



# TES

TM

## Electronic Solutions



## Media & Graphics Innovation Kit

### Synergy in Media & Graphics

MAGiK provides a complete hardware and software platform for the development of embedded and handheld applications based on a range of processors from Texas Instruments and Freescale.

*Typical applications include:*

- Industrial User Interfaces
- Home Automation
- Gaming & Fitness Displays
- Digital Signage / Kiosk
- Media Phones / -Players
- Avionics, Transportation

The heart of MAGiK is the  $\mu$ C System Module. A variety of such production ready  $\mu$ C modules is available. They are BOM optimized and proven with integration of OS and application software.

#### MAGiK SYSTEM MODULES

##### *Processors*

- OMAP 3530: ARM Cortex A8, PowerVR SGX
- OMAP 3730: ARM Cortex A8, C64x DSP, PowerVR SGX (OpenGL ES 2.0 compliant)
- i.MX 27: ARM9, Media Accelerator, TES eGML

##### *Memory*

- 256 MBytes Mobile DDR or DDR II
- 512 MBytes NAND Flash
- 64 MBytes NOR Flash
- MicroSD connector on board

##### *Power & Expansion*

- 2x 180 pin BTB connector
- USB OTG, USB Device
- Video In/Out (LCD Out / Camera In)
- Audio I/F (I2S), Ethernet, Memory Bus
- UART, SPI, I2C, GPIO

##### *Dimensions & Specs*

- 50 x 90 x 8 mm, Business card size
- Industrial and Commercial Temp Grades
- Lead Free and RoHS compliant

**MAGiK**  
SYNERGY IN MEDIA & GRAPHICS



### BOARD SUPPORT PACKAGES AND SOFTWARE

- Open source Linux kernel 2.6.32
- Android Froyo or Gingerbread
- Windows CE 6.0 BSP
- OpenGL ES 1.1 & OpenGL ES 2.0
- OpenCORE media framework
- TES Guiliani User Interface SDK

### MAGiK I/O BASEBOARD

#### LCD Touch Screen

- 7" 24 bit 800 x 480 WVGA
- Integrated 4 wire touch controller

#### HDMI Video Output

- HDMI 1.2 / DVI 1.0 transmitter
- 480i/P, 720i/P, I2S Stereo
- HDMI Type A connector

#### Video Connectors

- 3 x RCA / Cinch connectors
- Component (RGB and Pr/Y/Pb)
- Composite CVBS
- Standard VGA

#### Networking

- 10/100 Base-T ethernet controller, RJ45

#### USB 2.0

- USB OTG, Mini-AB Port
- 4 USB 2.0 Type A

#### SDHC/MMC Card Slot

- Micro SD on System module
- 4-bit SD Card on Board

#### Audio

- Stereo Line-In ( 3.5 mm jack )
- Mic-In ( 3.5 mm jack )
- Line-Out L/R ( 2 x RCA )

#### Serial ports and Buttons

- 1x 9-pin D-Type serial Port
- 2x expansion (see connector details)
- 6x buttons (on/off, reset, 4 configurable)
- I/R Receiver

#### Power

- 5V DC-In with Power Supply
- 3-pin battery connector
- 3.6 V Li-Ion 2000 mAh VARTA battery

#### Expansion

- Altera 3C16 Cyclone III bridge expansion
- PinCompatible FPGA with 3C20 or 3C40
- Memory Bus, Camera In
- UART, SPI, I2C, Audio I2S
- Configurable GPIO



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