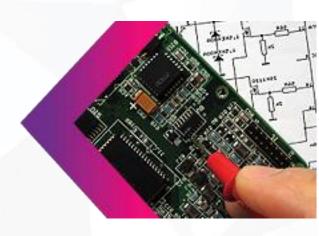
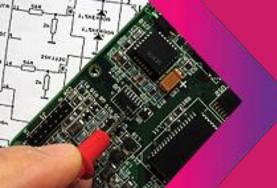




# Yocto Project Building Embedded Linux Workshop





### **NOW** FOR **SIMPLIFIED** SOLUTIONS

# Yocto project - Building Embedded Linux - Workshop

# Objectives:

- ✓ Understand the Yocto Project and its organization
- ✓ Build and customize image using Yocto and run it on target
- ✓ Gain knowledge about writing recipes and adding layers
- ✓ Add custom application and its recipe to the build system.
- ✓ Development workflow using Bitbake
- ✓ Understand BSP layers and distro layers in Yocto Project

#### Duration:

- √ 3 days (One and half weekend)
- √ 6 session (Duration of each session: 3 to 3.5 hours)

#### Platform:

- ✓ Any Linux Platform supporting QT (Preferably Ubuntu)
- ✓ Beagle Bone Black

# Delivery method:

Workshop based approach with demo and hands-on exposure

# • Pre-requisites:

Basic Linux usage

# • Detailed course contents:

#### ✓ Introduction to embedded Linux build systems

- What is a build system
- List of build systems
- Benefits of build system

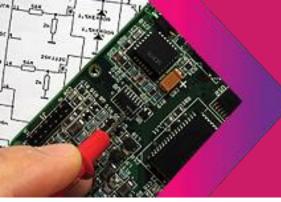
#### ✓ Yocto Project and Poky Overview

- Yocto Project Overview
- The Yocto Project lexicon
- The Poky reference system overview
- Poky source tree

#### ✓ Yocto project basic setup and build

- Environment setup
- Configuring the build
- Building an image





#### **NOW** FOR **SIMPLIFIED** SOLUTIONS

# √ Yocto project advanced usage

- Advanced configuration
- Packages variants
- Packages
- The power of BitBake

#### √ Writing recipes - Basics

- Recipes Overview
- Organization of a recipe
- Applying patches
- Examples of recipes

#### √ Writing recipes - Advanced

- Extending a recipe
- Append file example
- Advanced recipe configuration
- Classes
- Binary packages
- BitBake file inclusions

#### ✓ Layers

- Introduction to layers
- Creating layers

#### ✓ BSP Layers

- Introduction
- Generating a new BSP layer
- Hardware configuration files
- Formfactor
- Bootloader
- Kernel

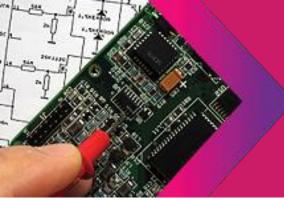
#### ✓ Distro Layers

- Overview
- Creating a distro layer
- Distribute the distribution

#### ✓ Images

- Introduction to images
- Image types
- Package groups





# NOW FOR SIMPLIFIED SOLUTIONS

# ✓ Application development workflow

- Recommended workflows
- The Yocto Project SDK
- Devtool
- Quilt





Emertxe Information Technologies Private Ltd #83, 1st Floor,

Farah Towers,

MG road,

Bangalore - 560001

T: +91 809 555 7 333 (M), +91 80 4128 9576 (L)

E: <a href="mailto:training@emertxe.com">training@emertxe.com</a>