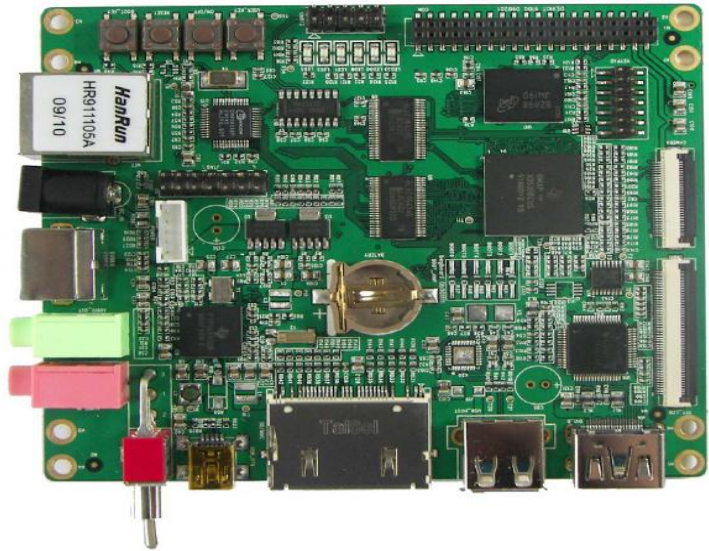




## Embest - DEVKIT8000STD - DevKit8000 Evaluation Board

### Product Overview:

Embest DevKit8000 Evaluation Board is a compact board using OMAP3530 microprocessor. It takes full features of this processor and supports 128MByte DDR SDRAM and 128MByte NAND Flash as well as high-speed USB2.0 OTG function. The board has exposed many other hardware interfaces including RS232 serial port, LCD/TSP, DVI-D, S-Video, Ethernet, SD/MMC, keyboard, camera, SPI, I2C and JTAG. The board has two methods to boot the system from either SD card or NAND flash. It is able to support WinCE and Linux OS and provided with WinCE6.0 BSP and Linux2.6.28 BSP.



Embest also provides demo of Google Android OS and Angstrom (GPE) for user experience.

### Kit Contents:

Take the DEVKIT8000STD out of its box. Included in the box are:

- One DevKit8000 Evaluation board
- One 512MB SD card
- One Serial cable (IDC10-to-DB9)
- One 5V@2A Power adapter
- Documents (user manual, schematic drawing, Datasheet)
- WinCE.net 6.0 BSP
- Linux 2.6.28 BSP

### Key Features:

- Dimensions: 110mm x 95mm
- Working temperature: 0°C to 70°C
- Processor: TI OMAP3530 microprocessor with 600MHz ARM Cortex-A8 RISC Core
- Power supply: +5V
- 128MB DDR SDRAM, 166MHz

- 128MB NAND Flash, 16bit
- LCD/Touch Screen interface (50-pin FPC connector, support resolution up to 2048\*2048, optional VGA8000 module can connect via LCD interface)
- DVI high-resolution image output port (HDMI interface, support 720p, 30fps signal)
- S-Video display interface
- One audio input interface (3.5mm audio jack)
- One 2-channel audio output interface (3.5mm audio jack)
- One 10/100M Ethernet interface (RJ45)
- One High-speed USB2.0 OTG port (Mini USB type interface)
- One High-speed USB2.0 Host port (USB A type interface)
- Two serial ports (one 3-wire RS232 serial port led out from 2.54mm 10-pin connector and one 5-wire TTL serial port led out from expansion connector)
- SD/MMC interface (supports 3.3V and 1.8V logic voltage)
- One camera interface (30-pin FPC connector, support CCD or CMOS camera, support analog camera module CAM8000-A for option)
- 6\*6 keyboard interface
- One 14-pin Jtag interface
- Four buttons (Reset, Boot, User defined, On/Off)
- One expansion connector (2.0mm 40-pin SMT Female Pin Header, McSPI, McBSP, I2C, HDQ, GPIO are led out from this connector)
- Supports USB WiFi through WF8000-U module
- Supports GPS function through GPS8000-S module
- Supports GPRS function through GPRS8000-S module
- Support 3G function through CDMA8000-U module (CDMA2000 standard)

## Ordering Information:

### Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
DEVKIT8000STD	Embest	NA	64R5910

### Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
XOMAP3530BCBB	TI	32Bit ARM Cortex	1660215	85M0392
SPC19944	SPC Technology	Shielded Serial Cable Assembly	1702771	83K3689
SPC21961	SPC Technology	Category 5e Cable Assembly	1363809	21M5875
555052-1	TYCO Electronics	RJ45 JACK	1557068	66F3284

897-43-004-90-000000	Mill Max	USB Connector	1621546	84K7068
1901116	Multicomp	HDMI Adapter	1428271	74M6204
FPS009-2405-0	Yamaichi	Card, SD, Push/Push, Low Profile	1145893	24M2236

## Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
DEVKIT8000-56	Embest	Evaluation Kit of Ti OMAP3530,with 5.6"TFT LCD	OMAP3530	NA	64R5908
DEVKIT8000-70	Embest	Evaluation Kit of Ti OMAP3530,with 7.0"TFT LCD	OMAP3530	NA	64R5909
DEVKIT8000-43	Embest	Evaluation Kit of Ti OMAP3530,with 4.3"TFT LCD	OMAP3530	NA	64R5907
TMDSMEVM3530-L	TI	Zoom OMAP35x Medical Development Kit	OMAP353x	1784744	25R0024

## Document List:

### Datasheets:

Part Number	Description	Size
DP83848K	<a href="#">Ethernet Transceiver</a>	752KB
LM1117DT-ADJ	<a href="#">800mA Low-Dropout Linear Regulator</a>	647KB
OMAP3530	<a href="#">Applications Processor</a>	3.58MB

### Application Notes:

File Name	Size
<a href="#">Power Management Techniques for OMAP35x Applications Processors White Paper</a>	142KB
<a href="#">Running a TMS320C64x+ Codec Across TMS320C64x+ Based DSP Platforms</a>	969KB
<a href="#">Using TI's Embedded Processor Software Toolkit for Medical Diagnostic Ultrasound</a>	2.38MB
<a href="#">Powering OMAP™3 With TPS65023: Design-In Guide</a>	828KB
<a href="#">OMAP35x Technical Reference Manual</a>	237KB