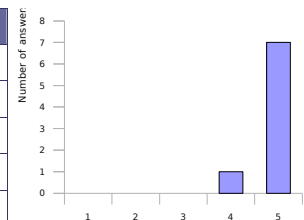


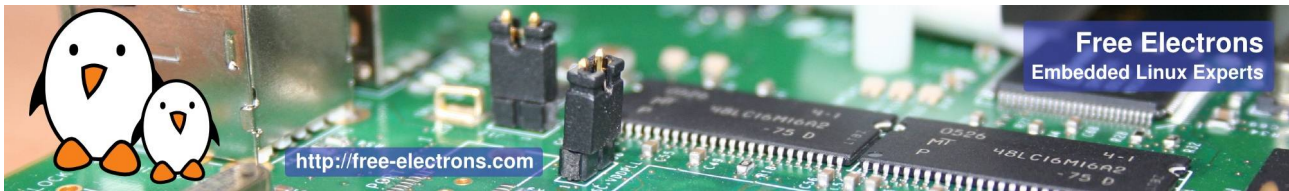
4 - Good that you write down specific questions, look up the answer and bring up the answer in depth later

4 - Questions were not fully answered

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	7	Yes. The instructor definitely helped to make labs a learning opportunity.

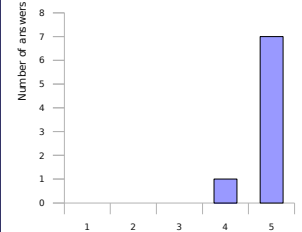




## Training labs

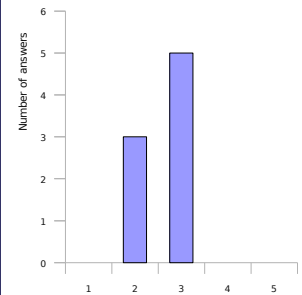
10. How useful were the training labs?

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



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	3	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	0	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.

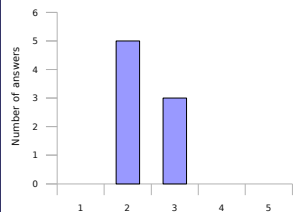


2 - More details and explanations will be very helpful for beginners

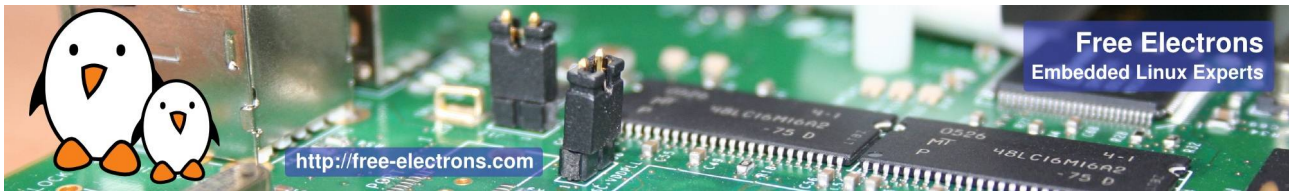
3 - Some steps are not present in the labs. However, very useful to well understand the topics

12. Was enough time dedicated to the practical labs?

Rating	Answers	Description
1	0	No. More practice is needed
2	5	A little bit more time would help.
3	3	Just fine
4	0	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



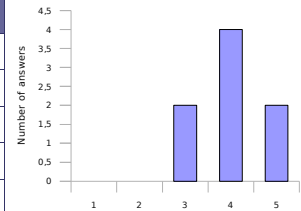
3 - Well - time for labs was ok - I guess the companies would not pay for an even longer training



## Training conditions

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

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



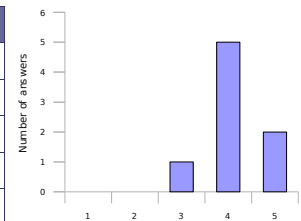
3 - Bigger tables :-)

4 - Fine

2 - Chairs are hard for the back

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	5	
5	2	Very good. Very little time waiting, more time learning.



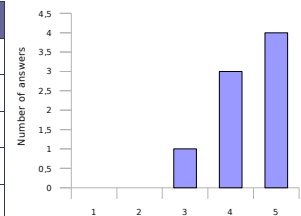
4 - Nice that we could directly work with your website (downloads)

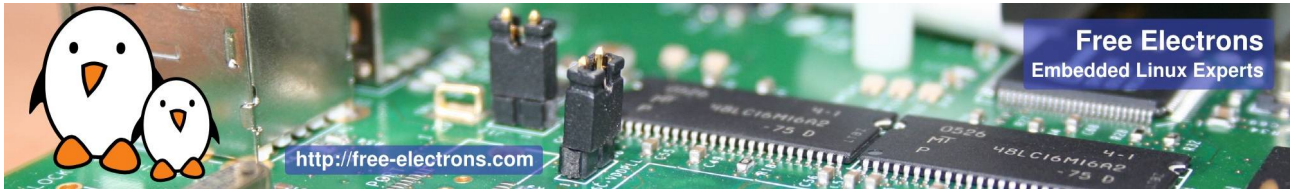
3 - Wifi was not working at beginning but good then

4 - Fine

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

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

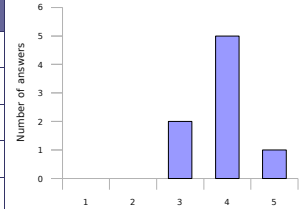




## Overall rating

16. How much did you learn?

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



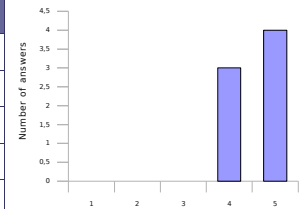
4 - Learned a lot of things :)

4 - I learn bit more. I was expecting bit more

3 - I had the opportunity to practice without really understanding things. It helps to really understand the subject.

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

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



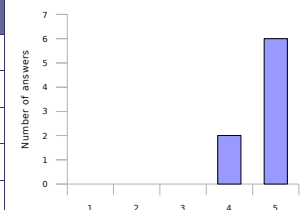
4 - Useful to find a job

4 - Useful for job even if we use commercial tools

N/A - Don't know yet

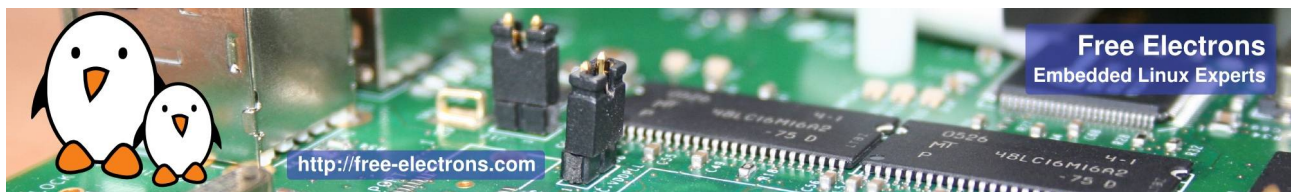
18. Would you recommend this course to others?

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



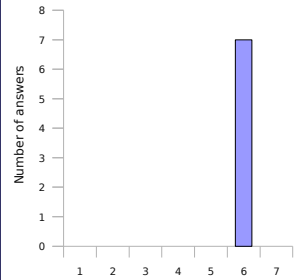
5 - May be give a course in Germany once a year?

5 - Yes



## 19. Overall rating

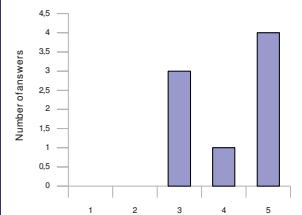
Rating	Answers	Description
1	0	Very disappointing
2	0	Disappointing
3	0	A little bit disappointing
4	0	OK
5	0	Pretty good
6	7	Very good
7	0	Excellent



## 20. An extra session?

Rating	Answers	Description
1	0	No
2	0	
3	3	Why not?
4	1	
5	4	Yes, definitely

5 - Embedded kernel driver development  
 3 - Linux kernel, remote debugging with J Tag, ...  
 4 - Not only depends on me :)  
 5 - Linux device driver development



## Number of votes for topics in an extra session

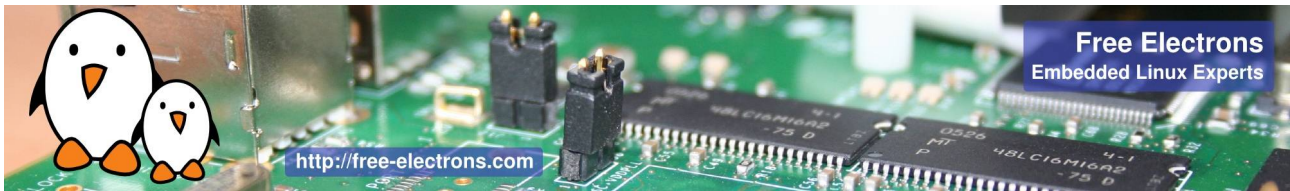
Understanding the Linux kernel	Linux device driver development	Linux board support packages	Embedded system development	Miscellaneous needs
Process management	1 USB device drivers	2 Processor specific code	1 Lightweight tools	Java
Filesystem implementation	1 USB host drivers	2 Board specific code	1 Embedded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

## Free Electronics comments

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

- By reducing the number of slides to focus on the most important ones, and leave more time for labs.
- By trying to make the materials even easier to understand and digest for beginners.
- By making sure that all questions get an answer, and not only the ones which could be answered during the day.
- By installing Linux ahead of time on the laptops. This would have allowed to detect driver issues with the latest Ubuntu version earlier (they didn't happen with past ones).
- By asking the hotel for more comfortable chairs and wider tables.





## 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.