EPIC SBC with AMD Geode™ GX466 CPU, VGA, LAN, Dual COM, Mini PCI Slot, CF, USB 2.0 and Audio

NANO-GX2
Quick Installation Guide
Version 1.0

Apr. 2, 2008

Package List

NANO-GX2 package includes the following items:

- 1 x NANO-GX2 single board computer
- 1 x Mini Jumper Pack
- 1 x IDE flat cable 44P/44P
- 1 x Dual ports USB cable
- 1 x Audio cable
- 1 x Utility CD
- 1 x QIG (Quick Installation Guide)

Specifications

- CPU
  On board AMD Geode™ GX466(333MHz) processor
- System Chipset
  AMD Geode™ GX466 + CS5536
- BIOS: Award BIOS
- System memory
  On board 128MB DDR SDRAM Supported, optional 256MB
- Ethernet
  10/100Mbps Realtek RTL8100C Ethernet chipsets
- I/O interface
  1 x IDE
  4 x USB 2.0
  2 x RS-232
  2 x PS/2 for KB/MS
- Expansion
  1 x Mini PCI
- Digital I/O
  8-bit digital I/O, 4-bit input/ 4-bit output by 2.54 pitch pin header
- Super I/O
  Winbond W83627EHG
- Display Interface
  VGA Integrated in AMD Geode™ GX466
- Audio
  Realtek ALC203 AC'97 Codec
- SSD
  CF Type II
- WDT
  Software programmable supports 1-255 sec. system reset
- Power supply
  5V only, AT/ATX function supported

- Power Consumption
  5V@ 1.86A
  (AMD Geode™ GX466 with DDR 400MHz, 256MB RAM)
- Temperature: operation: 0℃ ~60℃ (32℉~140℉)
- Humidity: operation: 5%~95% non-condensing
- Dimensions: 115mm x 165mm
- Weight: GW: 800g / NW: 180g

Ordering Information

NANO-GX2-466-R10
EPIC SBC, AMD Geode™ GX466 333MHz CPU, VGA, LAN, Dual COM, Mini PCI Slot, CF, USB 2.0, Audio with on board 128MB memory
NANO-GX2-CE050
Windows® CE 5.0 & BSP, S/W CD, Licensed Sticker (W/O CPU board)
NANO-GX2-XPE
Windows® XP Embedded & SLD, S/W CD, Licensed Sticker (W/O CPU board)
63000-UP0301E05P62L-RS
5V 30W power adapter; 90~264Vac input

Jumpers setting and Connectors

JP2 : AT/ATX Function Setting	
JP2	DESCRIPTION
1-2 Open(default)*	ATX
1-2 Short	AT(auto power on)

JP6 : Compact Flash Master/Slave Function Setting	
JP3	DESCRIPTION
1-2 Short(default)*	Master
1-2 Open	Slave

JP5 : Board ID (memory configuration)		
Configuration	Pin1, Pin2	Pin3, Pin4
On Board DDR 128M	Open	Open
On Board DDR 256M	Short	Open
Reserve	Open	Short
Reserve	Short	Short

PWR1 : main power input connector	
PIN	DESCRIPTION
1	GND
2	GND
3	+5V

FAN1 : system fan connector (2.00mm)	
PIN	DESCRIPTION
1	FANSPEED
2	+5V
3	GND

CN5 : ATX power button connector (Wafer 2pin 2.0mm)	
PIN	DESCRIPTION
1	PWRBTN#
2	GND

CN6 : reset button connector (Wafer 2pin 2.0mm)	
PIN	DESCRIPTION
1	RESET#
2	GND

CDIN1 : CD-IN connector (Pin-header 4pin 2.54mm)	
PIN	DESCRIPTION
1	FANSPEED
2	+5V
3	GND

AUDIO2 : Audio Connector (Box-header 2x5pin 2.00mm)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	LINEOUT_R	2	LINEIN_R
3	GROUND	4	GROUND
5	LINEOUT_L	6	LINEIN_L
7	GROUND	8	GROUND
9	MIC1IN	10	MIC2IN

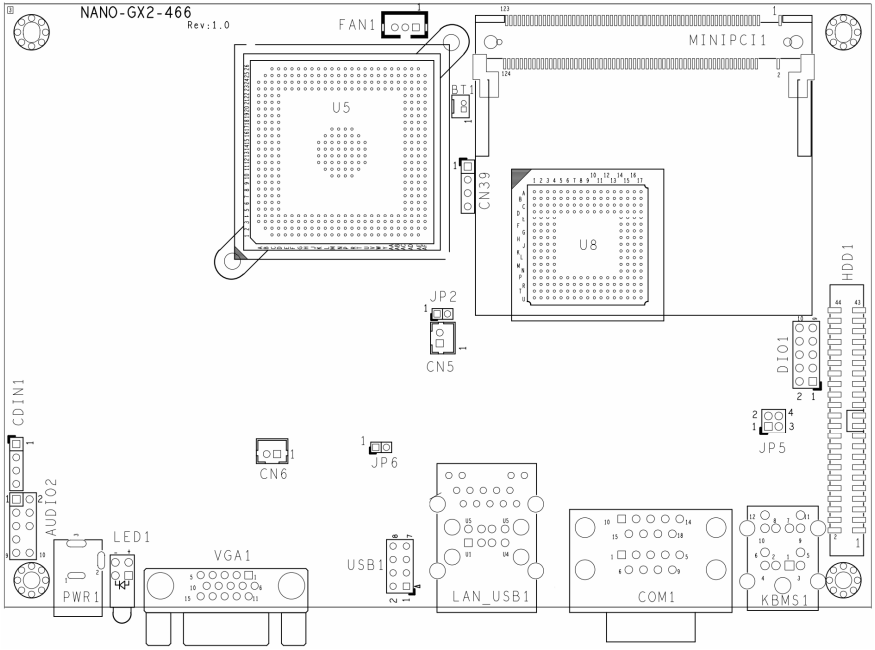
LED1 : 1-2: HDD LED 3-4: POWER LED (Pin-header 2x2pin 2.54mm)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	HD_LED#	2	+5V
3	GND	4	+5V

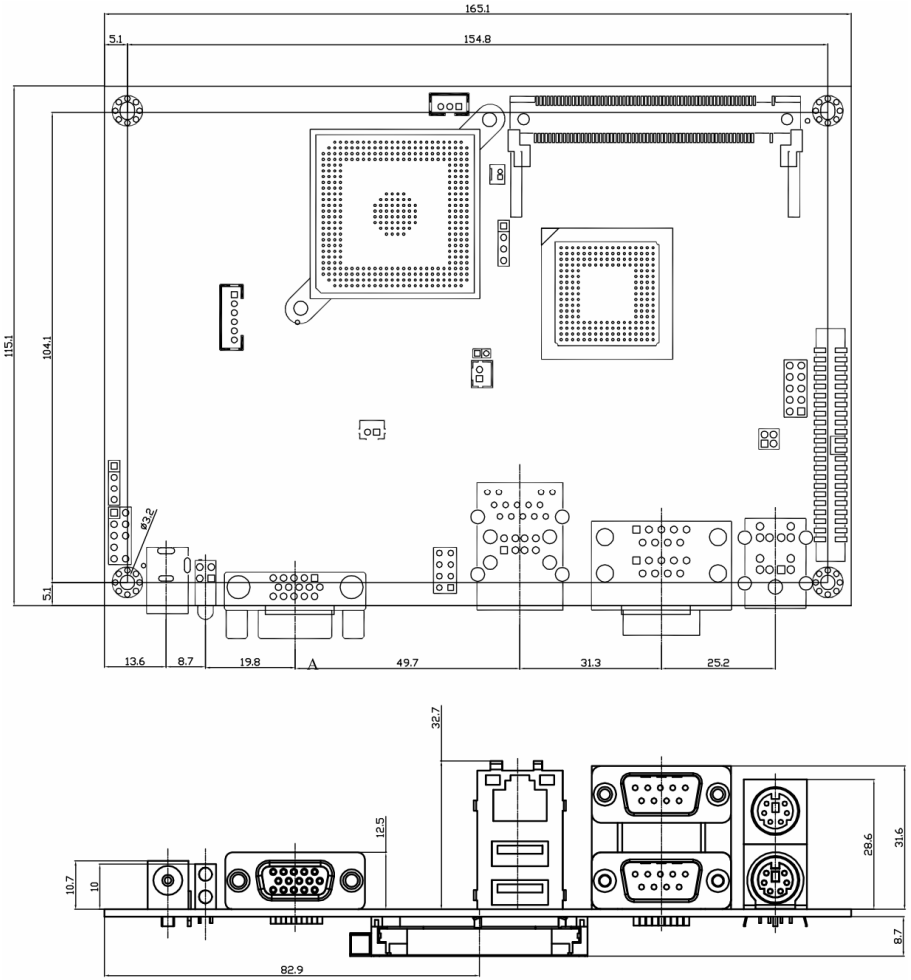
DIO1 : GPIO connector (Pin-header 2x5pin 2.54mm)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	+5V
3	GPO0	4	GPO1
5	GPO2	6	GPO3
7	GPI0	8	GPI1
9	GPI2	10	GPI3

HDD1 : IDE connector (Box-header 2x22pin 2.0mm)			
Pin	Description	Pin	Description
1	RESET#	2	GND
3	D7	4	D8
5	D6	6	D9
7	D5	8	D10
9	D4	10	D11
11	D3	12	D12
13	D2	14	D13
15	D1	16	D14
17	D0	18	D15
19	GND	20	NC
21	DRQ	22	GND
23	IOW#	24	GND
25	IOR#	26	GND
27	RDY	28	NC
29	ACK#	30	GND
31	INT	32	NC
33	A1	34	CABLEID
35	A0	36	A2
37	CS0#	38	CS1#
39	ASP#	40	GND
41	+5V	42	+5V
43	GND	44	NC

USB1 : USB connector (Pin-header 2x4pin 2.54mm)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	+5V	2	GND
3	D1-	4	D2+
5	D1+	6	D2-
7	GND	8	+5V

Board Layout: Jumper and Connector Locations




165.1
5.1
154.8
115.1
104.1
5.1
Ø3.2
13.6
8.7
19.8
A
49.7
31.3
25.2
32.7
12.5
10.7
10
28.6
31.6
8.7
82.9