X7 User Instruction

Ver:001

Content

一、Product Descriptions：

- Windows Embedded Compact 7, Android 2.3 and Linux 2.6 are three available operating systems for this device;
- WIFI, Ethernet port and 3G high speed internet surfing;
- Built-in high sensitivity U-Blox GPS module and active GPS antenna;
- Built-in CSR 4.0 Bluetooth module, longer transfer distance and stronger signal;
- Optional RS485 and RS422 ports;
- Three RS232 ports;
- CAN Bus support Version 2.0 B (ISO11898);
- External GPIO control interface;
- Optional G-sensor;
- 7-inch TFT LED backlight 16:9 800x480 display;
- Keys and touch control;
- Both USB device and USB Host functions;
- Support 32GB SDHC storage;
- Double channel earphone jack, built-in 1.5W left and right channel speakers, with microphone input;
- Compliant IP54 protection rate;
- Support RAM, On-DASH, and VESA mounting modes;

二、Product detailed specification

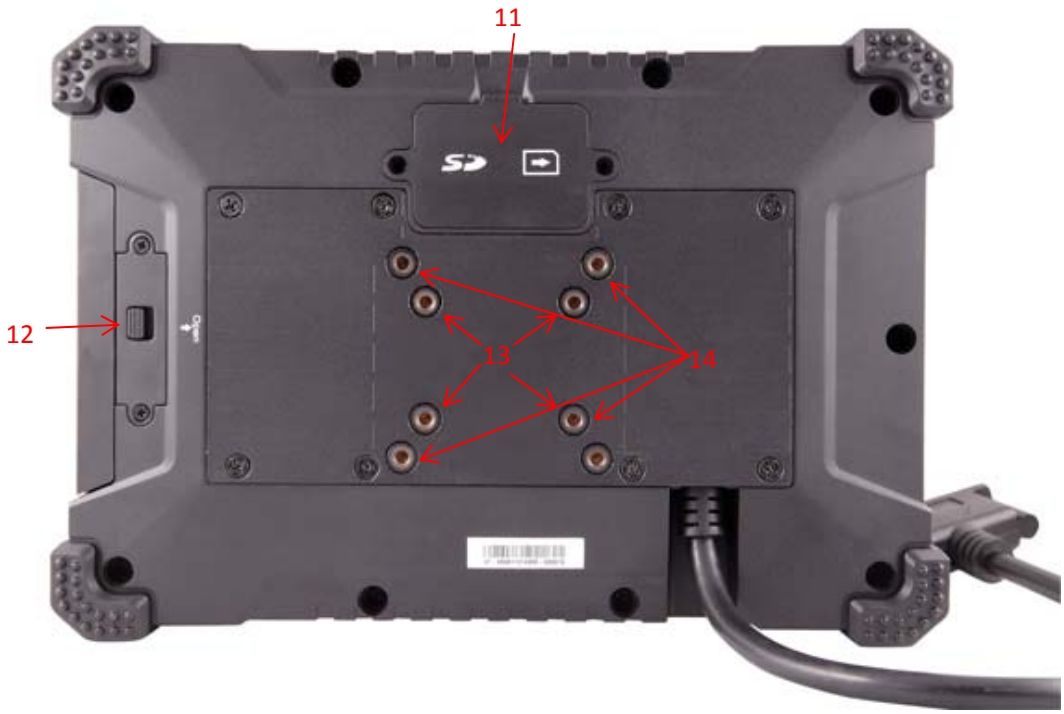
Basic Specs	
LCD	7''TFT LED Backlight Resolution: 800×480 Brightness: 400cd/m2
Touch panel	7-inch 4-wire resistive
Interfaces	SD card slot SIM card slot USB device USB Host×2 Earphone jack Microphone jack RS232×3(standard x 2, 1 optional) RS422/RS485 (choose one of them) CAN Bus (optional) Ethernet port GPIO (3 x DI, 1 x DO) DC IN
Keys	Panic/backlight +/Backlight -/Hone/Vol+/Vol-/Menu/Power
Start up mode	Pres power key (standard) or auto power on(optional)
Audio output	Stereo speakers, water proof 8-ohm 1.5W x 2
Power consumption	≤8W
WIFI module	802.11b/g/n (optional)
3G module	WCDMA or CDMA2000 (optional)
Bluetooth module	CSR chipset Ver. 4.0, dual modes data transfer (optional)
CAN Bus	Standard: Version 2.0 B (ISO11898) (optional)
GPS module	U-Blox 50 Channels high performance module (optional)
G-sensor	3-axis accelerometer(optional)
Dimension	230L×150W×42D(mm)
Weight	0.9Kg
System Specs	

CPU	Freescale i.MX535 （i.MX536）ARM Cortex-A8, 1GHz
Memory	DDR3 512MB
iNAND	4GB
Storage expansion	Support SDHC up to 32GB
Operating system	Windows Embedded Compact 7.0, Android 2.3 or Linux 2.6

Environment Specs	
Working temperature	-20℃ to +65℃
Storage temperature	-30℃ to +80℃
Working humidity	0% to 95%RH
Storage humidity	0% to 95%RH
IP ratings	Compliant IP54

三、Description to each part

Main device:



1、44-pin male connector

2、PANIC

3、Backlight brightness+

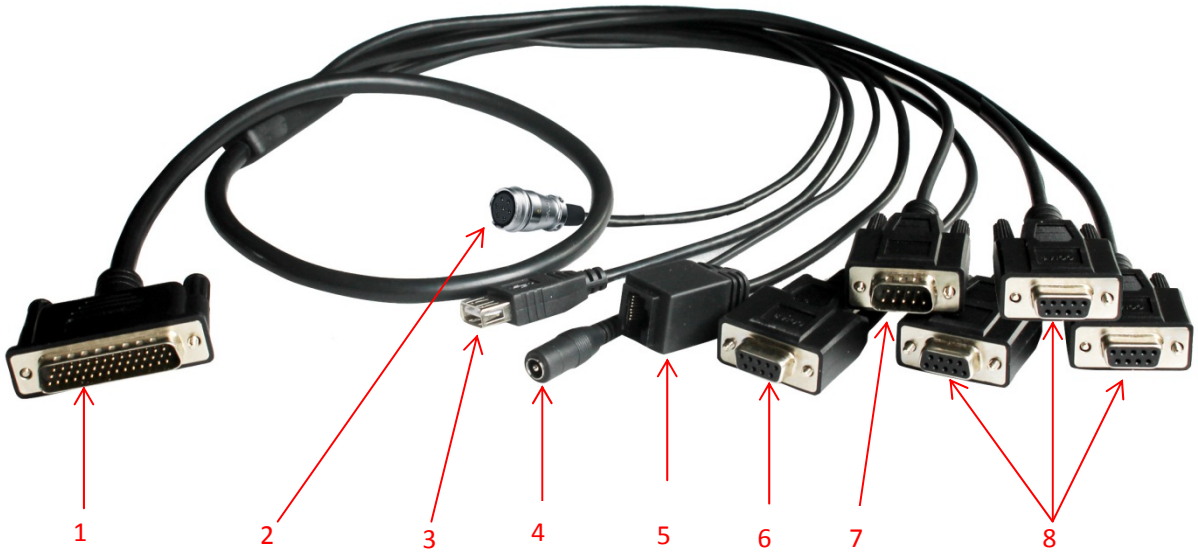
4、Backlight brightness-

5、HOME
6、VOL+
7、VOL-
8、MENU
9、POWER
10、SPEAKER
11、SD card/SIM card slot cover
12、Side cover clasp
13、RAM mounting holes
14、VESA mounting holes
15、USB DEVICE connector
16、USB HOST connector
17、Earphone jack
18、Microphone jack
19、DASH mounting hole

SD card and SIM card slot usage

- Open SD card screws on the back cover
- Left side is SD card slot (see above picture)
- Right side is SIM card slot(see above picture)

Pigtail cable:



1、44-pin male connector
2、GPIO connector(3 x DI, 1 x DO)

3、USB HOST connector

4、DC IN；

5、Ethernet port

6、RS422/RS485 connector

7、CANBUS connector

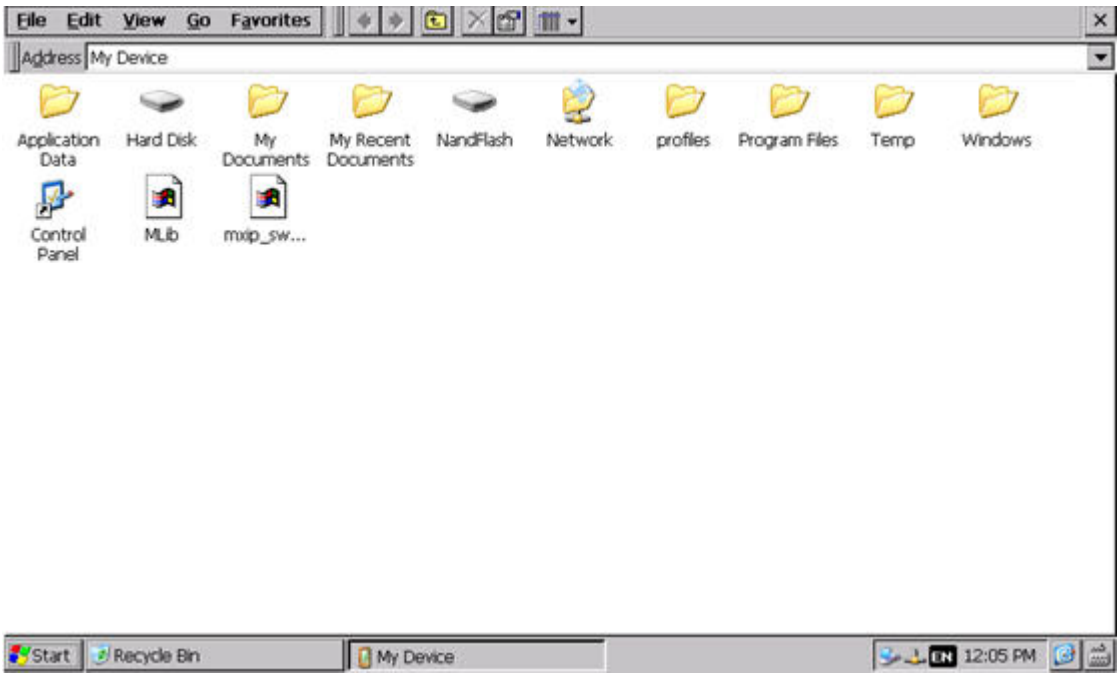
8、3 x RS232 ports

四、**Usage for Windows Embedded Compact 7 version**:

1、Below interface will appear when pressing Power button:

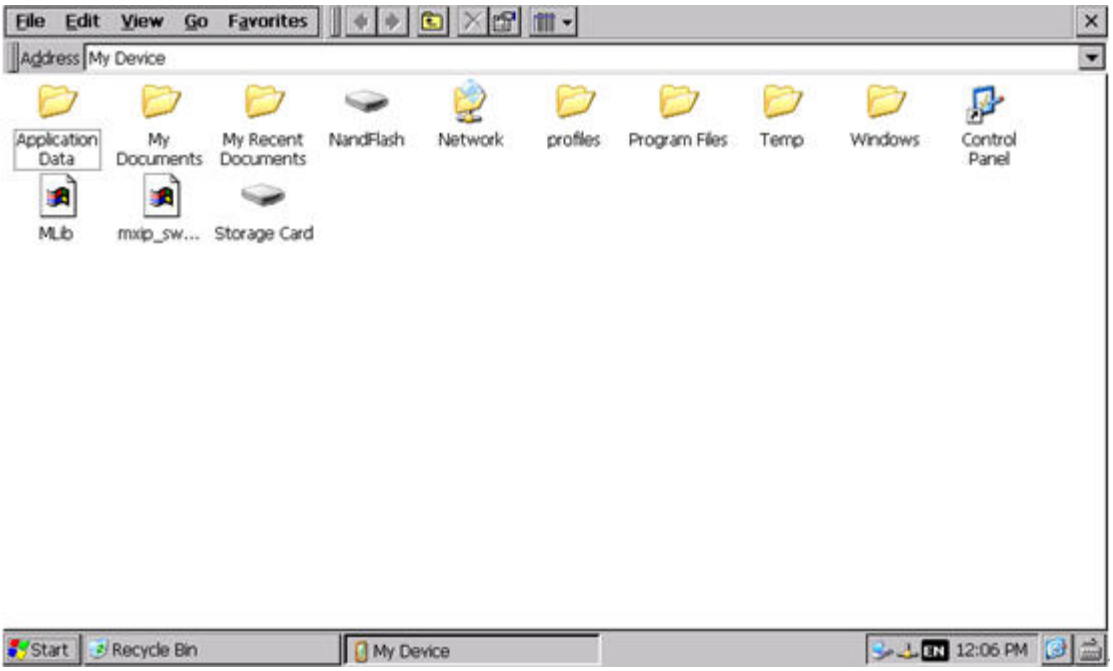
2、 Usage of USB flash disk under Windows Embedded Compact 7 is similar to under standard Windows OS

- After Windows Embedded Compact 7 OS starts up, plug USB flash disk into USB Host connector
- The indicator of USB flash disk flicker, wait for few seconds, the system will load the disk automatically
- At this time, double click "My Device" icon, you will see a folder "Hard Disk" which is USB Flash Disk. Double click "Hard Disk" to read and write data
- USB flash disk can also be recognized before the system starts up



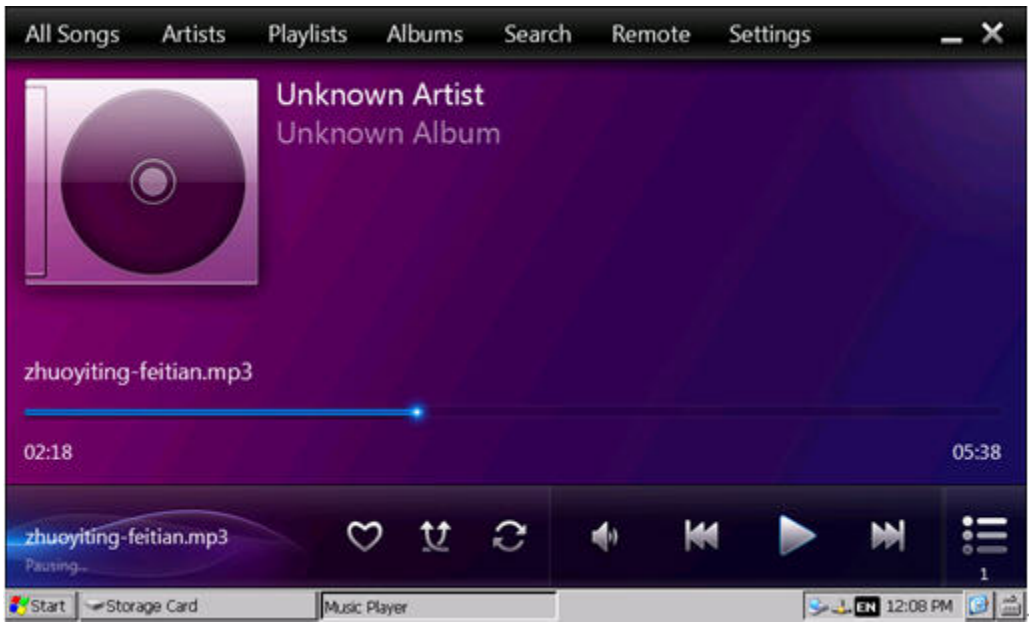
3、 SD card usage:

- SD card can both be recognized by the system when inserting SD card after or before the system starts up
- Double click "My Device" icon, you will see a folder "Storage Card" Double click " Storage Card " to read and write data



4、 Audio Play:

- Insert the earphone into the earphone jack
- Put a music in MP3 format in SD card and insert the SD card into SD card slot
- Then play this MP3 music in Windows Embedded Compact 7 OS, you will hear this music from earphone



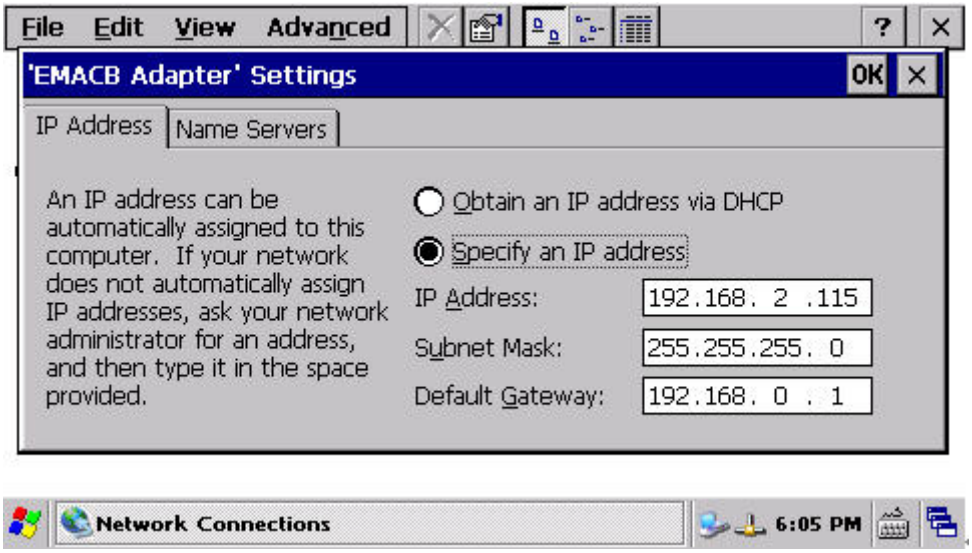
5、Video Play

- Play the video file in WMV format, the method is same as playing MP3 file

6、 Ethernet Port Usage

- Connect development board and PC with cross network cable coming together with development board (or use straight-through network cable to connect development board to switch). click "My Device->Control Panel->Network and Dial-up Connections", as per below:

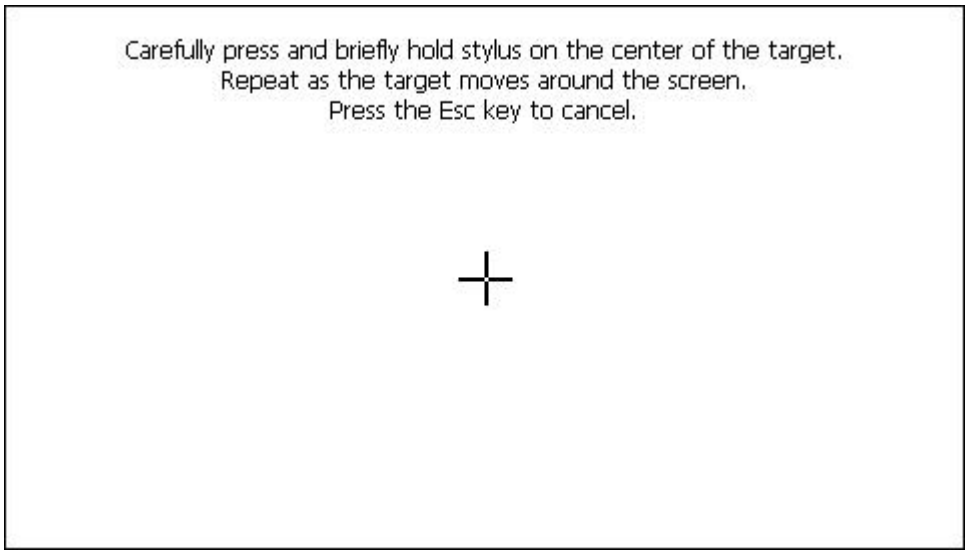
- Double click EMACB1 to open the setting window, fixed IP configuration can be set



7、Touch screen calibration:

- Double click "My Device" → double click "Control Panel" → double click "Stylus"

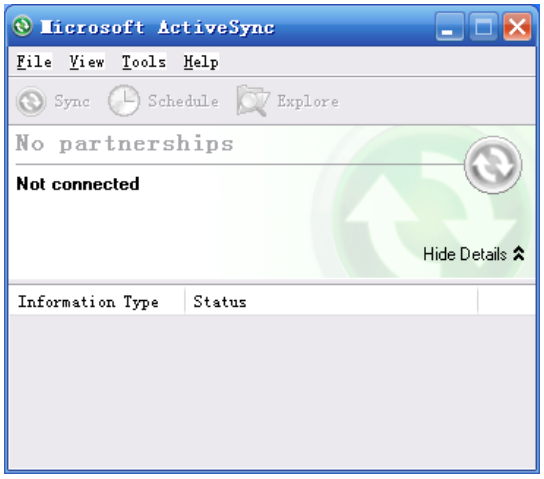
- Click "Calibration" option → click "Recalibration" button



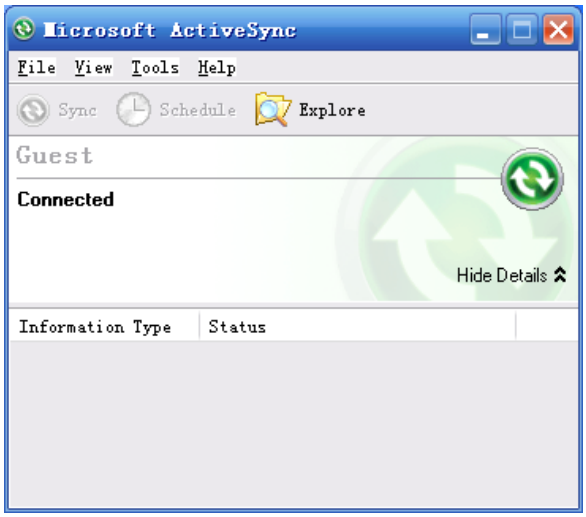
- Click “＋” in the middle, click right top “＋”, right bottom “＋”, left bottom “＋”, left top “＋”, click any point and exit calibration
- Click right top OK and finish the calibration

8、USB DEVICE usage:

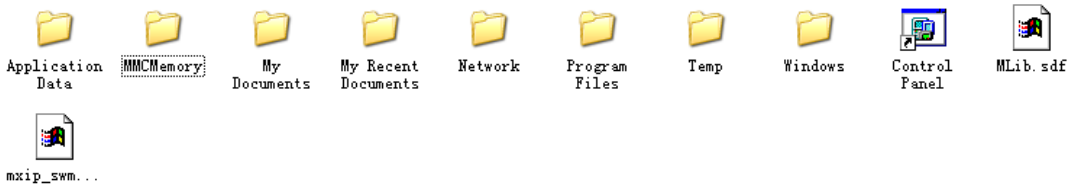
- Install Microsoft ActiveSync 4.5.0 or above version on the PC
- The icon is as below if there is no connection:



- Find a cable and its one end is Mini USB male and the other end is USB Host male. Mini USB male connector is connected with USB device on the X7 and the other connector is connected with USB Host on the PC
- After successful connection, the icon is as below:



◆ Open "My Computer" and "Mobile Device  " to read the relative files on X7 (see following picture):



◆ WARNING!

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/ TV technician for help.

◆ Note!

FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.