Agenda

• Linux Kernel Debugging Training Series overview
• Linux/kernel overview
• For more information
Debugging embedded Linux training summary

• **Purpose:** Linux is well-adopted within embedded systems. But debugging Linux system issues can be overwhelming. This training series teaches the techniques of debugging kernel issues that may be encountered in embedded Linux systems.

• **Goal:** Learn how to capture proper kernel logs for debugging issues.

• **Scope:**
  – Explain Linux Kernel logging system and logging API.
  – Illustrate how to locate a particular device driver.
  – Demonstrate how to read kernel Oops logs.
Debugging Embedded Linux Training Series

- Part 1: Linux/Kernel Overview
- Part 2: Kernel Logging System Overview
- Part 3: printk and Variations
- Part 4: Dynamic Debug
- Part 5: Locate Device Driver Source Code
- Part 6: Understand Kernel Oops Logs
Kernel config

- Kernel is configurable
- .config
- make menuconfig
make menuconfig
.config example

# Automatically generated file; DO NOT EDIT.
# Linux/arm 4.4.41 Kernel Configuration
#
CONFIG_ARM=y
CONFIG_INIT_ENV_ARG_LIMIT=32
CONFIG_CROSS_COMPILE=""

# CONFIG_COMPILE_TEST is not set
CONFIG_LOCALVERSION=""

# CONFIG_IRQ_DOMAIN_DEBUG is not set
CONFIG_LOG_CPU_MAX_BUF_SHIFT=12
CONFIG_XFRM=y
CONFIG_XFRM_ALGO=m
CONFIG_XFRM_USER=m

# CONFIG_XFRM_SUB_POLICY is not set
For more information

- For questions about this training, refer to the E2E Embedded Linux Community Forum: [http://e2e.ti.com/support/embedded/linux/f/354](http://e2e.ti.com/support/embedded/linux/f/354)