The Ultimate Rapid Prototype

You want to build a rapid prototype to take to your senior management or investors to demonstrate the feasibility of your latest idea. You also want the prototype to be resemble the final product in terms of size. This will increase their confidence in your ability to deliver.

A Mesh Network Processor Example

You want to develop a mesh network node with the following specifications

- 2 * 10/100 ethernet
- WLAN 802.11a,b,g
- Power Over Ethernet (PoE)
- Web proxy cache, 1GByte
- Small size

How long to construct prototype hardware?

One hour? One day? One week? One Month?

The One Hour Prototype (Hardware)

What if you could build the prototype using only commercial off-the-shelf (COTS) hardware? All you would need would be an ethernet card, 802.11card, and forget about PoE for the prototype. Of course, this could be achieved with a PC, but could you convince others that it could be the shrunk to the size an iPOD?

Well... here is one that has been put together in minutes!.

The system comprises

- Compact Flash Computer running linux (uClinux)
- 2 Socket LPE Compact Flash ethernet cards
- Linksys WCF12 Compact Flash 802.11b card
- Sandisk 1.0GB Compact Flash storage card
- 2.5*4.5*6.5 cm

You could certainly take this to investors as a prototype and claim to reduce the size by 50% and also accurately predict the costs of goods.

The One Hour Prototype (Software)

Sadly, not there yet.

The Compact Flash Computer is pre-loaded with uClinux, the software development can start immediately on the prototype hardware.

A working demonstration could be ready within weeks.

And So To Manufacture

The prototype hardware has enabled the application software to be developed and tested.

It can be used to optimise the hardware requirements, smaller FLASH or SDRAM, cheaper lower specification processor.

Compact Flash Computer

The Compact Flash Computer comprises

- MCF5272 Coldfire processor
- 32MB SDRAM
- 8MB FLASH
- RS232 and BDM ports for debugging
- Expansion bus for 8 Compact Flash Cards
- uClinux

Web: www.cdatas.com Email: info@cdatas.com