DevKit2000 WiFi & Bluetooth Evaluation Kit

- An RISC computer, works at 400MHz
- WiFi Technology, IEEE 802.11 b/g protocol
- Bluetooth V2.0 Communication Technology
- LCD display, Touch, Audio, Lithium Battery Power Supply, Power Management
- Windows CE5.0



Overview

Embest DevKit2000 WiFi & Bluetooth Evaluation Board which is deisgned based on <u>Mini2440-I</u> processor card has provided an evaluation platform for the wireless application—mainly WiFi and Bluetooth in a lower total cost but with high efficiency and powerful capacity.

The DevKit2000 WiFi & Bluetooth Evaluation Board is not only limited to be an evaluation board, it can be applied as many handheld devices in different fields and wireless device directly, for example mini notebook, wireless ordering machine, MP4 and etc.

The DevKit2000 WiFi & Bluetooth Evaluation Board applies the WG7210 WiFi and Bluetooth combo module, which enables to provide either WiFi function only or Bluetooth only or both accordingly with the same footprint and pin out. The WG7210 adopts the most popular and mature technology of TI WL1251 IEEE 802.11 b/g and BRF6300 BT V2.0 EDR solution. The

coexistence of wireless functions help to save the cost to re-layout to different platform and the BOM cost as well.

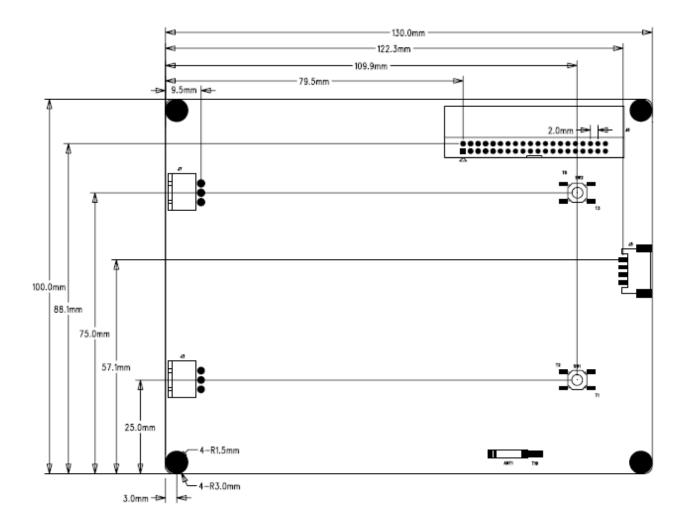
The DevKit2000 WiFi & Bluetooth Evaluation Kit contains the Board and a 7 inch 800*480 pixels resolution (Able to display in 480*800 pixels resolution as well, i.e. display vertically) TFT LCD with Touch panel and other necessary accessories, to free your operation and enrich your experience.

With excellent power management solution, the DevKit2000 WiFi & Bluetooth Evaluation Board runs at lower power consumption, and supports 4 kinds of status: Normal, Idle, Sleep and Shutdown. With a 3600mAH lithium battery supporting, the power can last 6 hours at standby status,

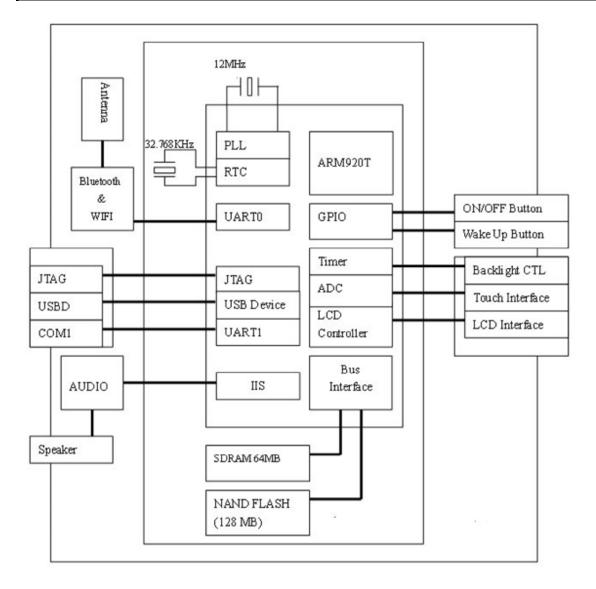
Hardware Features

- Samsung S3C2440A ARM920T microprocessor capable of running at up to 400MHz
- WiFi supported, compliant with IEEE 802.11 b/g protocol, with an external antenna and an on-board antenna reserved (WG7210)
- Bluetooth V2.0 Technology (WG7210)
- Stereo Audio output, able to drive 1watt speaker
- TFT LCD interface, supports 7 inch 800*480 resolution LCD now
- 4-wire resistor touch panel supported
- LCD backlight voltage supports 12V and 15V option (Reserved on board)
- Power on/off button, reset button
- LEDs: Power indicator and charge indicator
- RTC
- Watchdog
- Power supply: 3.7V, 3600mAH chargeable Lithium battery, charged with a 5V DC Adapter
- Debug interface: a 2.00mm dual-line 20-pin connector provides JTAG, Debug UART and USB device combination
- Power Management: Normal, Idle, Sleep and Shutdown
- Mechanical Parameters
 - Dimensions: 100mm*130mm
 - Temperature Range: $0 \degree C \sim 60 \degree C$
 - Humidity Range: 20% ~ 90%

Dimensions



Function Block Diagram



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Software

The DevKit2000 WiFi&Bluetooth Evaluation Board provides Window CE 5.0.net BSP, steady-going drivers, many of which are all in source code. Please refer to below table.

| OS | Item | Feature | Description |
|--------------|------------------------------|--------------|--|
| WinCE 5.0 | Bootloader | Stpldr | To copy the Eboot to RAM |
| | (Do not provide source code) | Eboot | To boot the WinCE system |
| | | Display | Supporting 7 inch LCD. Provide source code |
| | | BACKLIGHT | LCD backlight. Provide source code |
| | Drivers | ADVBACKLIGHT | Backlight adjustment |
| | | Touch | Provide source code |
| | | USB | USB device and USB Host. Provide source |
| | | | code |
| | | Serial | Debug UART. Provide source code |
| | | WAVEDEV | Audio. Provide source code |
| | | PWRBTN | Power on/off Button. Provide source code |
| | | Suspend | Provide source code |
| | | WiFi | WG7210. Provide library file |
| | | Bluetooth | WG7210. Provide library file |

Order Information

| Order No. | T6012000 | |
|--------------|---|--|
| Item | DevKit2000 Evaluation Kit | |
| Hardware | One DevKit2000 Evaluation Board | |
| | One 7" TFT LCD Module with Touch Panel | |
| | • One 3.7V, 3600mAH chargeable Lithium battery | |
| | • One +5V DC Adapter | |
| Software and | Documents (user manual, schematic drawing, Datasheet) | |
| Documents | • WinCE.net 5.0 BSP | |
| Price | Please contact us. | |



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