



Quick Guide

SBOX PC

April. 2006 (V1.0)

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Chapter 1

Unpacking

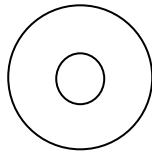
Unpacking the Slim BOXPC, please check the following items are presented and in good conditions:

a. Main Unit



b. CD: User's Manual & Driver Bank

The driver disk includes user's manual and all of driver software of peripheral, such as touch screen, VGA, LAN....etc.



c. Wall Mount Bracket



d. *Power Adapter*



e. *Power Cord*: Optional USA, Europe, UK or Australia type.



Chapter 2

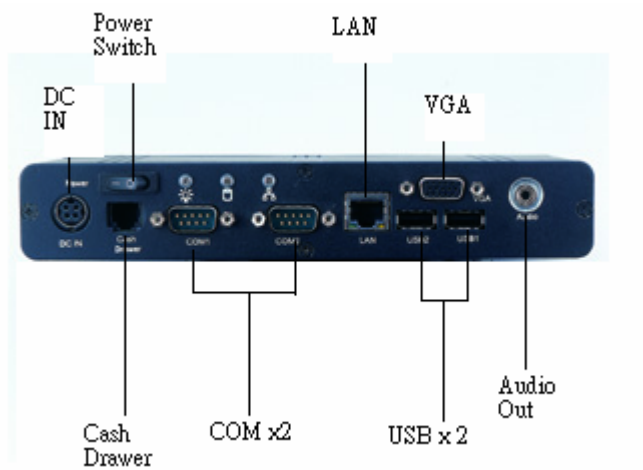
Specification

2.1 Specification

Main Board	
CPU	AMD Geode LX-800
System Memory	1 x DDR400 SO-DIMM Socket, up to 1GB
Display	
Resolution	Up to 1920 x 1440
Storage Device	
HDD	No Support
Compact Flash	1 x Type II, Slot
I/O Ports	
Serial	2x RS232, Pin9 with 5/12V Selected 2x RS232 , Internal Stand By
USB	2 x USB2.0 2 x USB2.0 Internal Stand By
LAN	1 x RJ45, 10/100 Base-T
Cash Drawer	1 x RJ11 (Power 12V)
Audio	AC97 2.0 Compliant
Others	
Power Supply	External Adapter, 12V / 80W, ATX
Compliance	FCC / CE
Weight (Kgs)	0.7
Operating Temperature	5 ~ 40 ° C

2.2 I/O ports

Following ports show all of ports of system.



- a. **DC IN**: connector for power adapter input 12VDC.
- b. **Cash Drawer**: provide IO port address 280H for cash drawer control by RJ11.
- c. **COM 1/2**: standard D sub serial port with 5V / 12VDC selected on pin9.
- d. **LAN**: 10 / 100 base-T by RJ45 connector.
- e. **USB**: play and plug USB 2.0.
- f. **Power Switch**: toggle switch for power on.
- g. **MSR PS2**: for attached MSR PS2 interface connection.

Chapter 3

Installation

3.1 OS Installation

3.1.1 Embedded WEPOS / WinCE



CD ROM Driver with USB interface

If you bought the system including WEPOS / WinCE operation system, please follow up below procedure.

- Connect CDROM to the USB port of system.
- Turn on the system and enter completely into WEPOS.
- Up load your application software into WEPOS platform.
- Complete installation and execute the AP.

Note: We suggest that you buy and use factory recommend CD-ROM with USB interface while you are placed first sample unit.

3.1.2 Win XP

If you would like to install the Win XP, we suggest the system's configuration include 256MB RAM and 4GB Compact Flash.

- Connect CDROM to the USB port of system.
- Turn on the system and press "Del" key enter to CMOS setup.
- Select icon "Advanced BIOS Features".

Phoenix – Award BIOS CMOS Setup Utility

- Standard CMOS Features
- Advanced BIOS Features
- Advanced Chipset Features
- Integrated Peripherals
- Power Management Setup
- PnP / PCI Configuration
- PC Health Status

ESC: Quit
F10: Save & Exit Setup

- d. Select "First Boot Device" to "USB-CDROM".
- e. Press "F10" to save setup change and quit.
- f. Install the Win XP, follow up the OS installation guide.

Phoenix – Award BIOS CMOS Setup Utility
Advanced BIOS Features

Virus Warning	[Disabled]	
CPU Internal Cache	[Enabled]	
Boot From Lan Control	[Disabled]	
First Boot Device	[USB-CDROM]	
Second Boot Device	[HDD-0]	
Third Boot Device	[CDROM]	
Boot Other Device	[Enabled]	
Boot UP NumLock Status	[On]	
Gate A20 Option	[Fast]	
Typematic Rate Setting	[Disabled]	
Typematic Rate (Chars/Sec)	6	
Typematic Delay (Msec)	250	
Security Option	[Setup]	
OS Select For DRAM > 64MB	[Non-OS2]	
Small Logo(EPA) Show	[Disabled]	

3.2 Cash Drawer

For the 3rd version M/B which is released from end of April. The cash drawer pin assignment as followings. In order to program the cash drawer easily, we also provide OPOS driver.

Pin	Assignment
1	GND
2	Data Out
3	Data In
4	12V
5	NC
6	GND

Note:

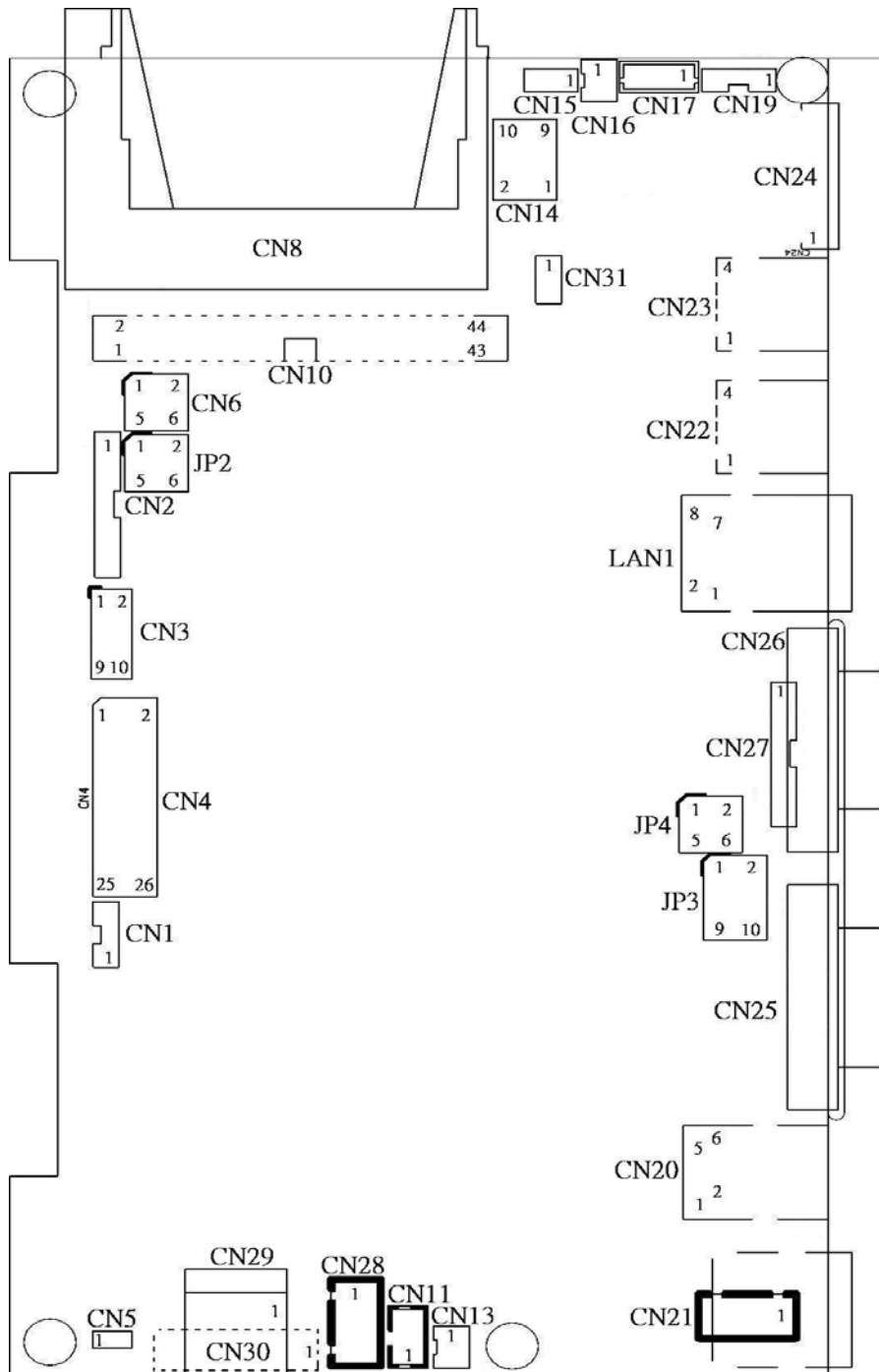
I/O Address: 280H for Cash Drawer which is controlled by
Data bit: Data IN =>Bit 0, Data OUT=>Bit 1

Normally recommend drive the Cash Drawer by out FF to I/O 280H.

Chapter 4

Jumper Definition

4.1 Main Board Layout



4.2 LCD Power setting

- JP2: This jumper is for the setting of LCD panel voltage.

JP2	Description
2-4	+3.3V
4-6	+5V

- JP2: This jumper is for the setting of LCD panel shift clock.

JP2	Description
1-3	Inverted
3-5	Normal

4.3 COM1/2 Power Selection

JP3	Description
1-3	COM1 RI Pin Use +12V
3-5	COM1 RI Pin Use +5V
7-9	COM1 RI Pin Use RI
2-4	COM2 RI Pin Use +12V
4-6	COM2 RI Pin Use +5V
8-10	COM2 RI Pin Use RI

4.4 COM3 Power Selection

JP4	Description
1-2	COM3 RI Pin Use +12V
5-6	COM3 RI Pin Use +5V
3-4	COM3 RI Pin Use RI

4.5 IDE Disk Drive Connector

- a. CN10: Primary IDE Connector (Pitch 2.00 mm)

PIN	Description	PIN	Description
1	RESET#	2	GROUND
3	DATA 7	4	DATA 8
5	DATA 6	6	DATA 9
7	DATA 5	8	DATA 10
9	DATA 4	10	DATA 11
11	DATA 3	12	DATA 12
13	DATA 2	14	DATA 13
15	DATA 1	16	DATA 14
17	DATA 0	18	DATA 15
19	GROUND	20	N/C
21	IDE DREQ	22	GROUND
23	IOW#	24	GROUND
25	IOR#	26	GROUND
27	IDE DRDYA	28	GROUND
29	IDE DACK	30	GROUND
31	INTERRUPT	32	N/C

33	SA1	34	CABLE_80P
35	SA0	36	SA2
37	HDC CS0#	38	HDC CS1#
39	HDD ACTIVE#	40	GROUND
41	VCC5	42	VCC5
43	GND	44	

b. CN8: Compact Flash Storage Card Socket

PIN	Description	PIN	Description
1	GROUND	26	CARD DETECT1
2	D3	27	D11
3	D4	28	D12
4	D5	29	D13
5	D6	30	D14
6	D7	31	D15
7	CS1#	32	CS3#
8	N/C	33	N/C
9	GROUND	34	IOR#
10	N/C	35	IOW#
11	N/C	36	OBLIGATORY TO PULL HIGH
12	N/C	37	IRQ15
13	VCC	38	VCC
14	N/C	39	SLAVE
15	N/C	40	N/C
16	N/C	41	RESET#
17	N/C	42	IORDY
18	A2	43	DRQ
19	A1	44	ACK
20	A0	45	ACTIVE#
21	D0	46	PDIAG#
22	D1	47	D8
23	D2	48	D9
24	N/C	49	D10
25	CARD DETECT2	50	GROUND

4.6 Fan Connector

These connectors can supply +5V/500mA to the cooling fan. In the connector there have a “rotation” pin. The rotation pin is to get the fan’s rotation signal to system. So the system BIOS could recognize the fan speed. Please note only specified fan offers the rotation signal.

- CN11 : Fan connector**

PIN	Description
1	Rotation Signal
2	VCC5
3	GND

4.7 Serial Ports

The system provides three high speed NS16C550 compatible UARTS with Read/Receive 16 byte FIFO. Four com ports are in IO connector.

- **COM1: CN25 DB9-pin header**
- **COM2: CN26 DB9-pin header**

PIN	Description
1	DATA CARRIER DETECT (DCD)
2	RECEIVE DATA (RXD)
3	TRANSMIT DATA (TXD)
4	DATA TERMINAL READY (DTR)
5	GROUND
6	DATA SET READY (DSR)
7	REQUEST TO SEND (RTS)
8	CLEAR TO SEND (CTS)
9	RING INDICATOR (RI)

- **COM2: CN27 pin header 2.0mm**

PIN	Description
1	DATA CARRIER DETECT (DCD)
2	RECEIVE DATA (RXD)
3	TRANSMIT DATA (TXD)
4	DATA TERMINAL READY (DTR)
5	GROUND
6	DATA SET READY (DSR)
7	REQUEST TO SEND (RTS)
8	CLEAR TO SEND (CTS)
9	RING INDICATOR (RI)
10	N/C
11	+5V
12	N/C
13	+12V
14	GROUND

- **COM3: CN24 for Card Reader.**

PIN	Description
1	GROUND
2	+5V
3	RXD3
4	TXD3
5	KB_DATA_OUT
6	KB_CLK_OUT
7	KB_DATA_IN
8	KB_CLK_IN
9	RI3
10	DTR3
11	CTS3
12	RTS3
13	DSR3
14	DCD3
15	KB_EN

4.8 Power Connector

- **CN21: Power Connector Input**

PIN	Description	PIN	Description
1	GND	3	Power IN(+12V)
2	GND	4	Power IN(+12V)

- **CN28: Power Connector Output**

PIN	Description	PIN	Description
1	+5V	3	GND
2	GND	4	+12V

4.9 VGA Connector

The pin assignments are as following.

- **CN3: 10-pin Connector**

PIN	Description	PIN	Description
1	RED	2	DDCDAT
3	GREEN	4	DDCCLK
5	BLUE	6	GROUND
7	HSYNC	8	GROUND
9	VSNC	10	GROUND

4.10 LCD & INVERTOR Connector

The pin assignments are as following.

- **CN2: 15-pin Connector for LCD**

PIN	Description
1	LVD0-
2	LVD0+
3	GROUND
4	N/C
5	N/C
6	GROUND
7	LVD1-
8	LVD1+
9	LVD2-
10	LVD2+
11	GROUND
12	LVDCK-
13	LVDCK+
14	LCD_VCC
15	LCD_VCC

- **CN1: 6-pin Connector for INVERTOR**

PIN	Description
1	+12V
2	BKL_ Enable

3	GROUND
4	N/C
5	+12V
6	GROUND

4.11 USB Port Connector

- **USB1: CN22**
- **USB2: CN23**
- **USB3: CN31**
- **USB4: CN15**

PIN	Description
1	+5V
2	DATA-
3	DATA+
4	GROUND

4.12 Audio Connector

The pin assignments are as following.

- **CN17: LINE_OUT connector**

PIN	Description
1	LINE_OUT_L
2,3	LINE_OUT_GROUND
4	LINE_OUT_R

- **CN16: MIC_IN connector**

PIN	Description
1	MIC_IN
2	GROUND

4.13 LED

The pin assignments are as following.

- **CN6: LED connector**

PIN	Description	PIN	Description
1	POWER LED-	2	POWER LED+
3	HDD LED-	4	HDD LED+
5	LAN LED-	6	LAN LED+

4.14 Power & Reset Button

- **CN13: ATX Power button**

PIN	Description
1	ATX Power button +
2	ATX Power button -

- **CN5: Reset button**

PIN	Description
1	Reset button +
2	Reset button -

4.15 Cash Drawer Connector

- CN20**

PIN	DESCRIPTION	PIN	DESCRIPTION
1	GROUND	2	DOUT_0
3	DIN_0	4	+12V
5	N.C	6	GROUND

4.16 Keyboard / Mouse connector

- CN19: Keyboard/Mouse Connector**

PIN	DESCRIPTION
1	VCC5
2	MOUSE DATA
3	MOUSE CLK
4	KEYBOARD DATA
5	KEYBOARD CLK
6	GROUND

4.17 Touch Connector

The pin assignments are as following.

- CN29: Touch 5W connector**

PIN	DESCRIPTION
1	RT
2	RL
3	SG
4	LT
5	LL

- CN30 : Touch 7W connector**

PIN	DESCRIPTION
1	NC
2	U
3	NC
4	R
5	NC
6	A
7	NC
8	L
9	NC
10	B
11	NC
12	D
13	NC
14	C
15	NC