

MeeGo on Development Boards

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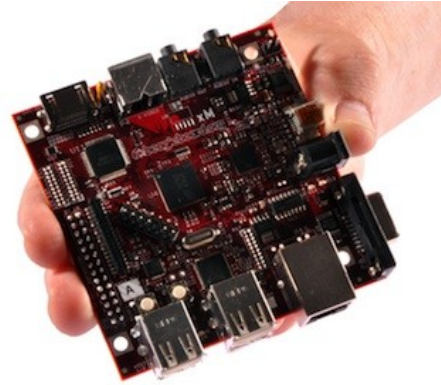
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Nokia Mobility Solutions

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Notable Dev Boards in use by aMeeGos



BeagleBoard XM
X1 Cortex A8 with SGX530 GPU



Pandaboard
X2 Cortex A9 with SGX540 GPU



ST-Ericsson Snowball
X2 Cortex A9 with Mali GPU

Prototyping possibilities



Atom N450 Mini-ITX
Single core, “integrated graphics”



Gumstix Overo
X1 Cortex A8 with SGX530 GPU



Freescale iMX53 QuickStart
X1 Cortex A8 1 GHz, SATA



Variscite AM35
X1 Cortex A8 600 MHz, CAN bus

Different approaches

- **TI** has put a great deal of effort into development hardware but less into SDK
 - No TI “app store”
- **Intel** has put great effort into the MeeGo SDK
 - AppUp online store accepts “components” as well as user-facing apps
- **Gumstix** is explicitly aimed at prototypers
- **ST Ericsson, Freescale** just getting started

Why does MeeGo care about dev boards?

- Encourage interest in MeeGo platform
 - Education and science markets
- Enable startups and small businesses to develop prototypes of H/W products
- Ease development of H/W-intensive S/W (using sensors)
- Potential to create accessory market of MeeGo-compatible devices

Problems

- Atom development boards are expensive (\$1400) unless purchaser is part of “seed board” program (\$149)
 - Compatible tools (JTAG) also more expensive
- MeeGo 1.2 ABI for ARM not backwards-compatible with 1.1 (softfp → hardfp break)
- Device driver support spotty
- Uneven toolchain support and documentation
- Product lifetime and availability not always clear

Questions

Does MeeGo for microcontrollers make sense?

Who are the current users and what are their plans?

What features does MeeGo lack to support H/W that startups and small businesses need?

What relationship should MeeGo have with Yocto, Linaro, OpenEmbedded, Buildroot?

What features do existing dev boards lack? What accessories?