BeagleBoard-xM breaks 1-GHz performance barrier for embedded design innovators and hobbyists

BeagleBoard-xM delivers extra MIPS with 1-GHz ARM® Cortex™-A8 performance and extra memory with 512MB of low-power DDR RAM, enabling hobbyists, innovators and engineers to go beyond their current imagination and be inspired by the **BeagleBoard.org** community. Designed with the community inputs in mind, this open hardware design improves upon the laptop-like performance and expandability, while keeping at hand-held power levels. Direct connectivity is supported by the on-board four-port hub with 10/100 Ethernet, while maintaining a tiny 3.25" × 3.25" footprint.

As with previous **BeagleBoard.org** offerings, the BeagleBoard-xM is not intended to be a complete development environment, but rather a community-supported platform that can be used as the basis for building more complete development systems and as a target for community software baselines. For a complete development system, please consider the Sitara™ AM37x Evaluation Module from Texas Instruments (**www.ti.com/am37x**).

Specifications:

Hardware:

- 1-GHz super-scalar ARM Cortex™-A8
- 512-MB LPDDR RAM
- High-speed USB 2.0 OTG port optionally powers the board
- On-board four-port high-speed USB 2.0 hub with 10/100 Ethernet
- DVI-D (digital computer monitors and HDTVs)
- S-video (TV out)
- Stereo audio out/in
- High-capacity microSD slot and 4-GB microSD card
- JTAG
- Camera port

Software:*

- Validation and demonstration image from the Angstrom Distribution

Applications of BeagleBoard-xM:

- Web services
- 3-D gaming
- 3-D UI
- Linux kernel and driver development
- Boot loaders and firmware
- UI framework
- ARM® NEON codecs
- Codec plug-ins for GStreamers
- OpenGL® applications
- OpenMAX™ IL applications
- Ubuntu, Android, MeeGo, WinCE, QNX, Angstrom, Symbian, Debian, Gentoo and others
- Home media centers
- In-vehicle entertainment
- Robotics
- Web kiosks
- Digital signage
- And many more …!

Compatible with:

- OMAP35x processor
- DaVinci™ DM37x processor
- Sitara AM37x processor

*Go to **BeagleBoard.org** to order your BeagleBoard-xM (U.S. $179) – available end of June 2010*

* Open source software is included for validation and demonstration purposes only. Learn about additional available software at **BeagleBoard.org**

BeagleBoard.org

BeagleBoard.org promotes and motivates open source development on OMAP™-, DaVinci- and Sitara-based systems. The key objectives of the organizations are to:

- Enable hobbyists and innovators to explore new domains and experiment with their ideas on an open platform
- Enable such experiments to be conducted cost effectively – to nurture innovation – by enabling supply of ultra-low-cost OMAP, DaVinci and Sitara hardware platforms
- Bring together the OMAP, DaVinci and Sitara communities by providing the basic infrastructure to exchange ideas and thoughts on OMAP, DaVinci and Sitara technologies
- Enhance the visibility and facilitate widespread adoption of the technology developed by the community by providing a source-controlled and consolidated project hosting service

beagleboard.org