Training evaluation report

Training session: Embedded Linux kernel and driver development
Training dates: Feb. 22-26, 2010
Country:

Number of participants: 4
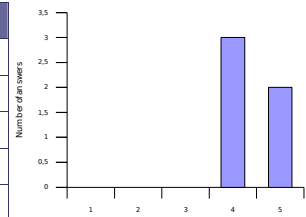**Returned evaluation forms**: 4

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	0	
4	3	
5	2	Fully met

4 - Did not solve yet my tests :-) But I get a good overview over driver development in Linux and I feel I am now able to attack my own problems.

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	1	Just fine
4	0	A little too long
5	0	Definitely too long. The concepts could be learned in much less time.
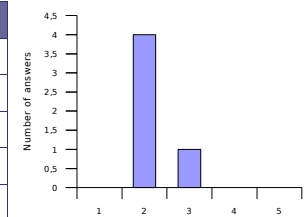
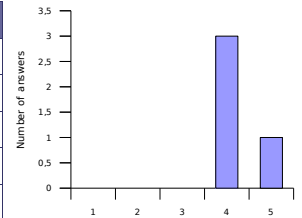2 - Device driver labs not finished. Maybe do not repeat things from past ones?

3 - Good "compromise" between allocated time / topics coverage.
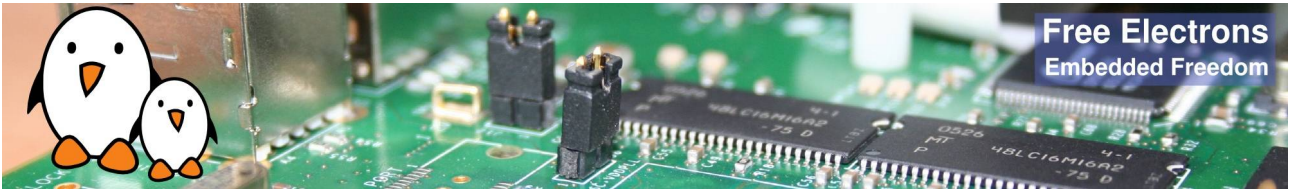
Lecture materials

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	3	
5	1	Really made things easier to understand and learn.

4. Will you recommend these materials to others?

Rating	Answers	Description
1	0	No. Not helpful without following the sessions.
2	0	
3	1	
4	0	
5	3	Definitely
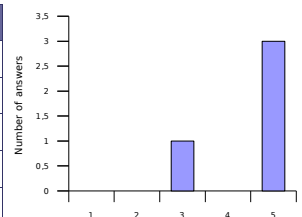
5. If you have Linux project opportunities, will you use these materials again?

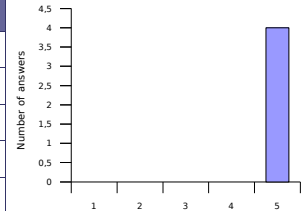| Rating	Answers	Description
1	0	No. I will look for other sources of information.
2	0	
3	0	
4	1	
5	3	Definitely
4 - Probably the kernel source code :-)		
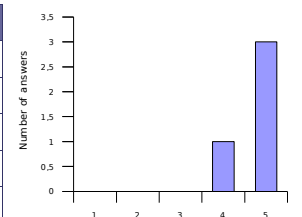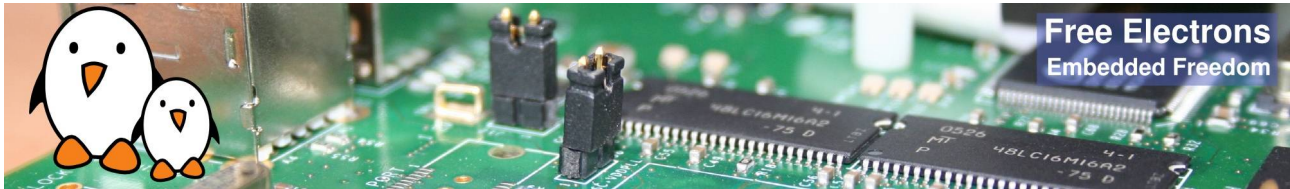
Instructor added value

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	4	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	1	
5	3	Yes. The instructor really made very useful oral explanations.
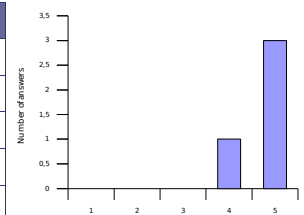
8. How well did the instructor answer questions from the audience?

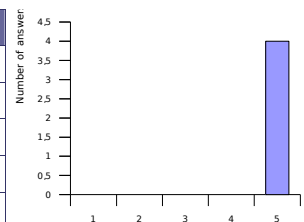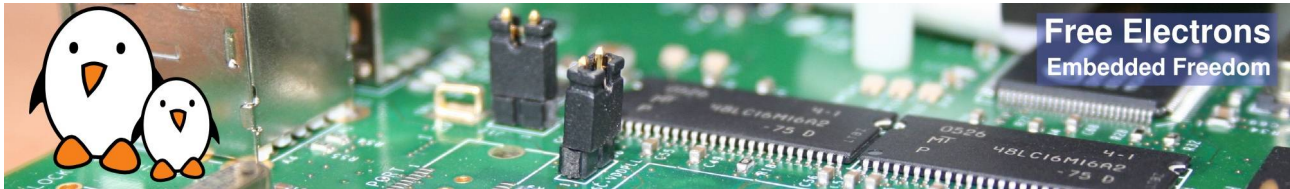| Rating	Answers	Description
1	0	Poorly. Didn't try to understand the questions well or rarely managed to find useful answers.
2	0	
3	0	
4	1	
5	3	Answered very well to questions from the audience
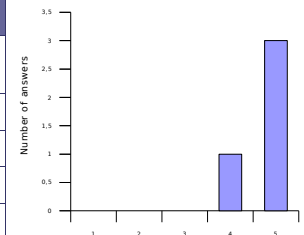
4 - Maybe allocate an additional time "space"at the end for asking / replying to all questions, about things that need to be understood better? (end of training).

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	0	
5	4	Yes. The instructor definitely helped to make labs a learning opportunity.

Training labs

10. How useful were the training labs?

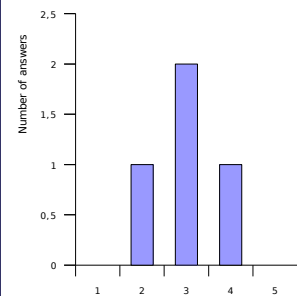| Rating	Answers	Description
1	0	Not useful. Didn't add significant value to the lectures.
2	0	
3	1	
4	1	
5	2	Very useful. Helped to highlight things not understood and build useful experience.
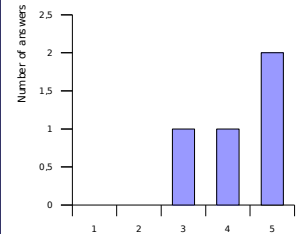
5 - Labs were very useful. Unfortunately, some labs did not work out of the box, which cost a lot of time or made it impossible to perform them.
3 - Unfortunately, some of the labs were not working. TBD: fix them!

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

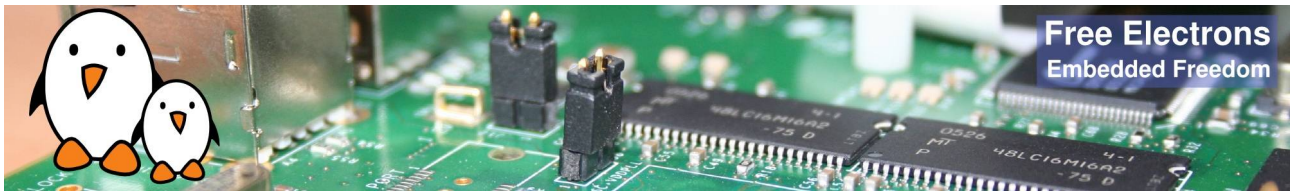| Rating	Answers	Description
1	0	Too difficult. Didn't help or even discouraged a beginner to get more familiar with the tools and concepts.
2	1	A bit too difficult. Would be better if the lab instructions gave a bit more details about explanations.
3	2	Just fine. Prompted me to look for answers, get 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.

2 - Step by step summary to reach results?

12. Was enough time dedicated to the practical labs?

Rating	Answers	Description
1	0	No. More practice is needed
2	2	A little bit more time would help.
3	2	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
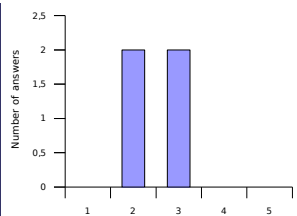
3 - This is a trade-of... I appreciated to do labs on a real system. On the other hand, there is a lot of material to cover.

3 - Difficult to state the point for sure. training is a week only and it all depends what each of us expects form the training (info, practice...)
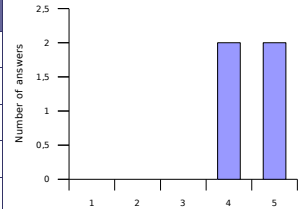
Training conditions

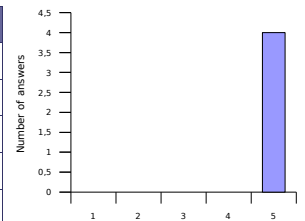13. How do you rate training conditions (room size, equipment, environment...)?

Rating	Answers	Description
1	0	Poor.
2	0	
3	0	
4	2	
5	2	Very good.
4 - Light conditions are poor.		

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	0	
4	0	
5	4	Very good. Very little time waiting, more time learning.

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

Rating	Answers	Description
1	0	Not well
2	0	
3	1	
4	0	
5	3	Very well
3 - Did not cover all lectures, especially all labs.		
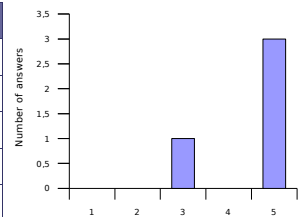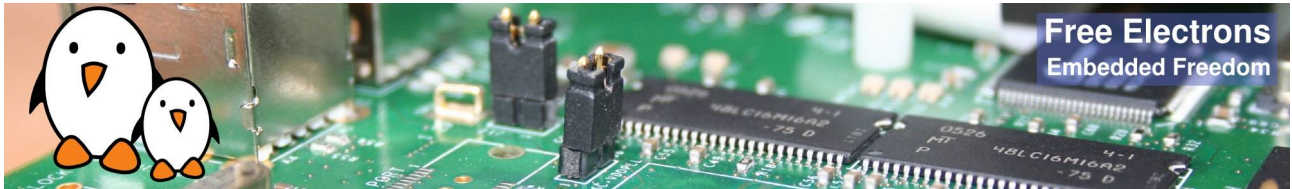
Overall rating

16. How much did you learn?

Rating	Answers	Description
1	0	Definitely not much
2	0	
3	1	
4	2	
5	1	Definitely more than I expected.
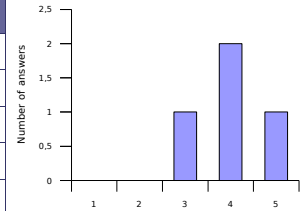
17. How useful will this course be in your daily job?

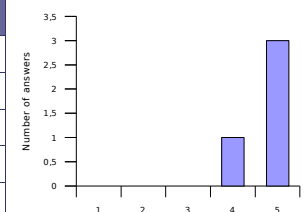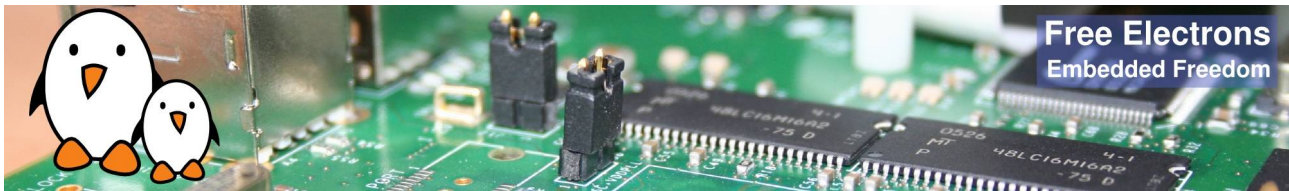| Rating	Answers	Description
1	0	Not useful.
2	0	
3	1	
4	1	
5	2	Very useful. Will make my job easier and more productive.
4 - Looking forward to applying what we've learned.		
5 - In case of beginning working in that field.		
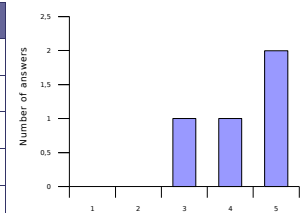
18. Would you recommend this course to others?

Rating	Answers	Description
1	0	No.
2	0	
3	0	
4	1	
5	3	Yes, definitely
5 - Fix the labs!		

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	1	Excellent
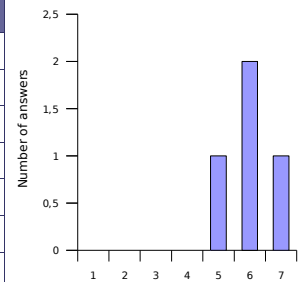
20. An extra session?

Rating	Answers	Description
1	0	No
2	0	
3	2	Why not?
4	1	
5	1	Yes, definitely
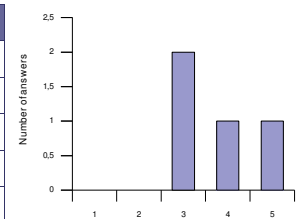
5 - Debugging solutions: would be great to work with a good debugging tool (Eclipse?)

3 - Free Software embedded project organization / management.

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

Free Electrons comments

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

- By working harder to ensure that our labs are never broken by the changes and improvements that we make. We can achieve this by implementing automated test suites.
- By proposing more summaries and commented solutions at the end of practical labs.
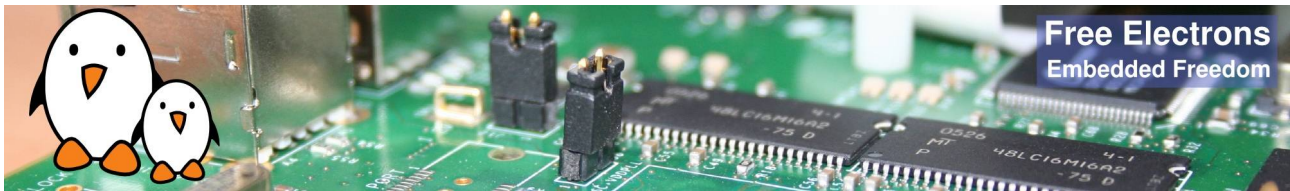
Life after training

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.