Training evaluation report

Training session: Embedded Linux and Kernel Training
Training dates: Nov. 16-20, 2009 (5 days)
Country:

Number of participants: 7
Returned evaluation forms: 7

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	4	Fully met

4 – Not enough time to cover everything.

2. How was the duration of the course?

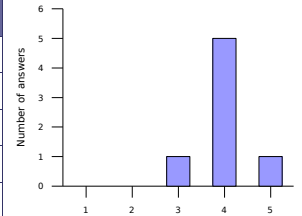| Rating	Answers	Description
1	3	Too short. Couldn't learn enough in such a short time.
2	3	A little too short
3	0	Just fine
4	1	A little too long
5	0	Definitely too long. The concepts could be learned in much less time.

1 – Practical labs need more time. A glossary with system functions and their prototypes would be useful (we wouldn't have to look them up and we would save time)

4 – In my case, I will unfortunately not use the Linux kernel in the next days. My expectations were rather for an introduction session, so a shorter session could have been sufficient.

1- Duration per day is enough. But some practices could be missing in 5 days. Surely due to the fact the base knowledge before the training was null.
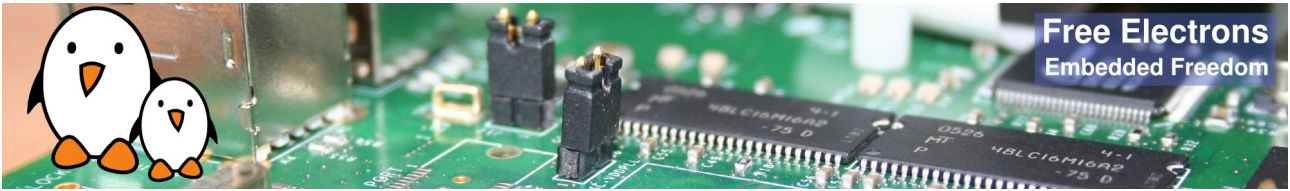
Lecture materials

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	5	
5	1	Really made things easier to understand and learn.
4 – Very useful given the trainer who speaks fast!		

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	3	
5	3	Definitely
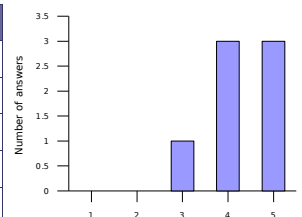
5. If you have Linux project opportunities, will you use these materials again?

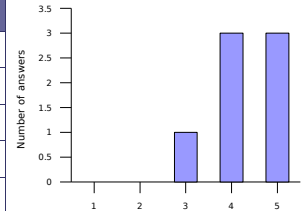| Rating	Answers	Description
1	0	No. I will look for other sources of information.
2	0	
3	0	
4	3	
5	3	Definitely
4 – Yes, will be used for a starting base and examples, but other sources may be used in some cases.		
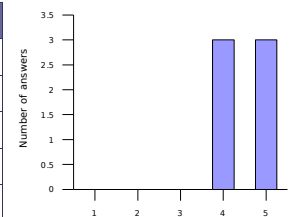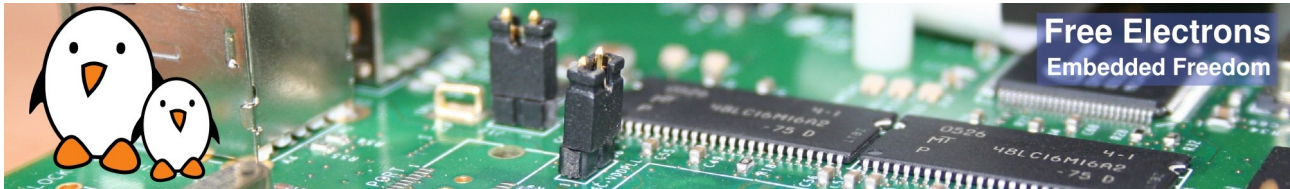
Instructor added value

6. How knowledgeable was the instructor?

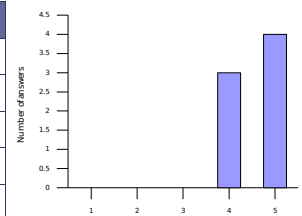| Rating	Answers	Description
1	0	Not enough for my own technical experience.
2	0	
3	1	
4	3	
5	3	More than enough for my own experience.

4 – I am not in a good position to evaluate this, but he seems to have a big background.
5 – Remained accessible for non experts.

### 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	3	
5	4	Yes. The instructor really made very useful oral explanations.

4 - Yes

### 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	3	Answered very well to questions from the audience
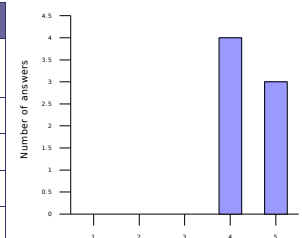
4 – Well!

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.
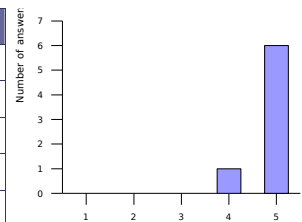
4 – YES!
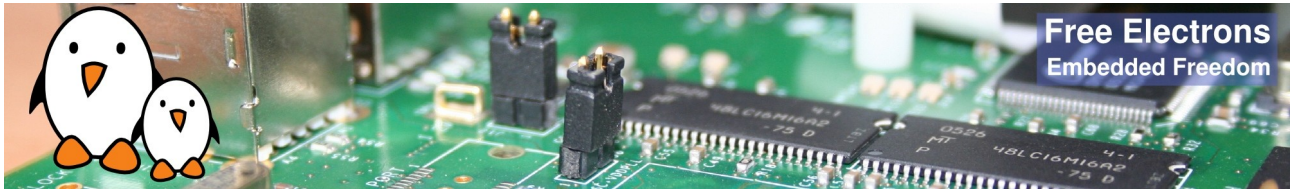
Training labs

10. How useful were the training labs?

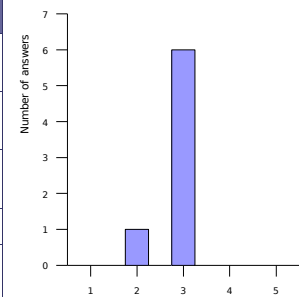| Rating	Answers	Description
1	0	Not useful. Didn't add significant value to the lectures.
2	0	
3	0	
4	2	
5	5	Very useful. Helped to highlight things not understood and build useful experience.
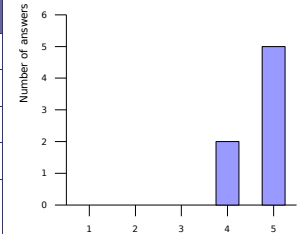
5 – Allow to consolidate ideas.
4 – Very useful for a Linux implementation in a near future. Less in another case. Overall very interesting anyway.
5 – Good mix between theory and practice.

11. How difficult were the training labs?

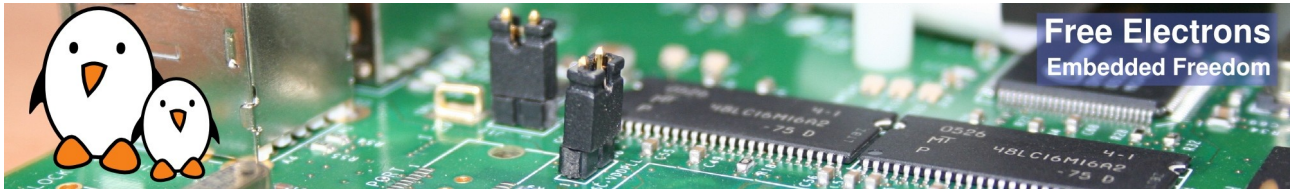| Rating	Answers	Description
1	0	Too difficult. Didn't help or even discouraged a beginner to get more familiar with the tools and concepts.
2	1	A bit too difficult. Would be better if the lab instructions gave a bit more details about explanations.
3	6	Just fine. Prompted me to look for answers, get 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 – Not enough time. Sometimes not clear enough about what should be done (depends on the trainee's knowledge).

12. Was enough time dedicated to the practical labs?

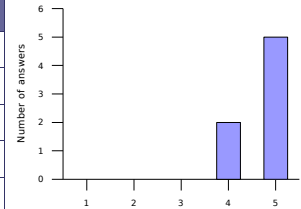| Rating	Answers	Description
1	1	No. More practice is needed
2	2	A little bit more time would help.
3	3	Just fine
4	1	A little bit less time would be enough.
5	0	Don't need to spend so much time on labs. On-the-job practice is best
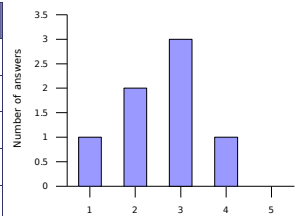
1 - (Sorry)

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	5	Very good.

4 – Good atmosphere. Resourcefulness *("Système D" in French)* but always found solutions.

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

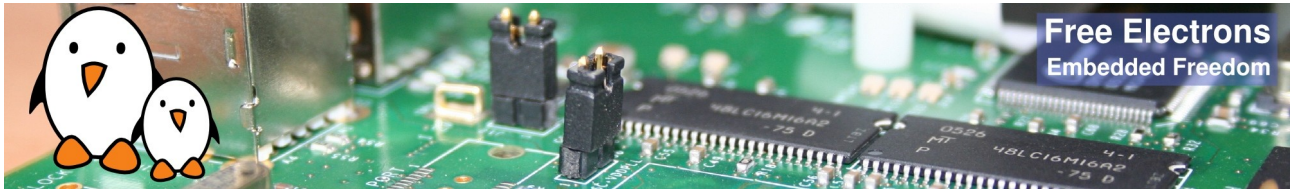| Rating	Answers	Description
1	0	Poor. Not powerful enough to execute practical labs.
2	0	
3	1	
4	0	
5	5	Very good. Very little time waiting, more time learning.
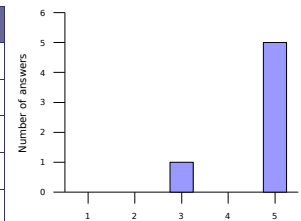
5 – Preinstall Xubuntu. That would save some time. *Free Electrons note: this usually doesn't take much time, but the network was slower than expected. It's still nice when people do everything by themselves, and when there's nothing that just works but without knowing how.*

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

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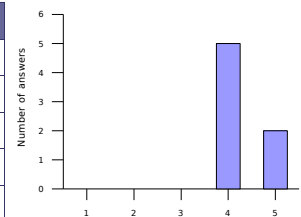
Overall rating

16. How much did you learn?

Rating	Answers	Description
1	0	Definitely not much
2	0	
3	1	
4	5	
5	1	Definitely more than I expected.
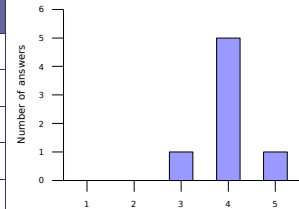
5 – Now time to remind for the future.

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

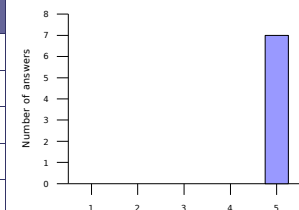| Rating	Answers	Description
1	0	Not useful.
2	2	
3	4	
4	0	
5	1	Very useful. Will make my job easier and more productive.
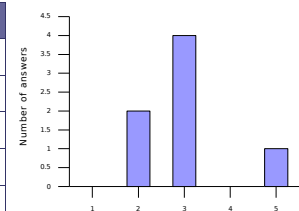
2 – Useful in 5 years for me.
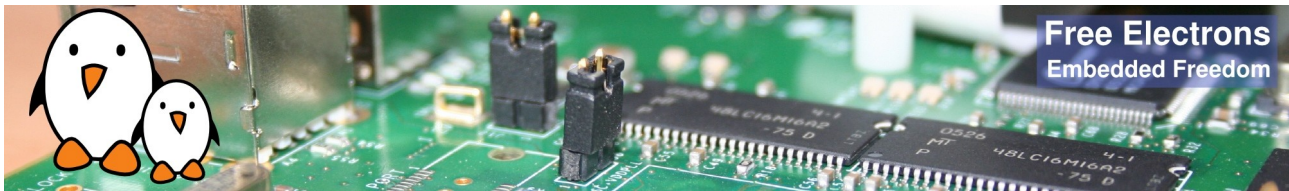3 – For the moment, Linux is not used often on our boards.
2 – I hope to have a project that will use Linux. That's not true today.
3 – Not in the next 6 months forward.
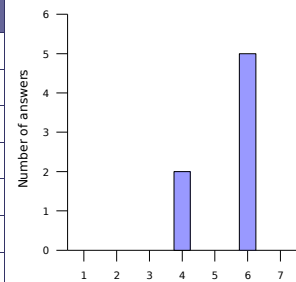
18. Would you recommend this course to others?

Rating	Answers	Description
1	0	No.
2	0	
3	0	
4	0	
5	7	Yes, definitely

19. Overall rating

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

20. An extra session?

| Rating	Answers	Description
1	0	No
2	0	
3	3	Why not?
4	2	
5	2	Yes, definitely
3 – To go deeper in some topics.		
4 – Definitely in the case of a future use of a free software solution.		
4 – To decide in the case of a new project.		
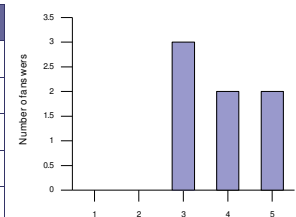
Number of votes for topics in an extra session

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

Free Electrons comments

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

- By proposing memento sheets for the most common embedded Linux commands and kernel functions too.
- By speaking slower!
- By proposing more realistic training agendas (this was a custom agenda, our standard agendas are well proven in terms of time).
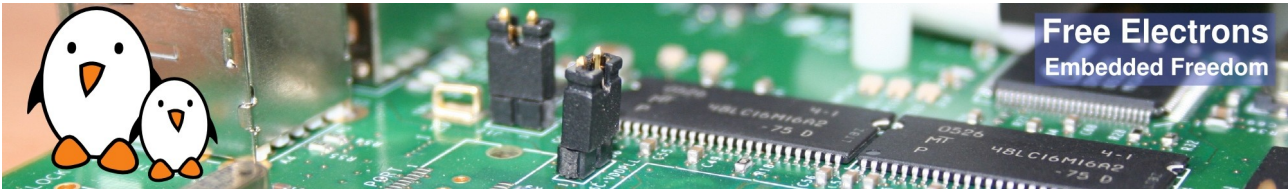
Life after training

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.