

Price: see your VeriFone sales representative. Per student, Excluding VAT.
Part Number: **AE-RTMX0XXXX-XX**

Mx 870 Programmers Training



1. Training description

The training is planned as comprehensive presentation of all aspects of Linux based Mx870 terminal.

The presentation starts from hardware design, than continues with system mode capabilities. Important part of the training is installation of software development environment and setting the best environment for seamless and reliable software development.

Over one day of the training will be taken for presentation of uclibC library providing majority of Linux specific features like: sockets, processes, threads. Few labs are planned for better understanding of Linux features.

The other big training block is creation of user interface using two different methods: direct usage of Fancy Pants library and usage of form Generator tool.

The training is designed for giving enough information for starting software development even without any Linux practice and it should be good starting point for future self studies.

During the training participants will work on 5 programming labs presenting some key features of the Linux and Fancy Pants application development:

- processes,
- threads,
- pipes,
- signals,
- sockets,
- using graphical screen

There is no strict pre-requisite of Linux knowledge, but C language is a must.

The best option for the attendees would be using their own laptop computers, as one of the training actions is installation of complete SDK with all supporting tools making development fast and easy. Please note that the computer has to be equipped with serial port for terminal connection.

2. **Training duration: 3.5 days**
3. **Training starts each day at 9:00, and finishes at 17:30, last day finishes at 13:00 with the lunch**
4. **Training facilities are located in Verifone office in Harefield,**
5. **Each participant get own terminal for the duration of the training**
6. **After the training all participants get all training materials and lab solutions.**
7. **It would be highly desired for all participants to buy and review “Beginning Linux Programming” book published by Wrox.**

8. Agenda

Day 1

8:45 – 9:00 Morning coffee
9:00 – 10:30 Hardware overview 1
10:30 – 10:45 Coffee break
10:45 – 13:30 Hardware overview 2
13:30 – 14:30 Lunch break
14:30 – 16:15 Linux – console commands, configuration
16:15 – 16:30 Coffee break
16:45 – 17:15 Practical exercises – terminal connection, mounting devices etc

Day 2

8:45 – 9:00 Morning coffee
9:00 – 9:45 Development environment – installation
9:45 – 13:00 uclibC – pipes, files, processes– with coffee break
13:00 – 14:00 Lunch break
14:00 – 15:30 processes Lab (1),
15:30 – 16:00 uclibC - signals
16:00 – 17:00 signal Lab (2)

Day 3

8:45 – 9:00 Morning coffee
9:00 – 10:00 uclibC – POSIX threads
10:00 – 11:30 threads Lab
11:30 – 13:00 Introduction to Fancy Pants
13:00 – 14:00 Lunch break
14:00 – 15:30 FP “hello word” lab
15:30 – 17:30 FP “full application model” lab

Day 4

8:45 – 9:00 Morning coffee
9:00 – 11:00 Form generator + installation
11:00 – 11:15 Coffee break
11:30 – 13:00 Form generator practice