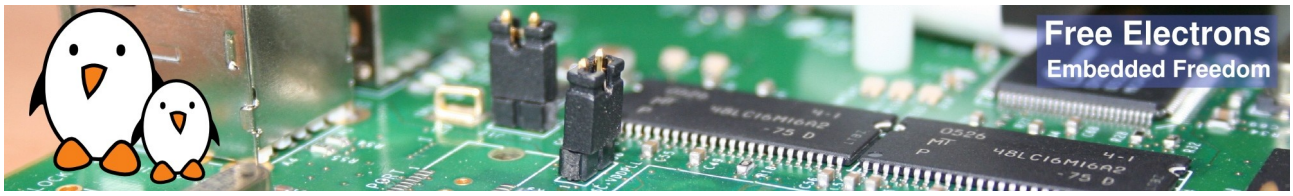


Training evaluation report

Training session: Embedded Linux Training
Training dates: Oct. 19-23, 2009 (5 days)
Country: France

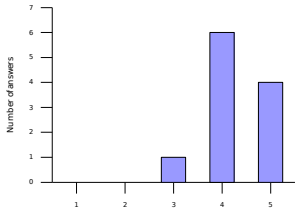
Number of participants: 11
Returned evaluation forms: 11

Thank you for having organized a Free Electrons 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	1	
4	6	
5	4	Fully met



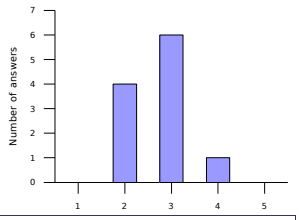
4 – I would have liked the RT part to take a little more time, in particular the practical labs.

4 – A little more about QT

5 – I didn't know Linux one week ago, and I now begin to understand the architecture and basic concepts. A good global vision is given.

2. How was the duration of the course?

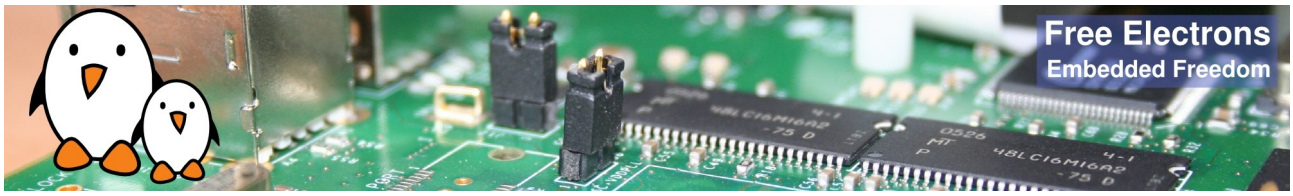
Rating	Answers	Description
1	0	Too short. Couldn't learn enough in such a short time.
2	4	A little too short
3	6	Just fine
4	1	A little too long
5	0	Definitely too long. The concepts could be learned in much less time.



3 – In spite of a well thought schedule, the amount of information received every day was important. More than one week would have been too much for me.

2 – But mainly because of lack of familiarity with the Linux environment before the session.

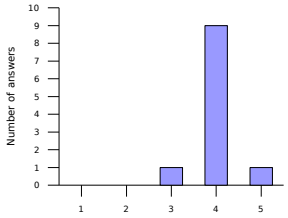
2 – For beginners like me, the same training with the same contents could be given in a little more time, I think. Maybe in two parts? (2 x 3 days).



Lecture materials

3. How helpful were the lecture materials?

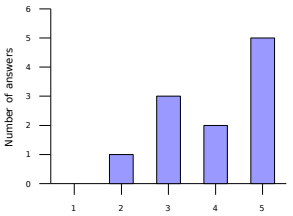
Rating	Answers	Description
1	0	Not helpful. Made things more difficult to learn and understand.
2	0	
3	1	
4	9	
5	1	Really made things easier to understand and learn.



4 – Concepts and recipes are clearly exposed.
4 – Very good but just a few errors
3 – Slides were not what helped me most, but rather the practical labs.

4. Will you recommend these materials to others?

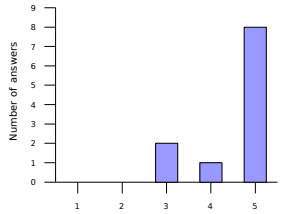
Rating	Answers	Description
1	0	No. Not helpful without following the sessions.
2	1	
3	3	
4	2	
5	5	Definitely



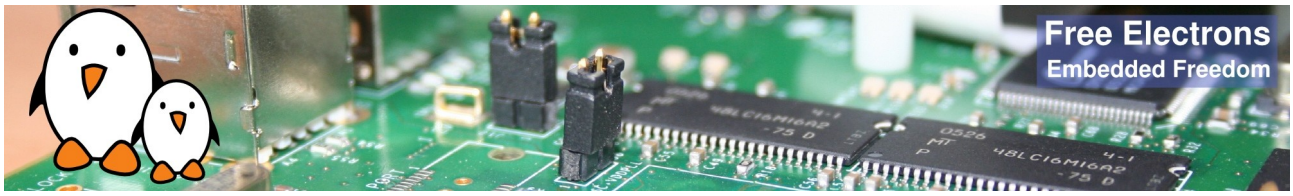
5 – I think I will recommend them to friends with the same education as mine (“general” software engineer)
3 – Same as above (found the labs the most helpful)
3 – Without the oral explanations this is less interesting.
3 – Depending on the level of Linux knowledge of the people.

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	2	
4	1	
5	8	Definitely



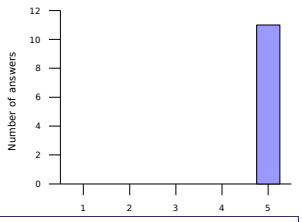
5 – Yes, probably, to try to reactivate the covered concepts.
3 – Probably if I deal with topics covered during the session, but will use Google otherwise.



Instructor added value

6. How knowledgeable was the instructor?

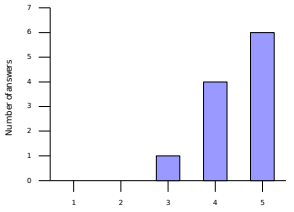
Rating	Answers	Description
1	0	Not enough for my own technical experience.
2	0	
3	0	
4	0	
5	11	More than enough for my own experience.



5 – Great to have an answer to all the questions that we ask.

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	1	
4	4	
5	6	Yes. The instructor really made very useful oral explanations.



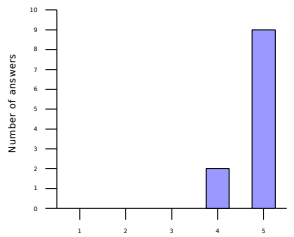
4 – It was very pleasant that the talk was much more than just reading the slides! Some slides at the end of the course were gone through rather quickly though.

5 – Takes the time to answer questions, available. Clear.

3 – Perhaps add more interaction with the audience during lectures.

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

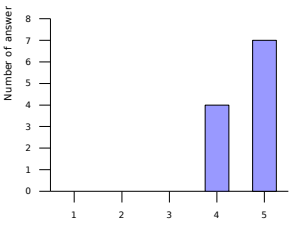
Rating	Answers	Description
1	0	Poorly. Didn't try to understand the questions well or rarely managed to find useful answers.
2	0	
3	0	
4	2	
5	9	Answered very well to questions from the audience



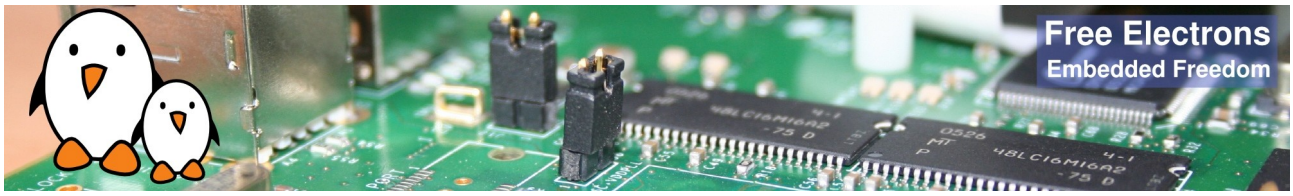
4 – Clear, precise, open-minded. Very interesting discussions.

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	4	
5	7	Yes. The instructor definitely helped to make labs a learning opportunity.



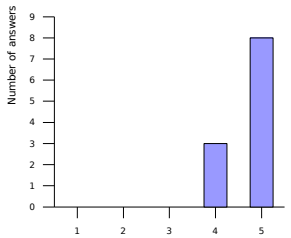
5 – Very profitable practical labs, and the most important part for me.



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	3	
5	8	Very useful. Helped to highlight things not understood and build useful experience.

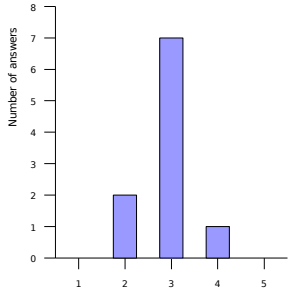


5 – Very important in my opinion, in particular for the bootloader and kernel configuration steps, to experience beginner mistakes.

5 – Essential to master the lectures well.

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	2	A bit too difficult. Would be better if the lab instructions gave a bit more details about explanations.
3	7	Just fine. Prompted me to look for answers, get my own experience and find my own solutions.
4	1	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.



3 – Slightly too easy for my experience, but adapted to the target audience in my opinion.

4 – Between 3 and 4, depending on practical labs

2 – Maybe detailed solutions with listed commands to be able to complete or redo the labs at home in the evening, and ask questions in the following morning.

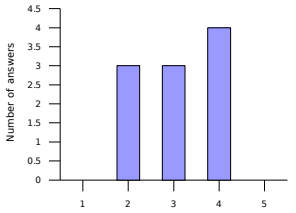
N/A – Impossible to evaluated. I didn't have the recommended bases for the course.

3 – The labs are well thought. Not too many details allow to understand better by looking for the commands. However, for a beginner like me, a little more time would have been necessary to complete them.

2 – Sometimes a bit too difficult for beginners

12. Was enough time dedicated to the practical labs?

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



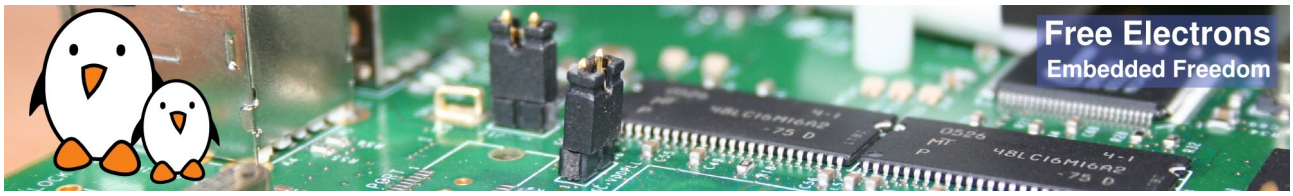
4 – Can really vary from one person to the other, difficult to evaluate. In my case, the first 2 days labs were a little too long, while the filesystem ones were a bit short. At the end, ½ hour of extra lab time would have allowed some to do a Linux RT lab.

4 – Depends on participant skills, which were very different.

N/A

3 – Very good balance between lectures and practical labs

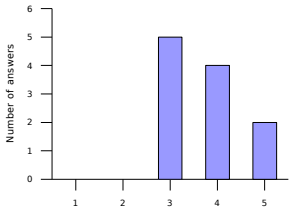
3 – Not always easy to resolve problems due to differences in participant skills.



Training conditions

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

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



3 – Rather limited room size: it would have been ideal if everyone could have had an entire table for the laptop, ARM board, cables and binder. It didn't impact the working atmosphere though.

4 – Enjoyed the ability to connect to the network through a cable. To keep absolutely for people sensitive to health problems related to wireless technologies.

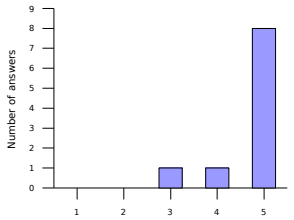
3 – Was rather undersized (oddly organized?)

4 – The room was a little small.

3 – Participants a little too numerous

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	1	
5	8	Very good. Very little time waiting, more time learning.



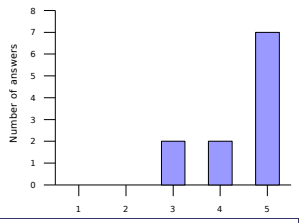
N/A

3 – My own PC because of the too short notice.

5 – Nice board!

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

Rating	Answers	Description
1	0	Not well
2	0	
3	2	
4	2	
5	7	Very well

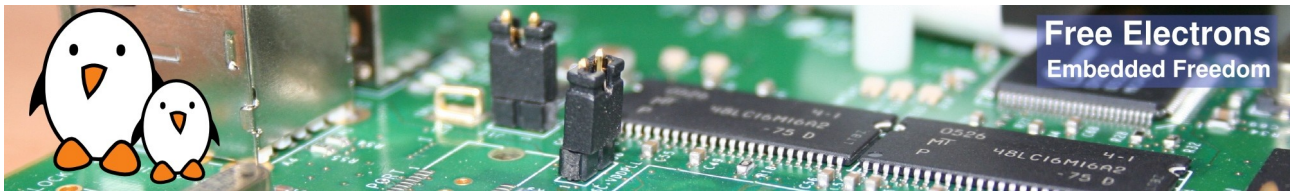


5 – Note: all the paperwork was done by someone else. I didn't see anything in this part.

3 – Getting late in the schedule, because of the difference in participant skills.

3 – Choice of restaurant and meal duration. The rest is OK.

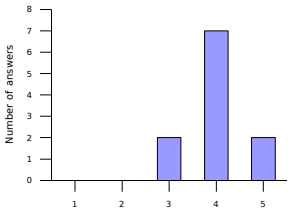
4 – Very good reactivity for session registration



Overall rating

16. How much did you learn?

Rating	Answers	Description
1	0	Definitely not much
2	0	
3	2	
4	7	
5	2	Definitely more than I expected.

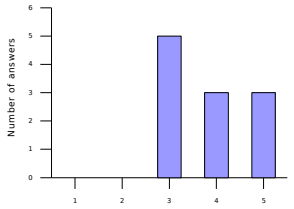


4 – Given that I am very curious about many things, it was impossible to cover everything in 1 week, but it was a very interesting starting point.

4 – Would have been even more if I already had more existing Linux knowledge. A session on this could be worth it.

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

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



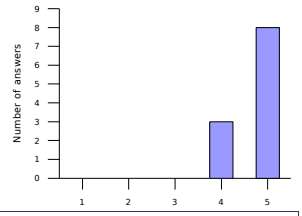
3 – Difficult to evaluate because I mainly do application development, system integration not being my main task.

3 – I can't tell yet...

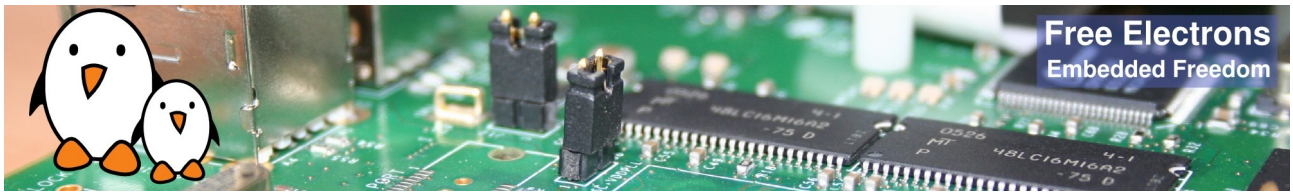
5 – Will depend on the company strategy

18. Would you recommend this course to others?

Rating	Answers	Description
1	0	No.
2	0	
3	0	
4	3	
5	8	Yes, definitely

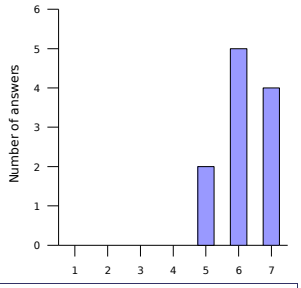


4 – Above all for people interested in embedded Linux but with little experience.



19. Overall rating

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

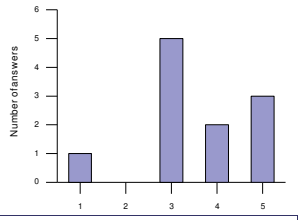


5 – 5.5 . Very few improvement ideas, maybe a “Linux desktop” training on selected topics in a few days would allow to cover more “embedded”concepts during this course.

7 – Should supply solutions.

20. An extra session?

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



4 – On almost everything! Difficult to choose, many things to see in my case, and not enough time.

5 – QT

3 – I don't know yet.

5- General driver programming.

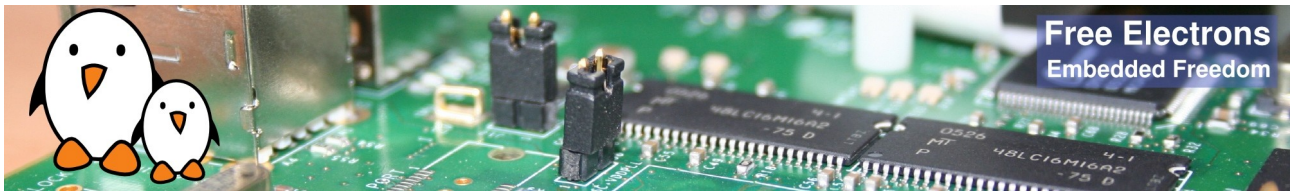
Number of votes for topics in an extra session

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

Free Electrons comments

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

- By offering solutions listing the commands to use during practical labs, even if the solutions can also be found in the lectures. That would be useful for people getting back to their labs after the course.
- By trying to make the lectures more interactive, asking more questions to the audience if needed.
- By insisting even more on the fact that people should get some familiarity with Unix/Linux commands before the training session.
- By trying to get a bigger room.
- By improving our coverage about real-time Linux.



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.