The dynamic role of open, Linux-based architectures in today’s mobile world

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What we’ll cover today

“Innovation is the whim of an elite before it becomes a need of the public.”

- Infinite possibilities on the Linux road ahead
- Why "open" is important in today's competitive landscape
- TI’s unwavering support of the Linux community
- Technologies that will help fully deliver the Linux promise
- OMAP™ processors’ role in fast, cold, cool Linux designs
- Wildly exciting innovation, thanks to a new animal in the TI family
- Wrap up, call to action, questions
Infinite possibilities with Linux!

Expanding to new universes, beyond smartphones

- Connected navigation
- Computing
- eBooks
- Virtualized terminals
- Smart TV
- Home automation
- Portable medical
- DSC, camcorder
- PMP, tablet
How do we get there?

“Open” is key to...

- Increased innovation
- Faster time to market
- Higher-quality products
- Differentiated solutions that span all markets
- More brain power behind the industry’s hottest advancements
- New community collaboration, enabled by current-generation hardware
Committing and acting

- Restructured organization to focus on “openness”
- **Dedicated** team, committed to and focused on Linux kernel work
- Building **open** platforms and foundations
- Enabling **access** to technical documentation
- Contributing to Linux-OMAP to develop an **exciting** technology leveraging TI platforms
Supporting the full Linux promise

Ultra processing performance

Frugal power requirements

Complete flexibility
With TI’s OMAP 4 processors, Linux is:

**FAST!**

**COLD!**

**COOL!**
With TI OMAP 4 processors, Linux is…

...fast!

Laptop MPU performance, with 1.5GHz Cortex-A9 SMP dual-core capabilities:

- Set-top-box quality video playback, up to 1080p60 fps
- DSC/Camcorder multimedia performance
  - 20+ Mpix
  - Full HD H264 w/ SloMo
- Handled 3D gaming console UXP
With TI OMAP 4 processors, Linux is...

- All capabilities driven in a very tiny power budget
- Large panel of power reduction/power savings software/hardware techniques
- Global power optimization approach from real user profiles

**cold!**

Source: Internal TI modeling tool
With TI OMAP 4 processors, Linux is...

...cool!

Passport for innovation!
- NUI (Natural User Interface) with advanced gesture recognition
- S3D video and gaming applications
- Cool connected cloud applications

Innovation everywhere!
- In your pocket with Smartphones
- In your car renewing driving experience
- In your living-room with SmartTVs
Developing specific codes

One code does not fit all. We are dedicating teams to market-leading distributions, and tailoring efforts to broaden our Linux scope.
Collaborating

- Infrastructure supports incorporation of **worldwide talent**
- **Ecosystem** developed to engage with and support experts in various fields
- Extended solutions portfolio through technical **partnerships**
Engaging and enabling

Higher learning support
- France, India, U.S.
- Basic, advanced Linux training
- Hands-on projects assistance
- Introduction to expertise during local facility tours

Board member
- Easing Linux development challenges
- Creating tools to remove complexity
- Speeding project development

Sponsoring open source community development boards and supporting related community projects

Media & Storage App Development (OMAP-L138 processor)
General Application Development (OMAP3530 processor)
Video App Development (DM355 & DM355 processors)
Announcing…PandaBoard!

Introducing the world’s first open, OMAP™ 4 processor-based mobile software development platform

• Dual-core performance, SMP support, open source foundation, community-driven support
• Ideal for development and enhancement of mobile platforms and products
• First-time access to ARM® Cortex™-A9 processors on an open development board
• Low-cost access to OMAP 4 processor’s low-power, rich multimedia capabilities
• Out-of-the-box 1080p, WLAN, Bluetooth® technology features and more!

It’s all about community!
What makes PandaBoard unique

OMAP4430 Processor

Status LEDs
SD/MMC Card Slot
Serial /RS-232
Camera Connector
USB 2.0 OTG
Stereo Audio in/out
Power Supply 5V
Power/Reset Buttons

JTAG
WLAN/Bluetooth
Expansion Connector
LCD Expansion
DVI Out
HDMI Out (Type A)
10/100 Ethernet & 2xUSB 2.0 Host ports

Board Dimensions: W:4.0" (101.6 mm) X H: 4.5" (114.3 mm)
TI: Enabling the Linux future, *today*

Linux-based designs are starting to usher in natural user interfaces!

- Multi-display support
- Touchless gesturing
- Stereoscopic 3D
- Interactive projection
Wrap up, call to action: *Remain pragmatic*

All the pieces are in place for you to bring Linux-based innovations to market faster!

- There are infinite possibilities on the open Linux road ahead
- TI can help you achieve success with Linux-based designs
- PandaBoard is available today as another example of our support

Together, we bridge the worlds of innovation and openness!
Thank you for joining me!