

OpenWRT, a VALUE-add base solution for your product.

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and

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講者背景

- 長期應用、使用 OpenWRT 於工作之開發者、使用者
 - Rex's Blog <http://people.debian.org.tw/~chihchun/tag/wireless>
- Talks
 - OSDC 2007 – PORTA2030 by Macpaul
 - <http://0rz.tw/Hnkp8>
 - COSCUP 2007 – Router hacking 101 by Rex
 - <http://0rz.tw/7RxP3>
 - COSCUP 2008 – Case Study by Rex
 - <http://0rz.tw/7RxP3>

Agenda

- OpenWRT Overview
- Why OpenWRT ?
 - 從消費者、品牌商、代工廠、到晶片廠
 - 商業個案介紹
- 如何做 - 社群期待與執行實務
- 從製造商角度看 OpenWRT by Macpaul

What's OpenWRT

- A linux distribution for embedded system, provide a well designed building system.
- It's now supporting more then 13 different hardware platforms.
- Latest version is Kamikaze 8.09.1
 - New LuCI, Lua Configuration Interface (Lua-powered MVC interfaces)
 - Sysupgrade for x86, broadcom and adm5120
 - Supports Cavium Octeon SoC, RDC SoC, MikroTik RouterBoard
- For more info please visit <http://www.openwrt.org/>

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Why OpenWRT ? - Consumer



降低變成韌體孤兒的機會

Why OpenWRT ? - Consumer

給我額外的功能 ~ 啊 ~ 啊 ~ 啊 !



後市場韌體 (Aftermarket Firmware) 社群

- PCZONE <http://www.pczone.com.tw/vbb3/forum/44/>
- Mobile01 <http://www.mobile01.com/topiclist.php?f=110>
- 數位天堂 <http://digiland.tw/>
- 520gu 路由站 (跑在 ASUS 530gu 上的討論區，主要討論 ASUS 520gu)
 - <http://www.2cna.cn/>
- 小浮萍 (Broadcom BCM4780 平台為主，如 ASUS WL-700gE 平台)
 - <http://blog.orz101.net/tags/bcm4780>
- 恩山無線論壇 (簡體中文) <http://www.right.com.cn/forum/>
- 中國無線論壇 (簡體中文) <http://www.wlanbbs.com/>
- 中國無線網路論壇 (簡體中文) <http://www.china-wifi.com/forum/>
- DualWan(簡體中文、主要討論 Tomato) <http://bbs.dualwan.cn/>

Why OpenWRT ? - Brand vendors



創造更大產品社群

商業案例 - NETGEAR

- NETGEAR 便針對 WGR614L 等產品採取與專營社群經營的 Capable Networks 公司合作策略，成立了 MyOpenRouter.com
- 這個網站提供已測試韌體、手冊與工具供下載，及社群技術支援

The screenshot shows the MyOpenRouter.com website. At the top, there is a navigation bar with links for 'OUR NETWORK: TouchSmart Community, TiVo Community, TechLabs, Sling Community, My DigitalEntertainment', and 'About Us, Advertise, Contact Us'. The main header features the 'myopenrouter' logo, a search bar with 'Advanced Search' and 'Entire Site' dropdown, and a user profile for 'Hi, Guest' with 'Log In or Register' options. Below the header is a navigation menu with buttons for 'Home, Browse, News, Forums, Downloads, Shop, Join, Videos'. The main content area is titled 'Experience the Freedom of Open Source' and includes a 'See All Downloads' button. It features several promotional tiles: 'Share Code On The Forums', 'Learn More About the WGR614L', 'Download Firmware & Utilities', and 'Read and Browse Articles'. A central image shows a NETGEAR WGR614L router. To the right, there are social media links for 'Follow The Community on Twitter' and 'Read NETGEAR Product Reviews'. Below this, a 'Featured Download' section highlights 'Tomato 1.25 Source & Firmware for WGR614L' uploaded by 'Tathagata'. The bottom section is divided into 'RECENT DISCUSSIONS' and 'LATEST DOWNLOADS'. The 'RECENT DISCUSSIONS' table shows a poll titled 'What other NETGEAR equipment do you currently own?' with 1 reply. The 'LATEST DOWNLOADS' list includes 'C-HK Upgrade Patch For DD-WRT GUI (size: 4.9KB, downloaded 35 times)', 'OpenWRT 1.0 Source Code and Firmware for NETGEAR WGR614L (size: 2.31MB, downloaded 36 times)', and 'DD-WRT build svn revision: 12357M (size: ...)'. A sidebar on the right contains 'New Forum Thread', 'Recent Threads', and 'RSS Feeds'.

商業個案 – FON

- La Fonera 2.0 後採開放原碼策略，成立 fonosfera.org 計畫，即時開放所有程式碼。
- 獲得相當使用者迴響與開發社群回饋
 - Proxy redirecto, Jamendo, Neorouter, FonHome, Owbox, Rapidshare downloader, Wake On LAN, etc..



商業案例 – Nokia Smart Home business

- Nokia 於 2008/12 月釋出 Nokia Home Control Center，為內建 Wireless 802.11n 之區域網路閘道器，支援 Z-Wave 之相關偵測器。
 - 用於居家空調、電力與 CO2 管理等
 - 與德國能源公司 RWE 進行軟體合作
- 此產品現已出讓給 There Corp.



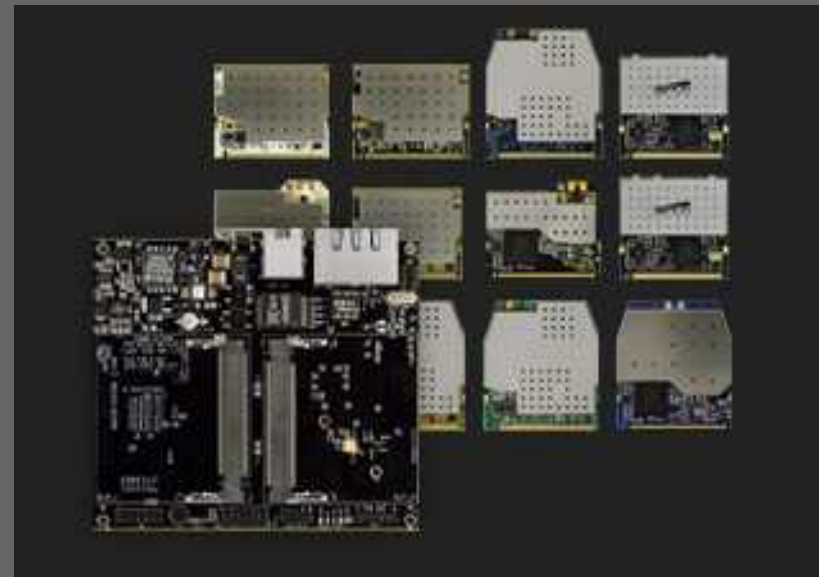
Why OpenWRT ? - OEM/ODM vendors



Faster Time to Market.
更廣泛的合作機會

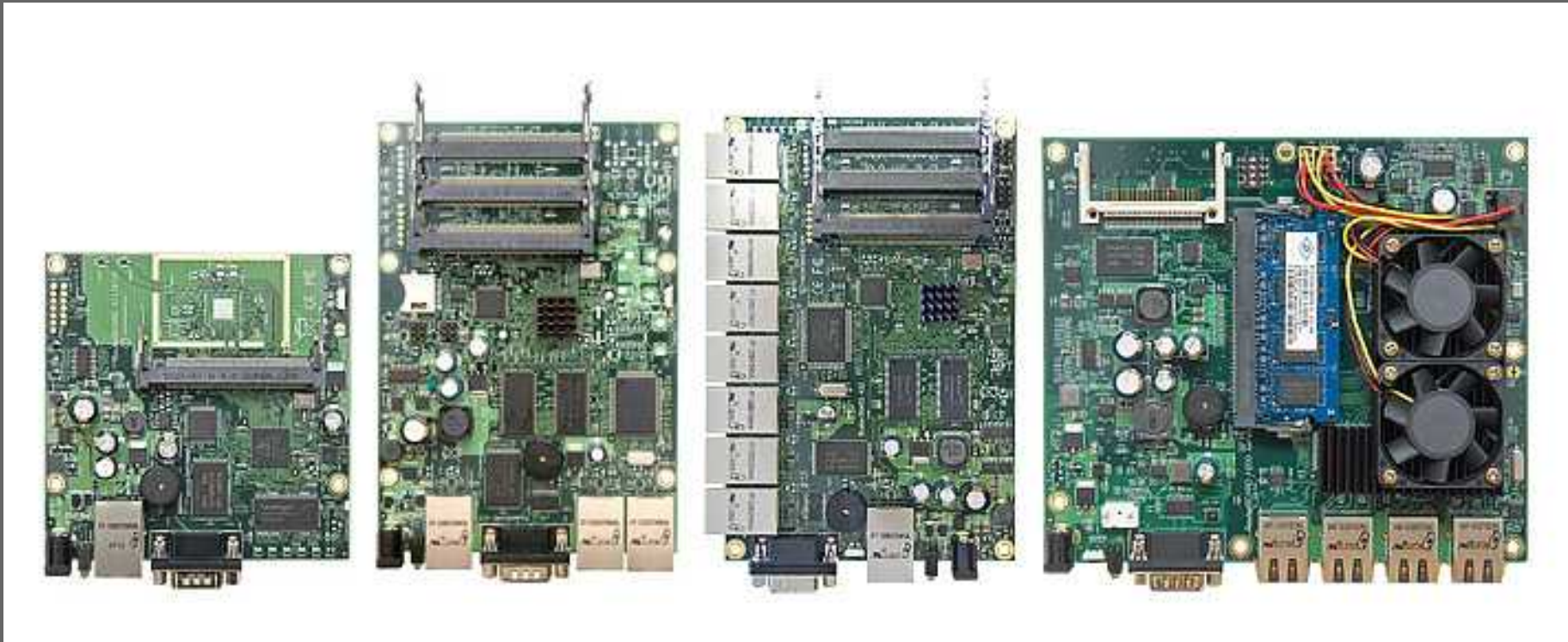
商業案例 - Ubiquiti's RouterStation

- 新款 RouterStation 產品基於 OpenWRT 開發，
 - 680MHz MIPS 24K CPU, 64MB RAM, and 16MB Flash 、三組 mini-PCI radios 、 3 10/100 ethernet interfaces 等。
 - 向社群發出 UI/Firmware 挑戰活動，獎金為美金二十萬作，徵求最佳韌體與操作介面。



商業案例 - MikroTik

- MikroTik 專營網路設備軟硬體產品，自從 RouterOS v3.21 之後，可於該公司硬體產品 RouterBoard 上透過 Metarouter 功能執行客製化 OpenWRT 系統



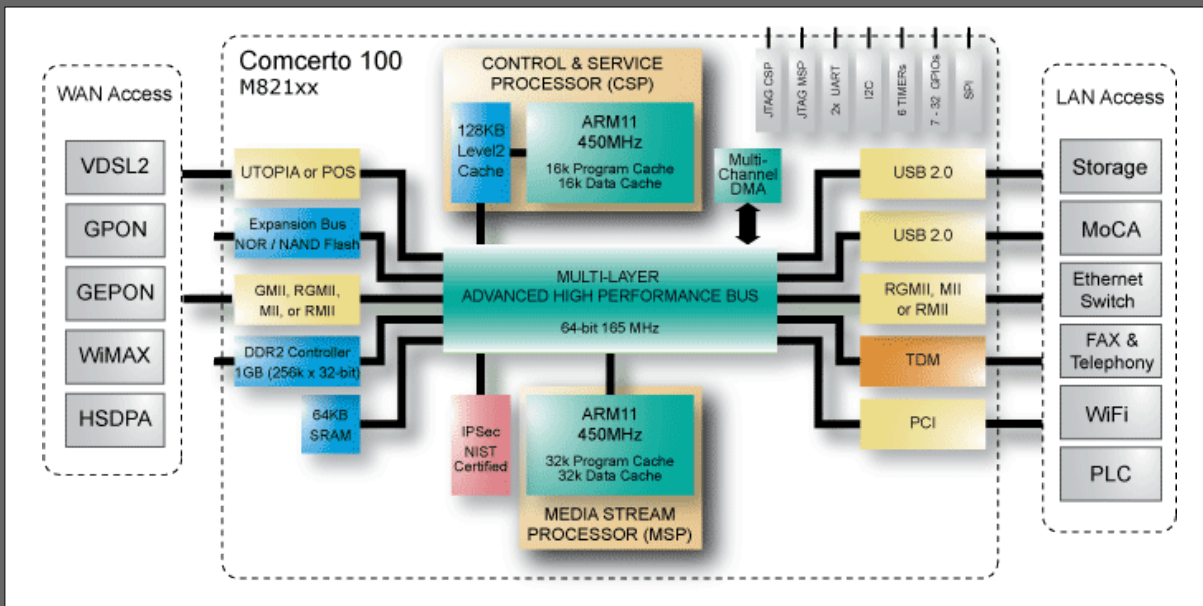
Why OpenWRT ? SoC and Chip vendors



建立強大的 Board Support Package (BSP)
而且軟體社群會自我成長

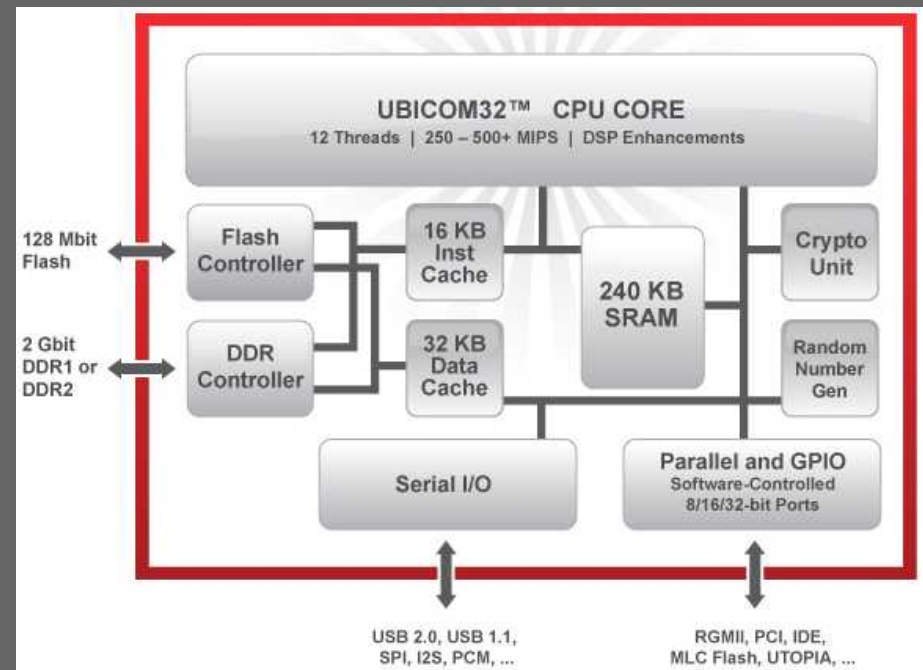
商業案例 – Ooma Telo powered by MindSpeed

- 2009 一月於 CES 宣佈 Ooma Telo 上市。使用 MindSpeed's Comcerto 100, 雙核執行。一處理器執行 OpenWRT, 一執行 binary-licensed "media stream processor".



商業案例 – UBICOM IP7100

- Uvicom 於 2009 年五月，宣佈釋出相容於 OpenWRT 的 Reference Design 作為 OEM/ODM 廠的開發平台。
 - 支援 12 way 多執行續架構， Software I/O technology for on-chip memory access.



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HOW TO - 引進實務

- 採用開放規格與晶片。
- 建立法務系統，嚴格遵守軟體授權。
- 明確標示產品版本。
- 開放 Bootloader 與 Serial Console。
- 提供簡易的韌體復原措施。

傾聽



主動與社群進行支援、聯絡與回饋。

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