TI’s e-book development platform

Specially developed for e-readers, TI’s development platform is more than a reference design – being hardware- and software-optimized allows our customers to reduce their development time for improved time to market.

Product Bulletin

Overview

The OMAP™ 3 e-book development platform from TI helps manufacturers and developers quickly launch new, innovative e-book readers. The comprehensive platform can accommodate a sleek 6-inch or larger electrophoretic display and includes TI’s new OMAP3621 applications processor, WiLink™ 6.0 WLAN/Bluetooth®/FM combination connectivity solution and the new TPS6518x electronic paper display (EPD) power management IC, along with other TI power management and analog solutions and 3G modem connectivity support.

TI’s e-book development platform offers a flexible, programmable architecture that allows designers to develop innovative, differentiated e-book readers with features to meet consumers’ evolving needs. TI’s OMAP e-book solution can support multiple electronic display technologies, including electrophoretic, electromechanical, electrowetting and thin-film transistor liquid crystal displays, giving designers maximum flexibility in designing the right e-book reader solution for their market.

Key features:

- Support for multitasking (reading, listening to music and downloading a book over WLAN, for example).
- Dual display support (two EPDs or EPD and LCD).
- ARM Cortex-A8 CPU integrated with TMS320C64x™ DSP technology for improved EPD driving.
- The OMAP3621 processor delivers an optimized peripheral set in a 12-mm x 12-mm, 0.5-mm ball-pitch package with low-power DDR memory support. The solution’s smaller footprint enables sleek consumer designs while also delivering power and performance metrics that will change how consumers use e-books in the future.
- New single-chip TPS6518x electronic paper display power management IC, with integrated display panel temperature sensor and the unique ability to automate the setting of the VCOM voltage through the I2C interface.
- Allows more than 15,000 page turns on a 6-inch E Ink screen using a slim 1500-mAh battery.
- TI’s WiLink™ 6.0 connectivity solution runs in a power-conscious environment using a low-power scanning architecture that continuously scans for available WLAN access points without impacting battery life.
- TI’s system-level power optimization extends idle times, allowing an e-book device to last nearly six weeks without the battery needing to be charged.
- Extra features like power-path allows users to use a device with a dead battery instantly when it is plugged into a wall or car charger.
## Important Notice:
The products and services of Texas Instruments Incorporated and its subsidiaries described herein are sold subject to TI’s standard terms and conditions of sale. Customers are advised to obtain the most current and complete information about TI products and services before placing orders. TI assumes no liability for applications assistance, customer’s applications or product designs, software performance, or infringement of patents. The publication of information regarding any other company’s products or services does not constitute TI’s approval, warranty or endorsement thereof.

© 2011 Texas Instruments Incorporated

The platform bar, OMAP, SmartReflex, WiLink, TMS320C64x and M-Shield are trademarks of Texas Instruments. All other trademarks are the property of their respective owners.
IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information published by TI regarding third-party products or services does not constitute a license from TI to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are not authorized for use in safety-critical applications (such as life support) where a failure of the TI product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal and regulatory requirements concerning their products and any use of TI products in such safety-critical applications. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are neither designed nor intended for use in military/aerospace applications or environments unless the TI products are specifically designated by TI as military-grade or “enhanced plastic.” Only products designated by TI as military-grade meet military specifications. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal and regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications.

TI products are neither designed nor intended for use in automotive applications or environments unless the TI products are specifically designated by TI as military-grade or "enhanced plastic." Only products designated by TI as military-grade meet military specifications. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications. TI is not responsible or liable for any such statements.

Following are URLs where you can obtain information on other Texas Instruments products and application solutions: