



## Real Time Projects on Embedded Linux Device Driver Development

With Beagle Bone Black Expansion board

### List of Real time Projects:

1. Boot time Optimization
2. Add Splash screen in Human Machine Interface
3. Self-Diagnostic Tool
4. Data logger
5. Smart Weather Monitoring System
6. Vibration Sentry
7. Network Router
8. Data Acquisition System

### Project Execution:

**Step 1: Setup Embedded Linux Development Environment**

**Step 2: Prepare Project Abstract**

**Step 3: Implementation phase @ Bootloader**

**Step 4: Implementation phase @ Kernel – Device drivers**

**Step 5: Implementation phase @ User**

**Note:** All Sessions are highly interactive hands-on-sessions.

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# KERNEL MASTERS

## Embedded Linux Design & Development



### End of the Project you'll be able to (Session Highlights):

- Add 3+ Years of Embedded Linux Device drivers Experience in your profile.
- Build a customized kernel and u-boot for a designated target.
- Configure a bootloader for booting a customized kernel with its root filesystem from a solid-state storage device.
- Choose a GNU toolchain for cross-development.
- Develop a deep understanding of the board support packages with Real Time Examples.
- Add the following skill set to your profile: **Board support packages, boot loaders, Setup Embedded Linux Development Environment, Board Bring up, Boot Time Optimization etc.**
- And more.