Embedded Linux Pitfalls

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Outline

Introduction
A bit o' perspective
Pitfalls
Conclusions
Q&A

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Mobile & Beyond · 2D/3D User Interfaces · Multi-OS · Networking

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Introduction

Setting expectations

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A bit o' perspective (History)

Click to edit Master text styles
Second level
Third level
Fourth level
Fifth level
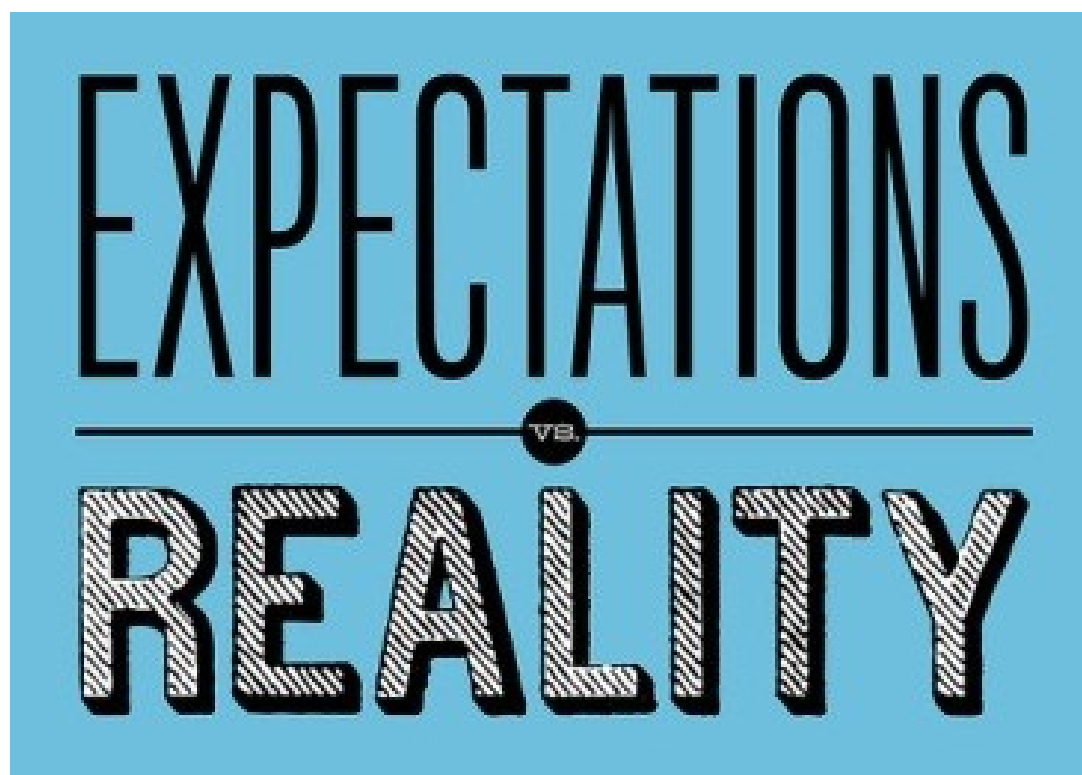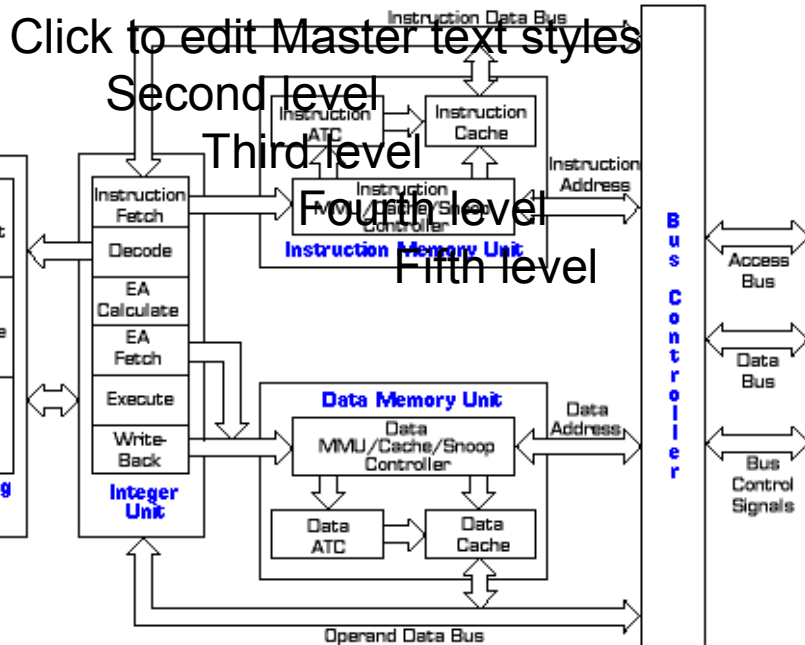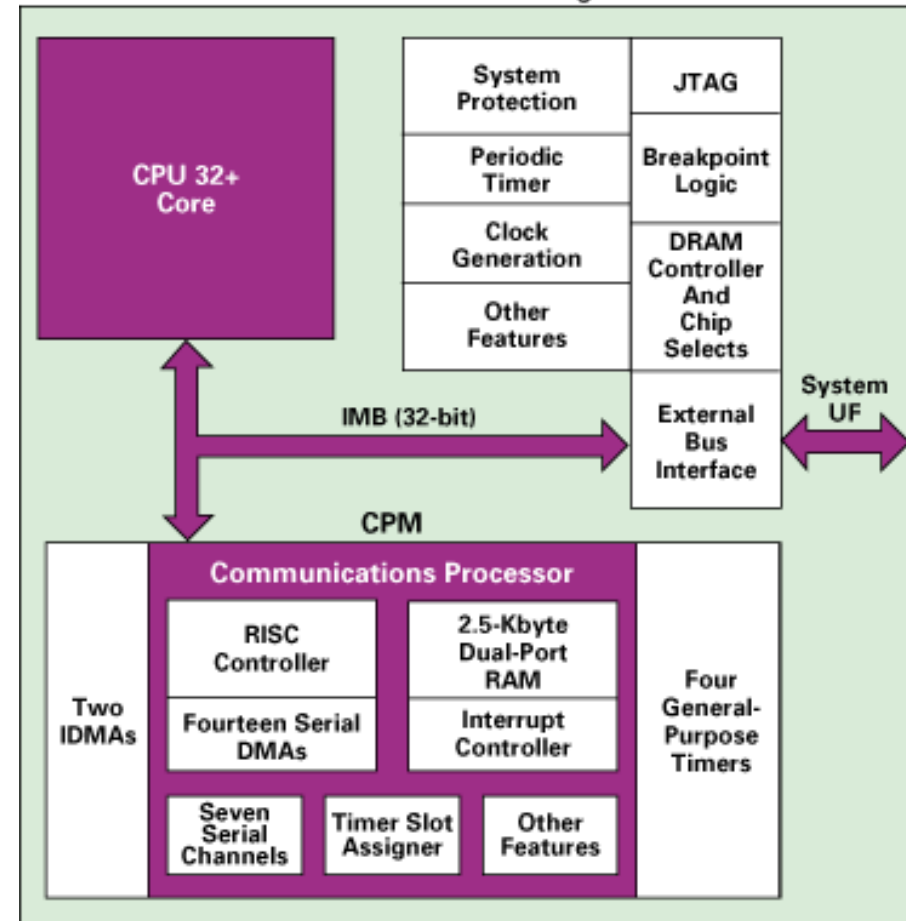
A bit o' perspective (History)
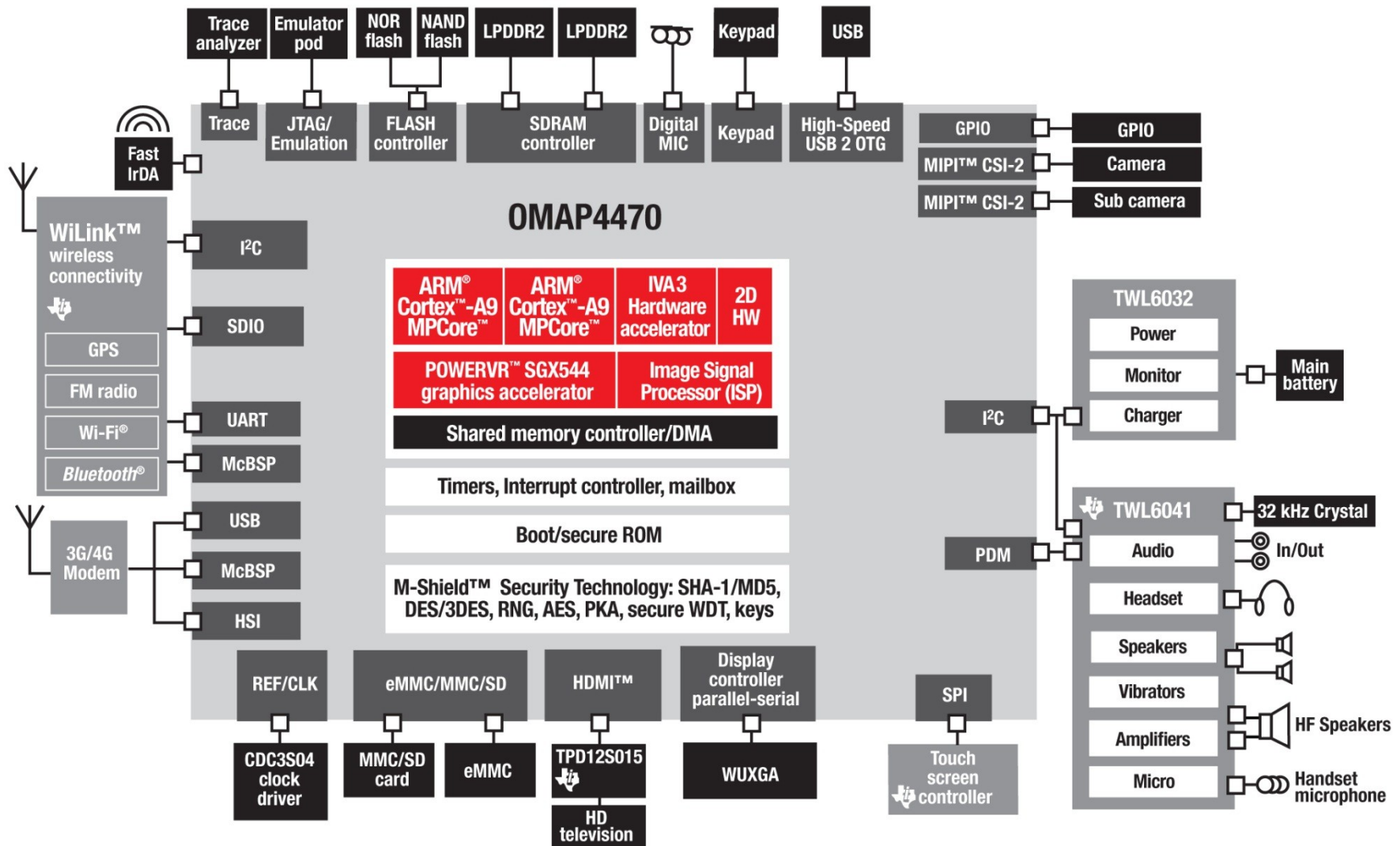
Pitfalls

Pitfalls – Some Fundamentals
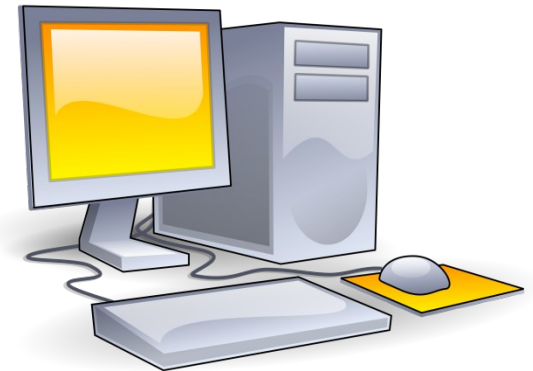
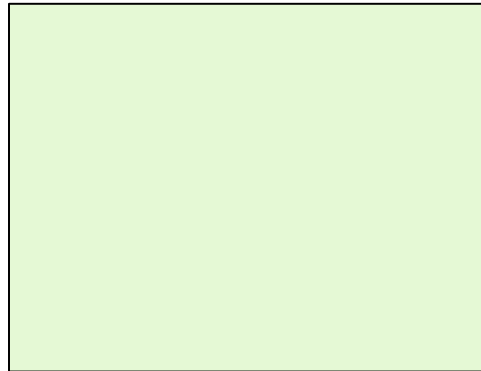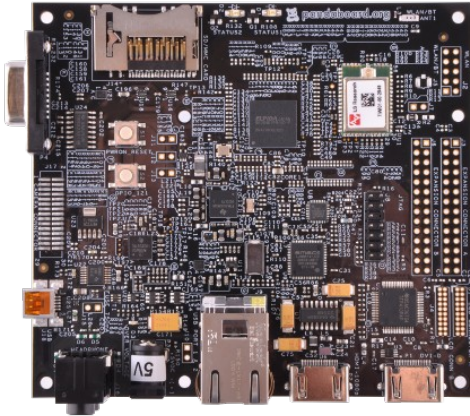Hardware and software: an impedance mismatch?

Pitfalls – Some Fundamentals

NIH syndrome

Pitfalls – Some Fundamentals

What do you mean this runs on my desktop?

Pitfalls - Maintenance

Click icon to add table

- Building the "Tower of Babel"

Click icon to add table

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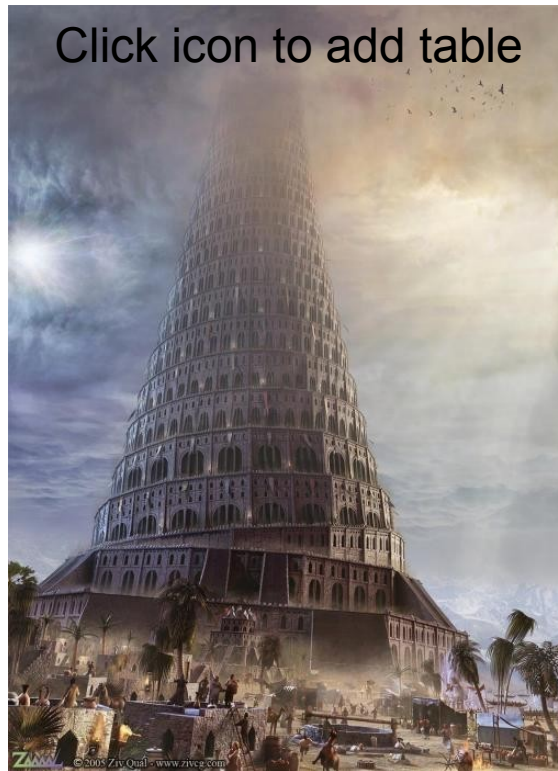
Pitfalls – Maintenance

- Carrying too many patches

Click to edit Master text styles
Second level
Third level
Fourth level
Fifth level

Pitfalls – System Design

Interfaces, APIs, & contracts

Pitfalls – System Design

Upgrade path

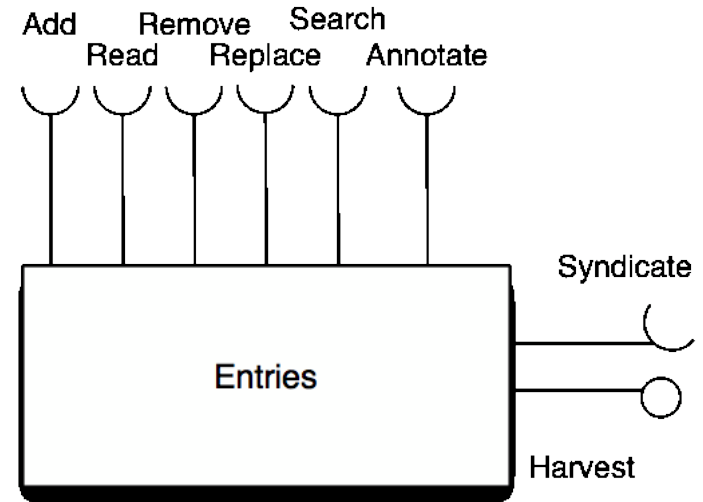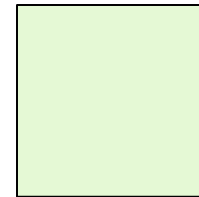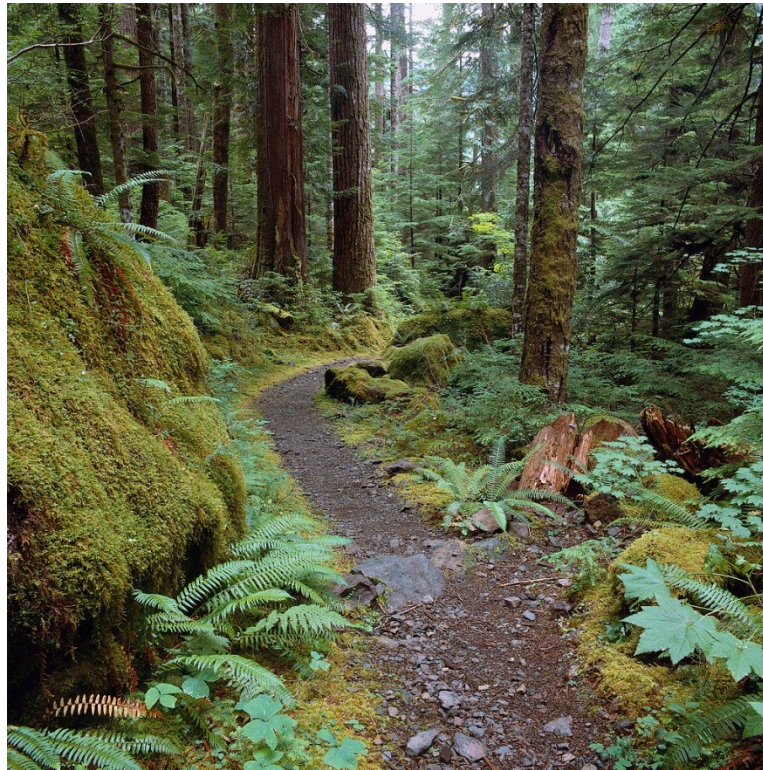# Pitfalls – Tools

Debuggers are your friend. No, really.

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Pitfalls – Tools

Use NFS to mount your target rootfs

Network

Conclusions

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Questions?

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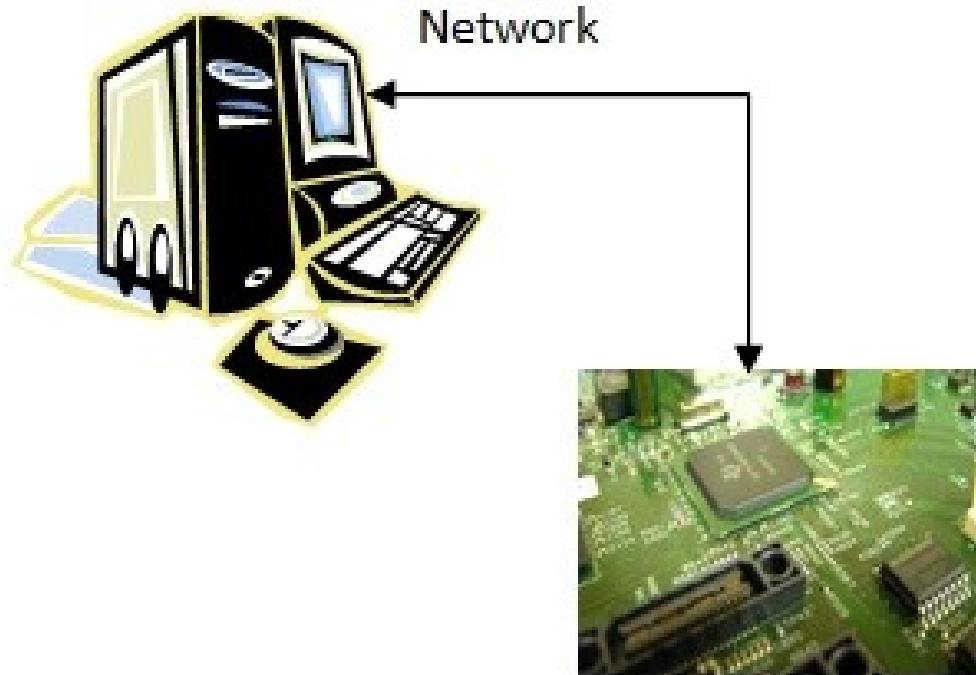
Pitfalls

Fundamentals:

What do you mean that I can't use my hammer?

What do you mean this runs on my desktop?

Treating Linux the same as you would your commercial/bare metal OS

Hardware isn't a product

NIH syndrome

Planning/Design:

What's in the choice of a CPU? Know thy footprint!

Interfaces, interfaces, interfaces

Forgetting the upgrade path until the end, if at all

Hardening

Maintenance:

Building a tower of Babel

Carrying too many patches

Tools

Debugging with printf()

Are you ready to cross Canada?

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Pitfalls – Some Fundamentals

Failure to learn about Linux specifics early on

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