2.6 Pre-installed Windows CE Resources Function and the External Test

Wince system used to test players mp3, network, and the use of USB, SD cards use a variety of common services procedures.

Please follow the chapter "program to install and update the system" to download you need programmer wince image file (this example burning wrote NK_N35.bin).

WINCE system restart after a Windows XP style interface, as shown below.

2.6.1 Button Test

Driver Position: Driver button is located in the BSP (SMDK2440 folder) in the.:

SMDK2440\DRIVERS\Userkey

Description: Development board of six key USB keyboard can simulate the upper and lower, left, right, enter and shift the focus of key "TAB", the system is activated, do not need to launch any program to open it, their relationship is as follows:

K1 – TAB

K2 - UP

K3 - ENTER

K4 - DOWN

K5 - LEFT

K6 – RIGHT

On the desktop, press K1 key, the focus shifted to the desktop icon, the icon will appear around the empty box, figure.

The "Recycle Bin", this time around by the upper and lower key, the focus shifted to other icons, such as "my device", figure:

Press the "Enter" key, or K3, can open a window:
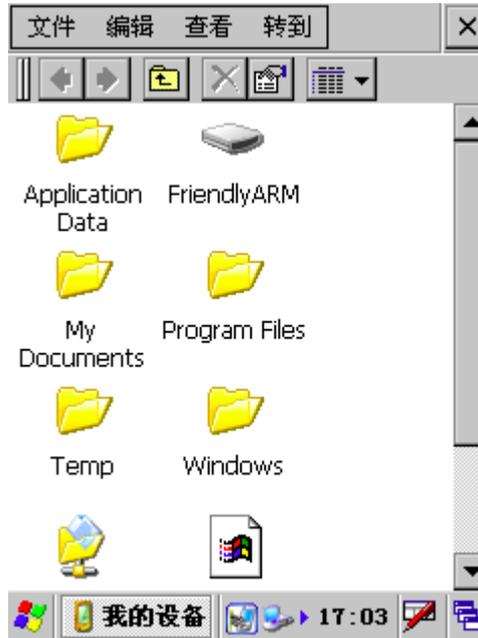
2.6.2 LED Test

System Startup, click on the desktop to run the "QQ2440 test" Open LED test procedure,

in Figure:

Click the process button, can control the development of the four on-board LED's light

and out.

2.6.3 Screen Rotation Test

Description: screen rotation driver has been shifting in the LCD driver, it does not require special hardware support pure software implementation, so no need to separate the other driver.

LCD driver location: SMDK2440\DRIVERS\DISPLAY

System Startup, click to run the desktop "screen rotation", run the interface, like the left figure below, click on the "spin" button, the screen will, counter-clockwise 90 degrees, such as the bottom right.

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2.6.4 Serial Communication Test

Description: The development board provides the BSP contains three standard serial drivers, serial 2, 3 to test the need for the use of string extend the small plate.

System Startup, click on the desktop is running the "serial debugging assistant", run interface, like the left figure below:

Point of the "Settings" button, open the settings window, set the serial number is COM2, baud rate to 115200, and other established home figure (upper right), determined to return to the main window.

At the same time, the expansion board connected to the PC end of the COM2 and PC client to the appropriate settings for the same serial port.

The mid-point in the main window, "Open Port" button, the button will now become "off-port" in the "Send zone" Enter some characters, point "send" button, like the left figure below, when in the PC side of the serial port the terminal receives from the development board to send to the characters, such as the bottom right:

Then, in the serial port of the main window debug aides point "receive" button (the button will change to "not to receive"), in PC-side input terminal of the serial number of characters (via HyperTerminal cannot be seen), the import of the same time, we see the importation of character development board in the reception serial debugging assistant district showed that figure:

We can also use the same method to test COM3; this is not explained in detail.

2.6.5 How to use the USB

Used in wince using the standard USB and USB windows use similar systems, when activated after WINCE, insert the USB Host USB interface, this board to the USB power supply, USB light flashes, wait a few seconds the system since USB dynamic load, and then double-click the desktop to the "My Computer" icon, open the Resource Manager, you can see the USB Letter: the hard disk, as shown in fig.

Double-click the hard disk can read and write access to the USB data.

2.6.6 How to use SD/MMC Card

Description: The development board using the SD card driver from the Samsung's public boards, only the driver dll files, not source code.

The SD/MMC card inserted into the SD slot on the board, the resource manager can be seen on the SD card drive letter: Storage Card, double-click to open access to the directory; you can on the SD/MMC card read and write.

2.6.7 Use Windows Media Player to play mp3

Double-click the desktop to open the Media Player icon Windows Media Player emerging players, the following chart, Point File-> Open the basis of tips to find the mp3 player you want to file so that you can like in the PC Windows in the same broadcast put mp3 files, and another player, Media Player can play WMV video file format, your own testing.

2.6.8 Use Super Player, SD card playback mpeg4 movie

Super player in Windows Mobile is frequently used for a media player, which is similar to our regular the use of the computer's "audio-visual Storm" player, we are now integrated into it, you can use it in the 3.5-inch screen fluent in a variety of formats of media player software, such as mpeg2, mov, avi and other formats.

Double-click to run on the desktop to open a "super player", as in the figure below, at "File > Open File ..." the election optional you need to play the movie file, the next plan is to play the video shots.

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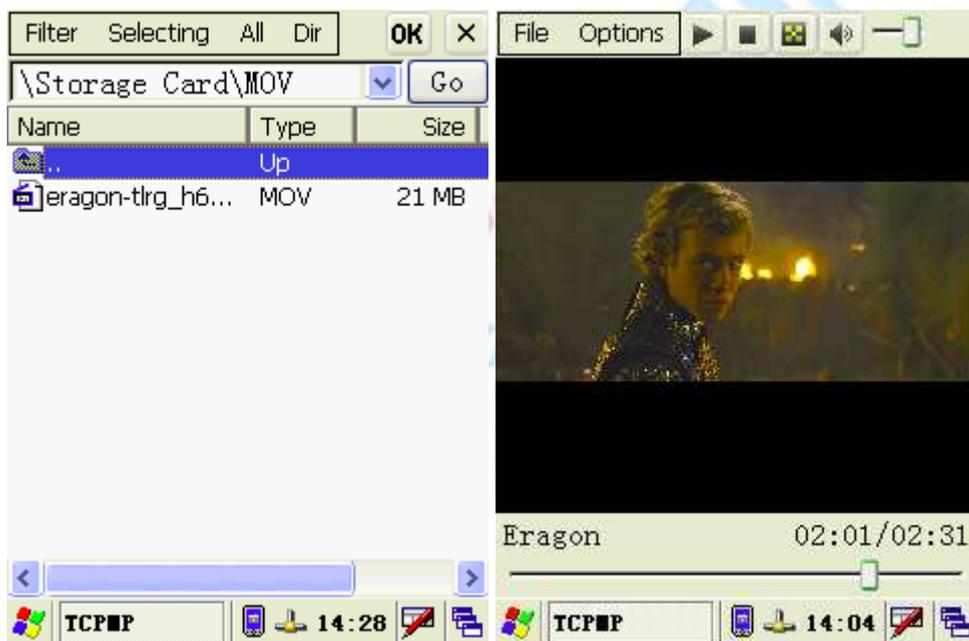
2.6.9 Ethernet

Point "Start > Settings > Network and Dial-up Connections", open interface is as follows.

Double-click DM9CE1, open the settings interface, under the plan is the default configuration, you can install the actual network environment settings.
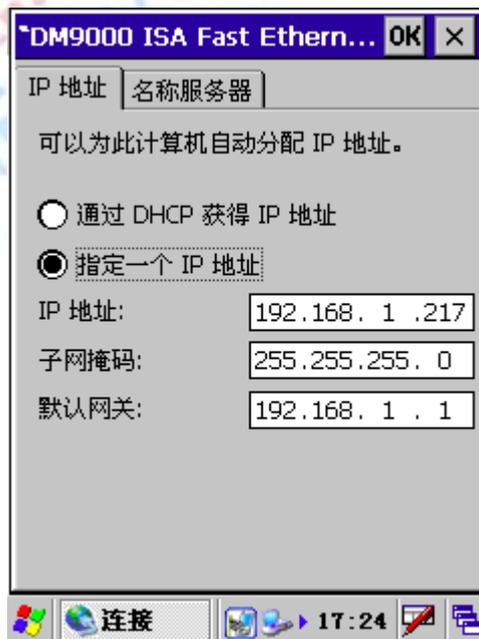
In the PC client, use the ping command to test network connectivity situation.

2.6.10 Login to the Target Board through Telnet

We configured the system to boot WINCE will start the telnet service, then access the Internet line, you can use telnet command registry development board, as shown in figure.

Tip: Telnet are customized WINCE kernel, one of the components, we only select custom kernel plus into it in more detail their use, such as: how to create other accounts, passwords and other settings are not familiar with, please user study.

Note: in WINCE system, the default IP address is 192.168.1.217, when the registry does not require any password.

2.6.11 Use FTP to Send Files

Tip: ftp services are customized WINCE kernel, one of the components, we only select custom kernel acceded to it, its use of more detailed, such as: how to create other accounts, passwords and other settings are not familiar with the user-requested line study.

We configured the system to boot WINCE will start the ftp service, then access the Internet line, you can use ftp log in order to develop an anonymous board, as shown below.

Note: in WINCE system, the default IP address is 192.168.1.217; user name and password are ftp.

```
C:\WINDOWS\system32\cmd.exe - ftp 192.168.1.216

Microsoft Windows XP [版本 5.1.2600]
(C) 版权所有 1985-2001 Microsoft Corp.

C:\Documents and Settings\yang>ftp 192.168.1.216
Connected to 192.168.1.216.
220 Service ready for new user.
User (192.168.1.216:(none)): ftp
331 User name okay, need password.
Password:
230 User logged in, proceed.
ftp> ls
200 Command okay.
150 File status okay; about to open data connection.
网络
FriendlyARM
Application Data
Printer.swap
控制面板.lnk
My Documents
Program Files
Temp
Windows
226 Closing data connection.
ftp: 收到 109 字节, 用时 0.39Seconds 0.28Kbytes/sec.
ftp>
```

2.6.12 Web Server Testing

We configured the system to boot WINCE will start the http service, known as web server, this when Internet access lines, the PC in your browser development board, enter the IP address, the server can see the target board to provide a simple page, which shows that the services have been launched.

2.6.13 Touchscreen Calibration

WINCE system you are using a touchscreen may be not very accurate, when you connect USB mouse, point to Start > Settings > Control Panel, find "stylus" icon, double-click to open "Stylus Properties" window, point "calibration" tab of the "re-calibration" button to begin re-calibration.

According to the system prompt, use the five-point calibration method to start using touch pen calibration, calibration has finished, it will jump out the window as follows, At this time the location of any point to return to a "Stylus Properties" window, point of "OK" to save.
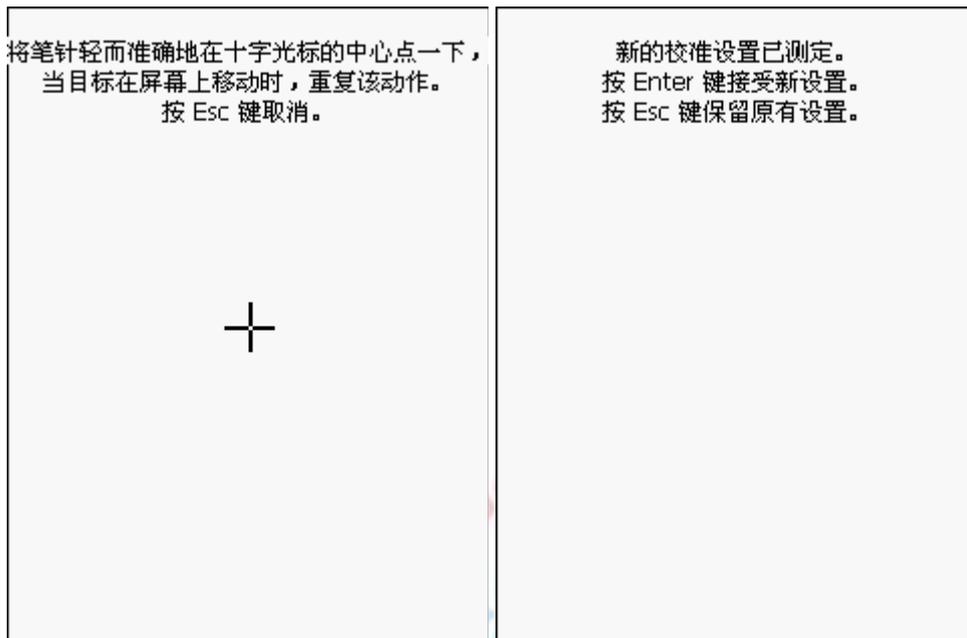
If you want to save the calibration parameters, please point "Start -> hang", and then restart it.

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2.6.14 Use the ActiveSync Synchronization to USB Communications

Note: the installation of sync when connected to USB drive, use the CD-ROM in the "\windows platform tools\CE USB driver" using the same step we assume that you have 9.3 installed in accordance with the driver and ActiveSync synchronization software.

By default, when activated after WINCE system, USB Device connectivity and settings have been doing a good job, and this can be directly connected with USB development board and PC, you can see a successful connection is as follows:

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2.6.15 Wireless Card Test

WINCE our system has been pre-installed integrated wireless card driver (model: VNUWLC41), you can direct then insert the wireless card module board on the USB Host interface, the following window will jump out at the same time the list will be attached to your able to provide a wireless network near the server group name.
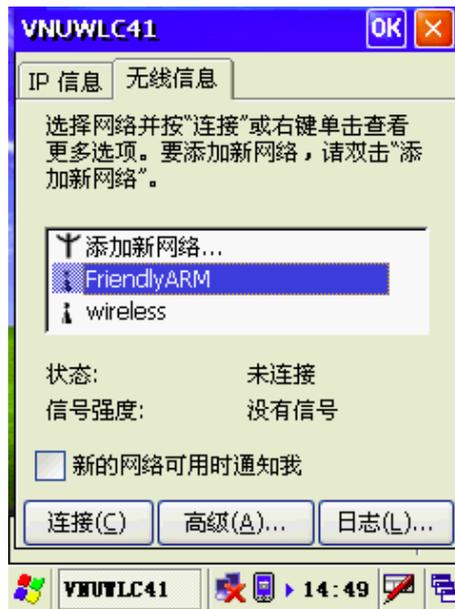
Double-click to open your wireless network to connect service providers to set up group, this choice is "FriendlyARM", enter the network key of the group (if no security settings do not need to enter a), where the password is clearly shown f. Point of "OK" is set up, return to the previous window.

Can see that the system is trying to connect, you will see the moment with the group of wireless network connections FriendlyARM on.

Then choose to click on "IP Info" tab, you can view the wireless network has been the distribution of information, point "more new "button to update the information below.
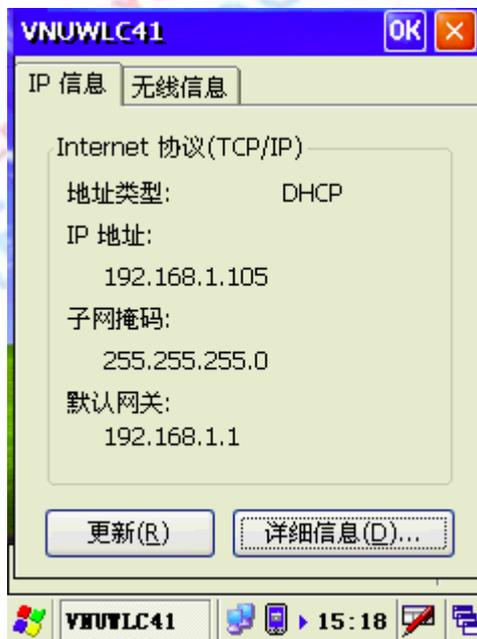
2.6.16 How to set up and save Real-Time Clock

Point of time the lower right corner of the taskbar, set a time window, according to prompts can be set up, and is set up, point of "OK" from the set point of time do not need to save.