

LINUX Device Drivers ON ARM



EASY
ARM

Enabling ARM Learning in INDIA
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PHYTEC_Wega-AM335x, Cortex-A8

Workshop

“Linux Device Drivers on ARM” workshop is an exclusive practical training for learning how to develop Device Drivers for a Embedded ARM Target.

Who should Attend?

Those who want to bringup the Linux kernel on real target and want to start learning Embedded Linux right from scratch.

Registration:

Drop a mail to info@easyarm.com with your contact details.

For any query please call on Ph: +91-80-41307589

Mob: +91-9972039671



Course : Device Drivers Programming (2 Days)

Fees: Rs. 4,560.00

Day-1

An introduction to device drivers

- Role of the Device Drivers
- Splitting the kernel
- Classes of devices and modules
- Kernel Architecture or Model
- kernel modules

Module Basics

- Introduction to Modules & Device Drivers
- Modules Defined
- Types of Modules in the kernel
- Writing Your first kernel module
- Module Related Commands
- Kernel Module vs Applications
- User space vs Kernel space
- Statically linked vs Dynamically linked drivers/modules
- Exporting symbols from modules
- Concurrency in the kernel
- Module Parameters
- Version dependency
- Kernel Module Programming
- Lab exercises

The proc file system

- Creating proc file system entries
- Making read & write operations on proc entries
- Lab exercises

Character Device Drivers

- Registering a character device driver
- File operations
- The file structure
- devfs / lseek /ioctl
- Blocking, non blocking and asynchronous operations

- Programming with ioctl(), mmap()
- Lab exercises

Day-2

Hardware and Interrupt Handling

- Using IO Ports
- Installing and implementing an interrupt handler
- Tasklets and Bottom halves
- Task queues, Work queues
- Lab exercises

Block Device Drivers

- Block drivers structures
- Flash memory Drivers
- Lab exercises

Network Drivers

- The net_device structure in detail
- Making changes in Ethernet drivers in kernel Source.
- Lab exercises

Payment Mode: [Complete Payment should done be in advance]

Venue Details:

9/1, 1st Floor,3rd Main, 8th Block, Opp: Police station, Kormangala, Banalore-560095.

Our Other Workshops:

1. ARM7 Workshop
2. ARM Cortex-M3
3. USB Programming
4. RTOS on ARM7 & ARM Cortex
5. Android Kick-Off
6. Android App Programming
7. Android System Development
8. ARM Cortex-M0 (Special Workshop for 8051 Programmer, Since ARM launched Cortex-M0 Series to replace all 8-bit, 16-bit Micro-controllers in market (ARM Targeted price for ARM Cortex-M0 is \$0.5)

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