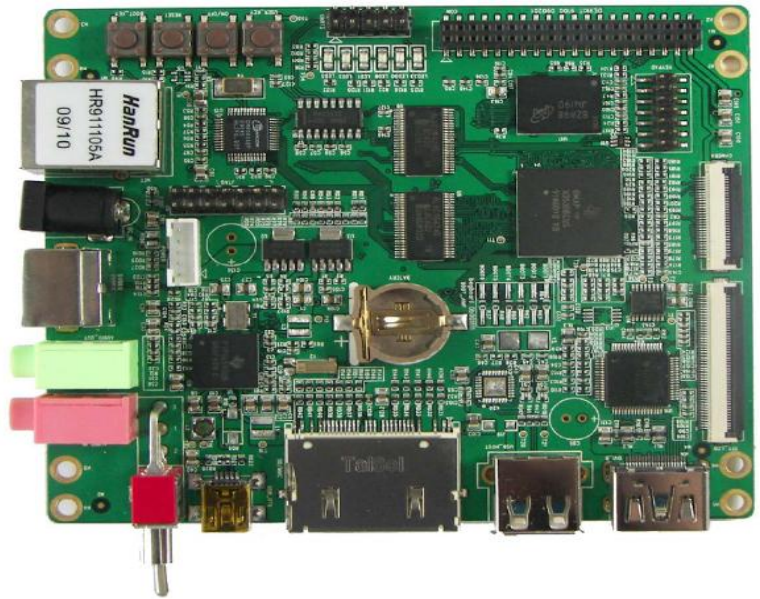


Embest - DEVKIT8000-56 - DevKit8000 Evaluation Board

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 DEVKIT8000-56 out of its box. Included in the box are:

- One DevKit8000 Evaluation board
- One 5.6" TFT LCD (With Touch panel, CHI HSIN LR043JC211 LCD Model)
- One 512MB SD card
- One Serial cable (IDC10-to-DB9)
- One 5V@2A Power adapter
- One Touch Pen
- One USB cable (Type A Male to Type Mini-B Male)
- One USB cable (Type A Female to Type Mini-A Male)
- One USB HUB
- One Cross Ethernet cable
- One HDMI to DVI-D Cable
- 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
DEVKIT8000-56	Embest	NA	64R5908

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	Category 5e Cable Assembly	1557068	66F3284
897-43-004-90-0000	Mill Max	RJ45 JACK	1621546	84K7068
1901116	Multicomp	USB Connector	1428271	74M6204
FPS009-2405-0	Yamaichi	HDMI Adapter	1145893	24M2236

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
DEVKIT8000-43	Embest	Evaluation Kit of Ti OMAP3530,with 4.3"TFT LCD	OMAP3530	NA	64R5907
DEVKIT8000-70	Embest	Evaluation Kit of Ti OMAP3530,with 7.0"TFT LCD	OMAP3530	NA	64R5909
DEVKIT8000STD	Embest	Evaluation Kit of Ti OMAP3530	OMAP3530	NA	64R5910
TMDSMEVM3530-L	TI	Zoom OMAP35x Medical Development Kit	OMAP353X	1784744	25R0024

Document List:

Datasheets:

Part Number	Description	Size
DP83848K	Ethernet Transceiver	752KB
LM1117DT-ADJ	800mA Low-Dropout Linear Regulator	647KB
OMAP3530	Applications Processor	3.58MB

Application Notes:

File Name	Size
Power Management Techniques for OMAP35x Applications Processors White Paper	142KB
Running a TMS320C64x+ Codec Across TMS320C64x+ Based DSP Platforms	969KB
Using TI's Embedded Processor Software Toolkit for Medical Diagnostic Ultrasound	2.38MB
Powering OMAP™3 With TPS65023: Design-In Guide	237KB
OMAP35x Technical Reference Manual	22356KB