



Quick Installation Guide

3301800

PACKING LIST

Before you begin installing your single board, please make sure that the following materials have been shipped:

- ≥ 1 x 3301800 Embedded SBC
- ≥ 1 x ATX Cable 300mm
- ≥ 1 x Quick Installation Guide
- ≥ 1 x CD-ROM (for driver used)
- ≥ 1 x Warranty Card

Optional

≥ 1 x Cable Kits contains the followings:

- Ⓜ 2 x USB Port Cable
- Ⓜ 1 x Parallele Port Cable
- Ⓜ 1 x IDE Flat Cable
- Ⓜ 4 x Serial Port Cable
- Ⓜ 1 x Audio Cable
- Ⓜ 1 x FDD Cable
- Ⓜ 1 x Keyboard / PS2 Mouse Cable
- Ⓜ 2 x LAN Cable (RJ45 cable)
- Ⓜ 1 x VGA Cable

Ordering Information

3301800 EPIC form factor Embedded AMD Geode LX800 Processor with CRT/ LCD,Dual Fast Ethernet,AC97 3D Audio,PC104+ and Compact Flash Socket

Specification	
Product Name	3301800
Form Factor	EPIC Embedded Board Size (165X115mm)
Processor	AMD Geode LX 800
Chipset	NB: AMD Geode LX 800 SB: CS5536
System Memory	1 x 200Pin DDR SO-DIMM Up to 1GB
VGA/LCD Controller	AMD Geode LX800 integrated VGA controller with 2D engine LCD Support 18/24 bit TTL
Ethernet	2 x Realtek 8100CL 10/100Base-T
I/O Chips	WINBOUND W83627HG x 1
BIOS	Phoenix-Award BIOS, Support 4MB Flash ROM
Audio	AC97 Codec supports MIC-In/ Line-In/ Line-out
IDE Interface	Ultra DMA x 1 channel (Support two ATAPI devices) Compact Flash Disk X 1 (Support up to 2GB)
4 Serial Port	4 COM ports: COM 1,3,4 : RS-232 COM 2: RS232/422/485
Parallel Port	Parallel Port Supports SPP/ EPP/ ECP mode
K/B and Mouse	Support Standard PS/2 K/B and Mouse
Universal Serial Bus	4 x USB 2.0 Port
Expansion Interface	PC/104 Plus
Watchdog Timer Chipset	1~255 Level (sec or min)
Hardware Monitor Chipset	Integrated in W83627HG
RTC	AMD Geode CS5536 built-in RTC with lithium battery
Power Input Connector	5X2 Pin ATX Power Connector
Operation Temp.	0°C ~ 60°C
Dimension (L x W):	165 x 115 mm

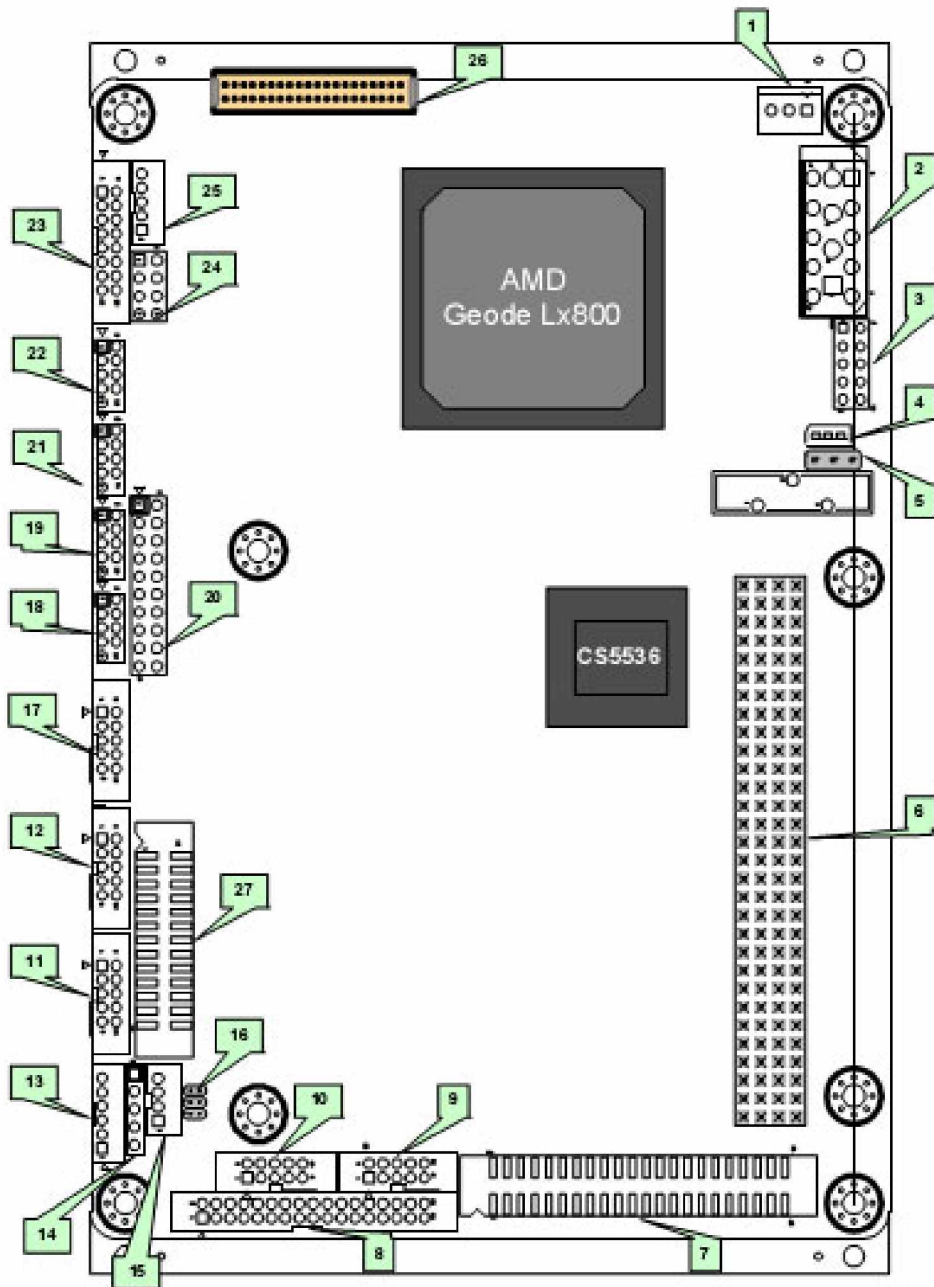
Jumper/Connector Quick Reference

Jumpers

Label	Function
JRS1	COM2 RS-232 / 422 / 485 Select
JBAT1	CMOS Jumper Settings

Connectors

Label	Function
DIMM1	200 Pin DDR SDRAM DIMM Socket
PC104P1	PC104+ for PCI Interface
KBM1	PS/2 Keyboard and Mouse
VGA1	CRT Display
INV1	LCD Inverter Connector
LCD1	TTL LCD Panel Connector
COM1-COM4	Serial Port
CON1	RS-422 / 485 Output
IR1	Infrared (IR) Connector
LPT1	Parallel Port
LAN1 & LAN2	Ethernet Connector
LLED1	LAN LED Connector
USB1 & USB2	USB 1, 2, 3, 4 Connector
AUDIO1	Audio Interface Port
ATX1	ATX Power Connector
SYSF1	CPU Fan connector
JFRT1	Front Panel (Switches and Indicators)
SMBUS1	External SMBus Connector
DIO1	Digital I/O Connector
FDD1	Floppy Disk Drive Connector
IDE1	Primary IDE Connector
CFD1	Compact Flash Socket
BZ1	Internal Buzzer



Top Side

01 SYSF1	06 PC104+	11 COM2	16 JRS1	21 LAN2	26 LCD1
02 ATX1	07 IDE1	12 COM1	17 AUDIO1	22 LAN1	27 LPT1
03 JFRT1	08 FDD1	13 KBM1	18 USB2	23 VGA1	
04 SMBUS1	09 COM4	14 IR1	19 USB1	24 LLED1	
05 JBAT1	10 COM3	15 COM1	20 DIC1	25 INV1	

Solder Side

01 DIMM1	02 CFI1
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01 FAN Connector

Connector: SYSF1—onboard 3-Pin Wafer

Pin	Description
1	GND
2	+12V
3	FAN Detect

02 ATX Power Connector

Connector: ATX 1—10-Pin ATX Power Connector

Pin	Description	Pin	Description
1	-PSON	6	+5VSB
2	GND	7	+5V
3	GND	8	+5V
4	+12V	9	-12V
5	+3.3V	10	GND

03 Front Panel (Switches and Indicators)

Connector: JFRT1—Onboard 10-pin header

Pin	Description	Pin	Description
1	RESET+	2	RESET-
3	POWER LED+	4	POWER LED -
5	HD LED+	6	HD LED-
7	SPEAK+	8	SPEAK-
9	PSON+	10	PSON-

04 External SMBUS Connector

Connector: SMBUS1—onboard 3-pin Wafer

Pin	Description
1	DATA
2	CLK
3	GND

05 CMOS Jumper Settings

Connector: JBAT1—onboard 3-pin header

CMOS	JBAT1
Keep CMOS	1-2 ON
Clear CMOS	2-3 ON

Default setting: Keep CMOS

06 PC 104P1

Rotary Switch Settings

Switch	SW	REQ/GNT	CLK	DSB	INT
04	1	-REQ/GNT0	SCLK0	SADB	INTA
15	2	-REQ/GNT1	SCLK1	SADB	INTB
26	3	-REQ/GNT2	SCLK2	SADB	INTC
37	4	-REQ/GNT3	SCLK3	SADB	INTD

Note: Slot 3 & 4 share LAN1,2 REQ/GNT

07 Enhanced IDE Connector

Connector: IDE1—onboard 2.0 pitch 2x22-Pin Box Headers

08 Floppy Disk Drive Connector

Connector: FDD1—onboard 2.0 pitch 2x17-Pin Box Header

09–12 RS-232 Serial Port

Connector: COM1/ COM2/ COM3/COM 4—onboard 2.0 pitch 2x5-Pin Box Header

Pin	Description	Pin	Description
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI	10	NC

13 PS/2 Keyboard and Mouse

Connector: KBM1—onboard 6-pin wafer connector

Pin	Description	Pin	Description
1	KB_DAT	2	GND
3	MS_DAT	4	KB_CLK
5	VCC	6	MS_CLK

14 Infrared (IR) Connector

Connector: IR1—onboard 2.54 pitch 5-Pin Header

Pin	Description	Pin	Description
1	+5V	2	N.C.
3	IRRX	4	GND
5	IRTX		

15 RS-422/485 Output Connector

Connector: CON1—onboard 2.0 pitch 4-Pin Wafer

Pin	RS-422	RS-485
1	TX+	DATA+
2	TX-	DATA-
3	RX+	N.C.
4	RX-	N.C.

RS-422/RS-485 Select by JRS1, share COM2

resource.

16 COM2 RS-232 / 422 / 485 Select

Connector: JRS1—onboard 6-pin (2*3) header

Select	1-2	3-4	5-6
RS-232	ON	OFF	OFF
RS-422	OFF	ON	OFF
RS-485	OFF	OFF	ON

Default setting: RS-232 mode

17 Audio Port

Connector: Audio 1--onboard 2.0 pitch 2x5-Pin Box Header

Pin	Description	Pin	Description
1	Line-in Left	2	Line-in Right
3	GND	4	GND
5	MIC	6	N.C
7	GND	8	GND
9	Line-out Left	10	Line-out Right

18-19 USB Connector

Connector: USB1 & USB2--onboard 2.0 pitch 2x5-Pin Header

Pin	Description	Pin	Description
1	USB_VCC	2	USB_VCC
3	USB D-	4	USB D-
5	USB D+	6	USB D+
7	USB_GND	8	USB_GND
9	USB_GND	10	Key

20 Digital I/O Connector

Connector: DIO 1--onboard 2.54 pitch 2x10-Pin Header

Pin	Description	Pin	Description
1	DIO1	2	DIO2
3	DIO3	4	DIO4
5	DIO5	6	DIO6
7	DIO7	8	DIO8
9	GND	10	GND
11	DIO9	12	DIO10
13	DIO11	14	DIO12
15	DIO13	16	DIO14
17	DIO15	18	DIO16
19	+5V	20	+12V

21-22 Fast Ethernet Connector

Connector: LAN1 & LAN2--onboard 2.0 pitch 2x5-Pin Header

Pin	Description	Pin	Description
1	TX+	2	TX-
3	RX+	4	N.C
5	N.C	6	RX-
7	N.C	8	N.C
9	GND	10	Key

23 CRT Display Connector

Connector: VAG1

Pin	Description	Pin	Description
1	RED	2	GREEN
3	BLUE	4	N.C
5	GND	6	GND
7	GND	8	GND
9	N.C	10	GND
11	N.C	12	VDDAT
13	HSYNC	14	VSYNC
15	VDCLK	16	N.C

24 LAN LED Indicator

Connector: LLED1--onboard 2.54 pitch 2x4-Pin Header

Pin	Description	Pin	Description
1	LAN1 LINK-	2	LAN1 LINK+
3	LAN1 ACTIVE-	4	LAN1 ACTIVE+
5	LAN2 LINK-	6	LAN2 LINK+
7	LAN2 ACTIVE-	8	LAN2 ACTIVE

25 LCD Panel Inverter Connector

Connector: INV1--onboard 2.0 pitch 5-Pin Wafer

Pin	Description
1	+12V
2	GND
3	Backlight on/off
4	Brightness control
5	GND

26. TTL LCD Panel Connector

Connector: LCD1--onboard DF-13-40DP-1.25V

Pin	Description	Pin	Description
1	VDD5	2	VDD5
3	GND	4	GND
5	VDD3	6	VDD3
7	N.C.	8	GND
9	LPD0	10	LPD1
11	LPD2	12	LPD3
13	LPD4	14	LPD5
15	LPD6	16	LPD7
17	LPD8	18	LPD9
19	LPD10	20	LPD11
21	LPD12	22	LPD13
23	LPD14	24	LPD15
25	LPD16	26	LPD17
27	LPD18	28	LPD19
29	LPD20	30	LPD21
31	LPD22	32	LPD23
33	GND	34	GND
35	DOTCLK	36	FP_VS
37	DE	38	FP_HS
39	BLON	40	ENVDD

27. Parallel Port Connector

Connector: LPT1--onboard 2.0 pitch 2x13-Pin Box-Header

Pin	Description	Pin	Description
1	STROBE	14	AFD
2	PTD0	15	ERROR
3	PTD1	16	INIT
4	PTD2	17	SLIN
5	PTD3	18	GND
6	PTD4	19	GND
7	PTD5	20	GND
8	PTD6	21	GND
9	PTD7	22	GND
10	ACK	23	GND
11	BUSY	24	GND
12	PE	25	GND
13	SELECT	26	N.C.

Compact Flash Connector

Connector: CFD1

Pin	Description	Pin	Description
1	GND	26	GND
2	DATA3	27	DATA11
3	DATA4	28	DATA12
4	DATA5	29	DATA13
5	DATA6	30	DATA14
6	DATA7	31	DATA15
7	CS#1	32	CS#3
8	GND	33	GND
9	GND	34	IO_READ
10	GND	35	IO_WRITE
11	GND	36	+5V
12	GND	37	IRQ15
13	+5V	38	+5V
14	GND	39	CSEL
15	GND	40	N.C.
16	GND	41	IDE RESET
17	GND	42	IO_READY
18	ADDR2	43	N.C.
19	ADDR1	44	+5V
20	ADDR0	45	DASP
21	DATA0	46	DIAG
22	DATA1	47	DATA8
23	DATA2	48	DATA9
24	N.C.	49	DATA10
25	GND	50	GND

Note: Driver install
 \Driver\LX800

Any advice or comments about our products and service, or anything we can help you with please don't hesitate to contact with us. We will do our best to support you for your products, projects and business

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