Quick Installation Guide

3007640

Version 1.0

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3007640 Quick Installation Guide

Packing List

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

 1 x 3007640 Embedded SBC
 1 x Quick Installation Guide
 1 x Warranty Card
 1 x Driver CD

Optional:

1 x Cable Kit contains the followings:
1 x USB V2.0 Cable
2 x COM Flat Cable
1 x FDD Flat Cable
1 x IDE Cable
1 x Print Cable
1 x LAN Cable
1 x VGA Cable
1 x K/B-M/S Cable

Ordering Information:

3007640 PC/104 Form Factor Embedded AMDGeode LX800 Processor with
              CRT/LCD, Ethernet, PC/104 and Compact Flash Socket up to 4GB
Cable Kit Cable Kit for 3007640

Specification

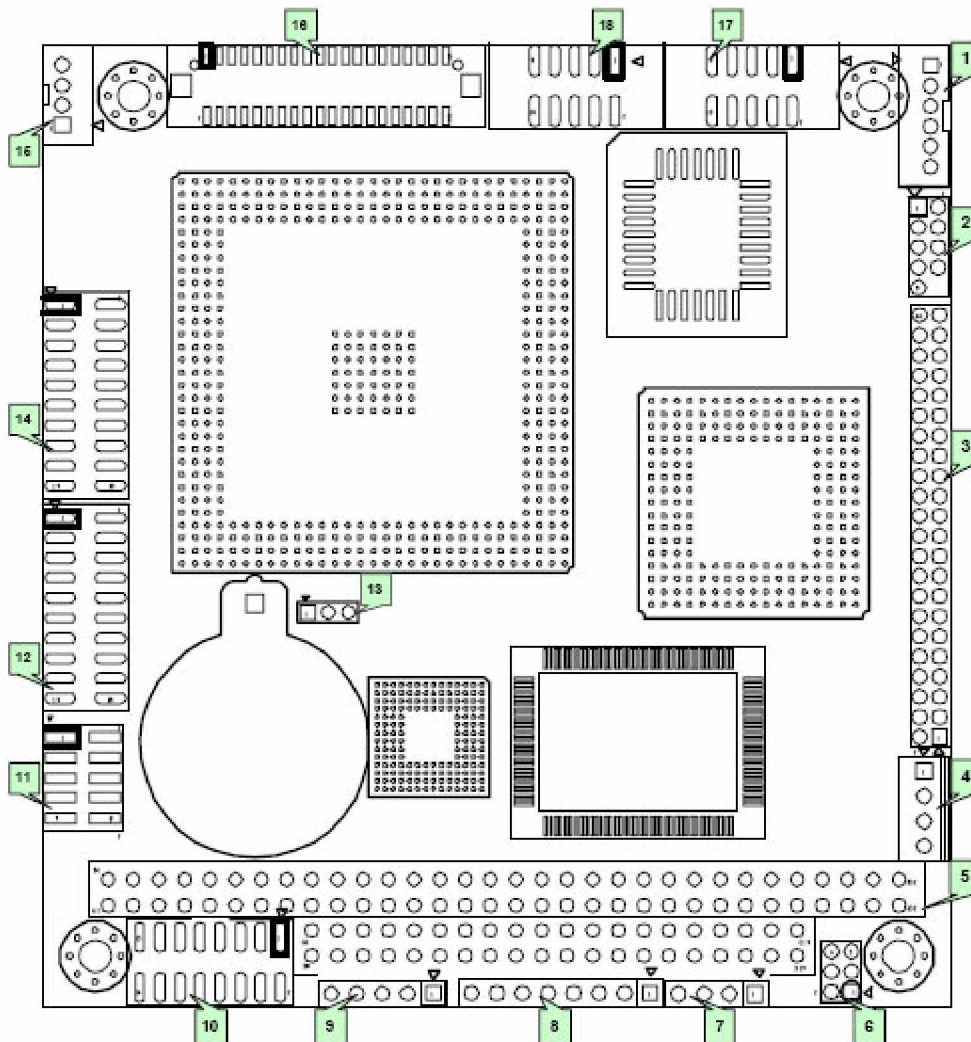|	
Form Factor	PC/104 form factor
Processor	AMD Geode LX series CPU
Chipset	AMD CS5536
System Memory	One 1 x 200-pin DDR SO-DIMM Up to 1GB
VGA/LCD Controller	AMD Geode LX800 integrated VGA controller with 2D engine
LCD	Support 18/24 bit TTL
PCI to ISA BRIDGE	ITE8888G (Master ISA and PNP feature not supported)
Ethernet	Realtek 8100CL 10/100 Base-T
I/O Chip	Winbond W83627HG
BIOS	Phoenix-Award BIOS, Support 4MB Flash ROM
IDE Interface	ATA-33 x 1 channel (Support one ATAPI device)
	Compact Flash Disk x 1 use Primary IDE Master resource (Support up to 4GB)
Two Serial Port	Two COM ports:
	COM 1: RS-232
	COM 2: RS-232/422/485
Parallel Port	Parallel Port Supports SPP/EPP/ECP mode
K/B and Mouse	Support Standard PS/2 K/B and Mouse
Floppy	1 x Floppy Drive Connector
Universal Serial Bus	2 x USB 2.0 port
Watchdog Timer	1~255 Level (Sec. or Min.)
Hardware Monitor	Integrated in W83627HG
RTC	AMD Geode CS5536 built-in RTC with lithium battery
Power Input Connector	1 x 4-pin 5V, 12V power connector
Operation Temp.	0ºC ~ 60ºC
Dimension (L x W):	96 x 90 mm (3.8" x 3.5 ")

Jumper/Connector Quick Reference

Jumpers

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

Connectors

DIMM1	200-pin DDR SDRAM DIMM Socket
PC104_1	PC/104 for ISA Interface
KBM1	PS/2 Keyboard and Mouse
VGA1	CRT Display
LCD1	TTL LCD Panel Connector
COM1-COM2	COM1 ~ COM2
CON1	RS-422/485 Output
IR1	Infrared (IR) Connector
LPT1	Parallel Port
LAN1	LAN1 Ethernet Connector
LLED1	LAN LED Connector
USB1	USB 1/2 Connector
PWR1	Power Connector Small 4P
JFRT1	Front Panel (Switches and Indicators)
FDD1	Floppy Disk Drive Connector
IDE1	Primary IDE Connector
CFD1	Compact Flash Socket

01	KBM1	06	JRS1	11	USB1	16	LCD1
02	LAN1	07	LLED1	12	FDD1	17	COM1
03	IDE1	08	JFRT1	13	JBAT1	18	COM2
04	PWR1	09	IR1	14	LPT1		
05	PC/104	10	VGA1	15	CON1		

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01 PS/2 Keyboard and Mouse (KBM1)

Type: onboard 6-pin wafer connector

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

02 Fast Ethernet Connector (LAN1)

Type: onboard 2.0mm 2*5-pin header

Pin	Description	Pin	Description
1	TX+	2	TX1-
3	RX+	4	N.C
5	N.C	6	RX-
7	N.C	8	N.C
9	GND	10	Key

03 Enhanced IDE Connector (IDE1)

Type: onboard 2.0mm 2*22-pin Headers

Pin	Description	Pin	Description
1	IDE RESET	2	GND
3	DATA7	4	DATA8
5	DATA6	6	DATA9
7	DATA5	8	DATA10
9	DATA4	10	DATA11
11	DATA3	12	DATA12
13	DATA2	14	DATA13
15	DATA1	16	DATA14
17	DATA0	18	DATA15
19	GND	20	KEY
21	REQ	22	GND
23	IO RWITE	24	GND
25	IO READ	26	GND
27	IO READY	28	IDESEL
29	DACK	30	GND
31	IRQ14	32	N.C
33	ADDR1	34	DIAG
35	ADDR0	36	ADDR2
37	CS#2	38	CS#3
39	IDEACTP	40	GND
41	+5V	42	+5V
43	GND	44	NC

04 Power Connector (PWR1)

Type: onboard 4-pin Power Connector

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

05 PC/104 ISA Interface (PC104_1)

06 COM2 RS-232/422/485 Select (JRS1)

Type: onboard 2*3-pin 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

07 LAN LED Indicator (LLED1)

Type: onboard 2.54mm 1*4-pin header

Pin	Description
1	LAN1 ACTIVE-
2	LAN1 ACTIVE+
3	LAN1 LINK-
4	LAN1 LINK+

08 Front Panel (Switches and Indicators) (JFRT1)

Type: onboard 2.54mm 1*8-pin header

Pin	Description
1	RESET+
2	RESET+
3	PWRLED+
4	PWRLED-
5	HDLED+
6	HDLED-
7	ESPK+
8	ESPK-

09 Infrared (IR) Connector (IR1)

Type: onboard 2.54mm 5-pin header

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

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10 CRT Display Connector (VGA1)

Type: onboard 2.0mm 2*8-pin header

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

11 USB Connector (USB1)

Type: onboard 2.0mm 2*5-pin header

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

12 Floppy Disk Drive Connector (FDD1)

Type: onboard 2.0mm 2*10-pin header

Pin	Description	Pin	Description
1	GND	2	DRVDEN0
3	GND	4	KEY
5	GND	6	DRVDEN1
7	-WDATA	8	-INDEX
9	-WGATE	10	-MOA
11	-TRACK0	12	-DSB
13	-WP	14	-DSA
15	-RDATA	16	-MOB
17	-HEAD	18	-DIR
19	-DSKCHG	20	-STEP

13 CMOS Jumper Settings (JBAT1)

Type: onboard 3-pin header

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

Default setting: Keep CMOS

14 Parallel Port Connector (LPT1)

Type: onboard 2.0mm 2*10-pin header

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

15 RS422/485 Output Connector (CON1)

Type: onboard 2.0mm 4-pin wafer connector

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 TTL LCD Panel Connector (LCD1)

Type: 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

17 18 RS-232 Serial Port (COM1/ COM2)

Type: onboard 2.0mm 2*5-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

Solder Side

200-pin DDR SDRAM DIMM Socket (DIMM1)

Compact Flash Connector (CFD1)

Note: CFD1 does not support hot swap.

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	IRQ14
13	+5V	38	+5V
14	GND	39	CSEL
15	GND	40	N.C
16	GND	41	IDE RESET
17	GND	42	DRDY
18	ADDR2	43	DREQ
19	ADDR1	44	DACK
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

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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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