

# Embedded Linux System

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# CH1 Introduction to Embedded System

- 嵌入式系統 定義
- 嵌入式系統 相關知識
  - SOC : ARM, MIPS, PowerPC ...
  - 週邊設備 : Flash, eMMC, I2C, I2S, ....
- 嵌入式作業系統 基本原理
- 開發版 NanoPi-M4 介紹
- 外掛模組介紹 :
  - 溫溼度模組 , 亮度模組 ..
- 學習建立 嵌入系統開發環境

# CH2 Embedded Linux Arch

➤ To know Embedded Linux System

# CH3 Basic Software And Tool

 GPL Tool

- Develop Tool
- Video and Audio Tool
- WiFi and Ethernet
- Build Code Tool



# CH4 Cross-compile Toolchain

- How to Cross-compile with Toolchain
- Create a Linux library to use

# CH5 Introduction to Bootloader

- To know Bootloader
- How to U-boot
- Detail into U-boot

# CH6 Embedded Linux Kernel

- How to build Linux kernel
- How to scale Linux kernel
- To know Linux kernel something



# CH7 RootFS

- To know RootFS in embedded system
- How to create a RootFS with Buildroot

# CH8 Linux User Land

- To know Linux user land
- To know user land application
- How to control device on the Linux user land

# CH9 Linux Device Driver

- To know Linux device driver
- How to build a Linux device driver
- How to install/remove a device driver