

Training evaluation report

Training session: Embedded Linux Training
Training dates: Nov. 30 – Dec. 3, 2009 (4 days)
Country: The Netherlands

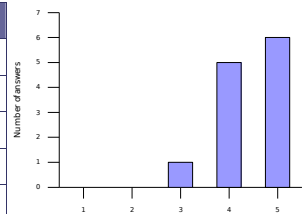
Number of participants: 13
Returned evaluation forms: 12

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?

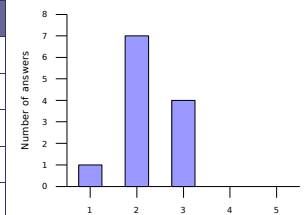
Rating	Answers	Description
1	0	Not met
2	0	
3	1	
4	5	
5	6	Fully met



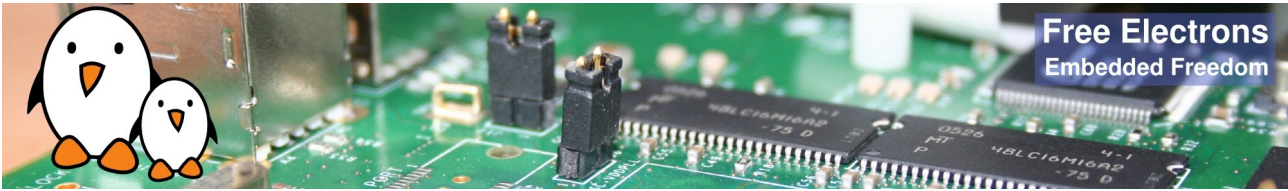
- 4 – Maybe add some small lecture about integrating custom device drivers
- 5 – More than what I expected

2. How was the duration of the course?

Rating	Answers	Description
1	1	Too short. Couldn't learn enough in such a short time.
2	7	A little too short
3	4	Just fine
4	0	A little too long
5	0	Definitely too long. The concepts could be learned in much less time.



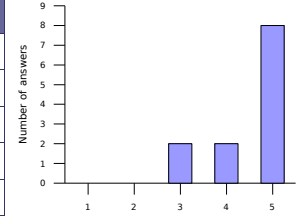
- 2 – Not enough time to finish the labs
- 2 – Couldn't finish the labs. More info in a few days would be too much anyway...
- 2 – Missed the 5th day (*Free Electrons note: this course had 4 days instead of 5*)
- 2 – The last part was handled too quickly
- 2 – For the average “knowledge” person, it might be a bit too fast to keep in synch.
- 3 – It was a lot of information in 4 days. After three days I was getting a bit tired.
- 2 – I didn't meet the initial base knowledge.
- 1- Also due to low base knowledge of me on Linux



Lecture materials

3. How helpful were the lecture materials?

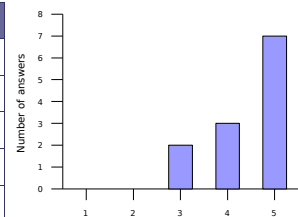
Rating	Answers	Description
1	0	Not helpful. Made things more difficult to learn and understand.
2	0	
3	2	
4	2	
5	8	Really made things easier to understand and learn.



4 - Labs are good!

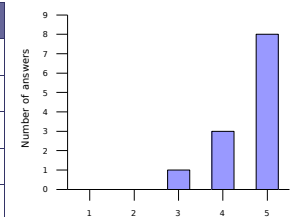
4. Will you recommend these materials to others?

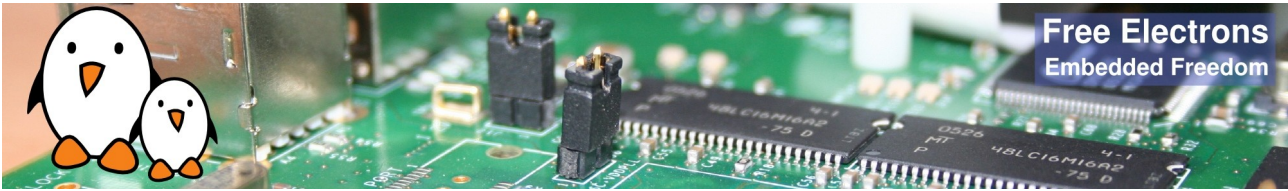
Rating	Answers	Description
1	0	No. Not helpful without following the sessions.
2	0	
3	2	
4	3	
5	7	Definitely



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	1	
4	3	
5	8	Definitely

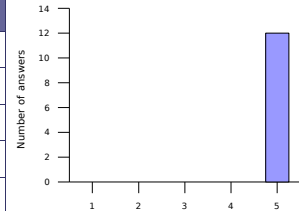




Instructor added value

6. How knowledgeable was the instructor?

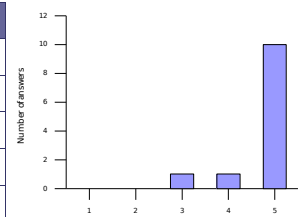
Rating	Answers	Description
1	0	Not enough for my own technical experience.
2	0	
3	0	
4	0	
5	12	More than enough for my own experience.



5 - Very impressive

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	1	
5	10	Yes. The instructor really made very useful oral explanations.

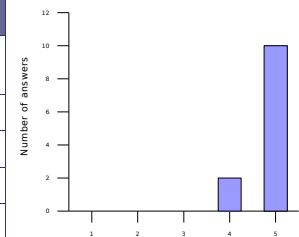


5 - Even for a Frenchman :P

5 - Help during labs also very useful.

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

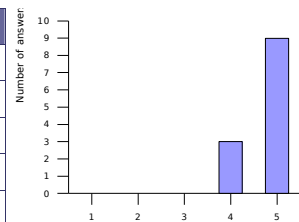
Rating	Answers	Description
1	0	Poorly. Didn't try to understand the questions well or rarely managed to find useful answers.
2	0	
3	0	
4	2	
5	10	Answered very well to questions from the audience



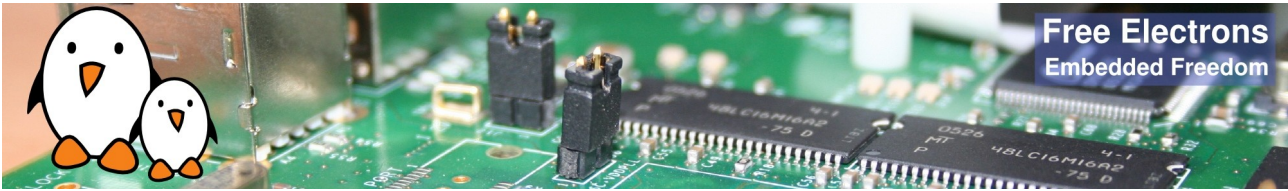
4 - Due to language differences sometimes people didn't get the correct answers.

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	3	
5	9	Yes. The instructor definitely helped to make labs a learning opportunity.



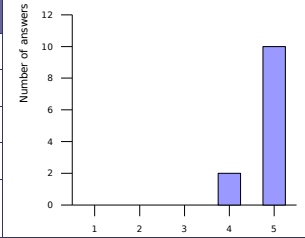
5 - Very helpful!



Training labs

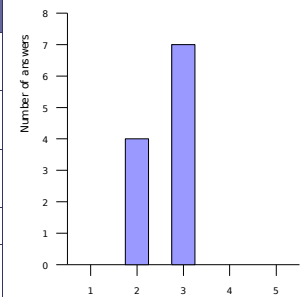
10. How useful were the training labs?

Rating	Answers	Description
1	0	Not useful. Didn't add significant value to the lectures.
2	0	
3	0	
4	2	
5	10	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	4	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	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.

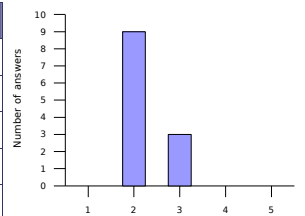


2 - This was caused by a lack of Linux experience from my side.

2- Also because of my base knowledge.

12. Was enough time dedicated to the practical labs?

Rating	Answers	Description
1	0	No. More practice is needed
2	9	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

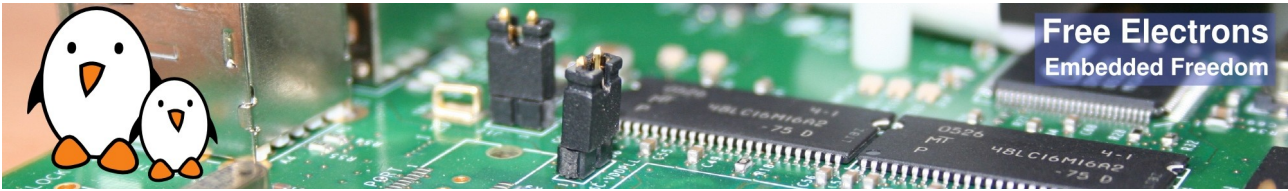


2 - Labs and lectures were getting asynchronous because some people were "too" fast.

2 - Again, missed the 5th day

3 - Fine for me.

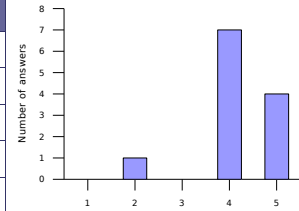
2 - I would recommend that the time of slides is adjusted to the average trainee, not the fastest.



Training conditions

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

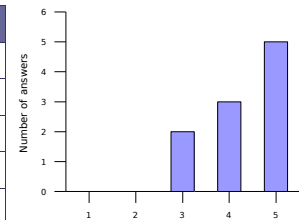
Rating	Answers	Description
1	0	Poor.
2	1	
3	0	
4	7	
5	4	Very good.



4 - Should avoid changing rooms.
2 - More improvements: network environment, moving classrooms

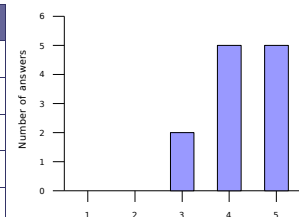
14. How do you rate the training equipment (mainly computers)?

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

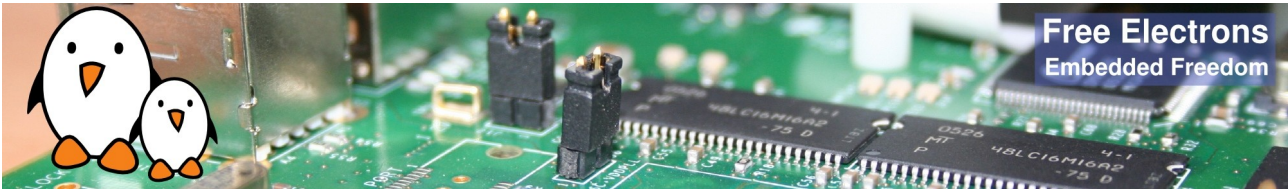


15. How well was the course organized (program, registration, meeting the schedule...)?

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



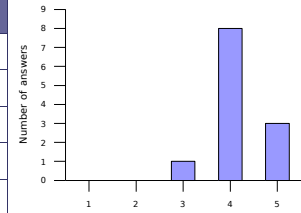
3 - Too bad we had to change location.



Overall rating

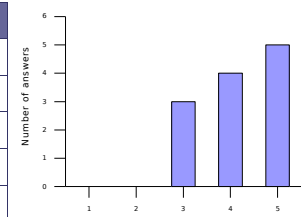
16. How much did you learn?

Rating	Answers	Description
1	0	Definitely not much
2	0	
3	1	
4	8	
5	3	Definitely more than I expected.



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

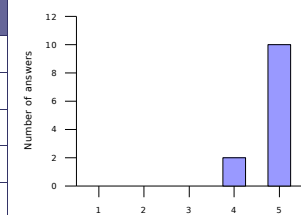
Rating	Answers	Description
1	0	Not useful.
2	0	
3	3	
4	4	
5	5	Very useful. Will make my job easier and more productive.

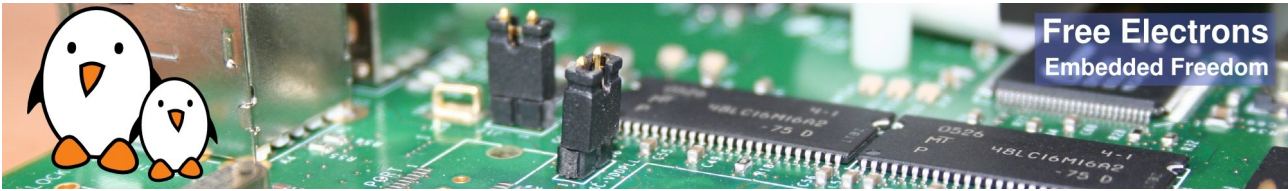


5 - Makes me understand what needs to be organized before a product can be produced.
3 - I'm not doing that much with embedded Linux at the moment, yet.

18. Would you recommend this course to others?

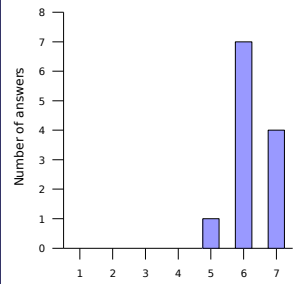
Rating	Answers	Description
1	0	No.
2	0	
3	0	
4	2	
5	10	Yes, definitely





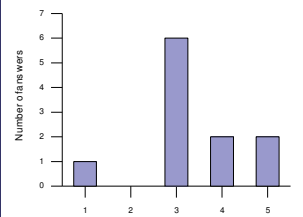
19. Overall rating

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



20. An extra session?

Rating	Answers	Description
1	1	No
2	0	
3	6	Why not?
4	2	
5	2	Yes, definitely



4 – Kernel programming
 3 – I could need a little more detail on BSP's since that's the biggest barrier using other hardware.
 3 – Depends on future work.
 5 – Drivers and "strange hardware support"
 5 – GPIO, SPI, I2C hardware drivers
 1- I want to get more practical experience first.

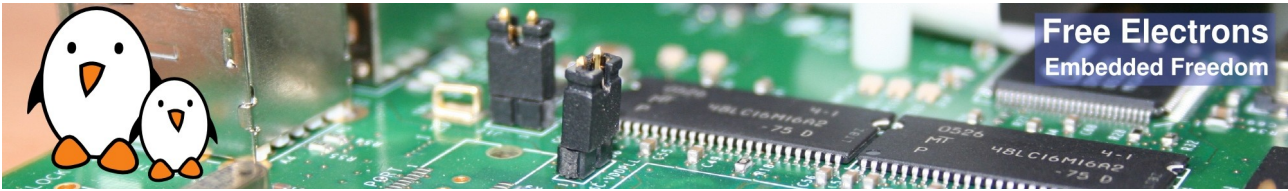
Number of votes for topics in an extra session

Understanding the Linux kernel	Linux device driver development	Linux board support packages	Embedded system development	Miscellaneous needs
Process management	USB device drivers	1 Processor specific code	1 Lightweight tools	Java
Filesystem implementation	USB host drivers	Board specific code	2 Embedded system development tools	2 Real-time
Memory management	PCI drivers	2 Board specific interrupt support code	4 Cross-compiling toolchains	1 Audio
Scheduling implementation	Network drivers	2 DMA support	4 Debugging solutions	2 Video
Bootstrap code	Block drivers	Bootloader development	1 Software development tools	1 uClinux
	Flash drivers		Programming with graphical libraries	Voice over IP
	I2S drivers		POSIX API	
	Input drivers		System optimization	
	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 more lab extensions to people progressing faster. This way, we keep everyone busy without having to get back to lectures as soon as the fastest person completes his / her labs.
- By proposing a less dense agenda for custom 4 days sessions.



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.