

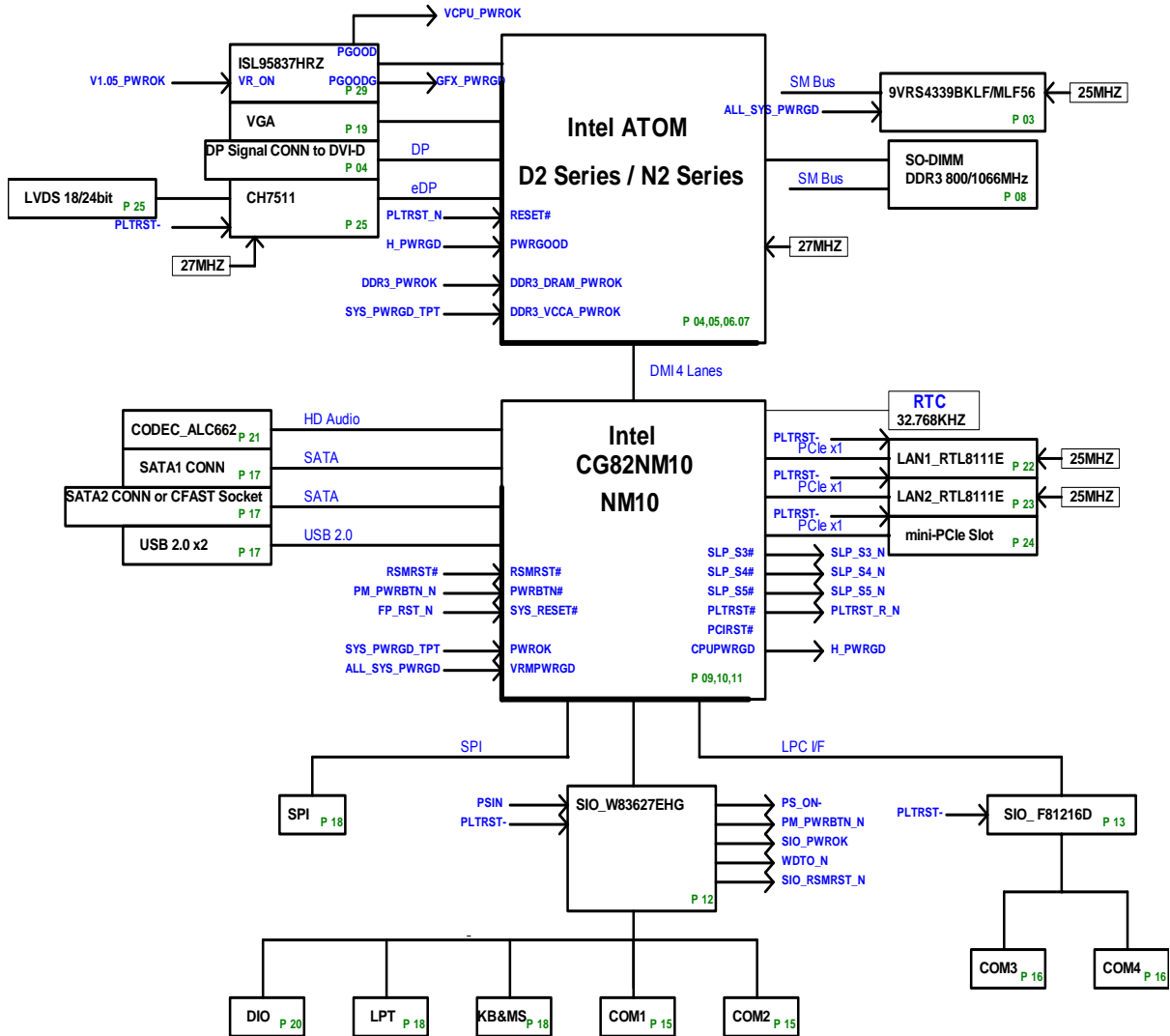
WECX-N26001

Intel N2600

Quick Installation Guide

Rev.01, Apr. 2013

Block Diagram



Features

System Processor/ Chipsets	Processor	Intel® Atom™ N2600 processor on board
	Chipset	Intel® NM10
	BIOS	AMI
Memory	Technology	One 204-pin DDR3 1066 SO-DIMM SDRAM, upgradable to 4GB
Display	Graphics	Intel® Atom™ N2600 integrated
	VRAM	Share with System memory
	Resolution	Analog Display: Up to 2048 x 1536 (QXGA)
	LVDS	24bit, Dual channel
	LVDS Resolution	Digital LVDS: Up to 1600 x 1200
	Dual Display	CRT+LVDS, CRT+DP, LVDS+DP
Ethernet	Interface	Dual 10/100/1000 Mbps
	Controller	Realtek 8111E GbE
Audio	Interface	High Definition Audio
	Controller	Realtek ALC662 HD CODEC
SATA	Max. Data Transfer	300 MB/s
	Port	1
Expansion Bus	Mini-PCIe	1
Onboard Pin-Header	LVDS	1
	USB 2.0	2
	COM	3
	Parallel	1
	DP	1
	Audio Header	1 (Mic.-In, Line-in, Line-out)
	C-Fast	1
	DIO *Note1	8-bit Digital I/O (4 In + 4 Out)
	PS/2	1 (K/B and Mouse)
Rear I/O	COM	1 x (RS232/422/485), support 5V & 12V by jumper selector
	VGA	1
	LAN	2 x RJ45
	USB 2.0	2
Power	Connector Type	4-pin DC-in power connector

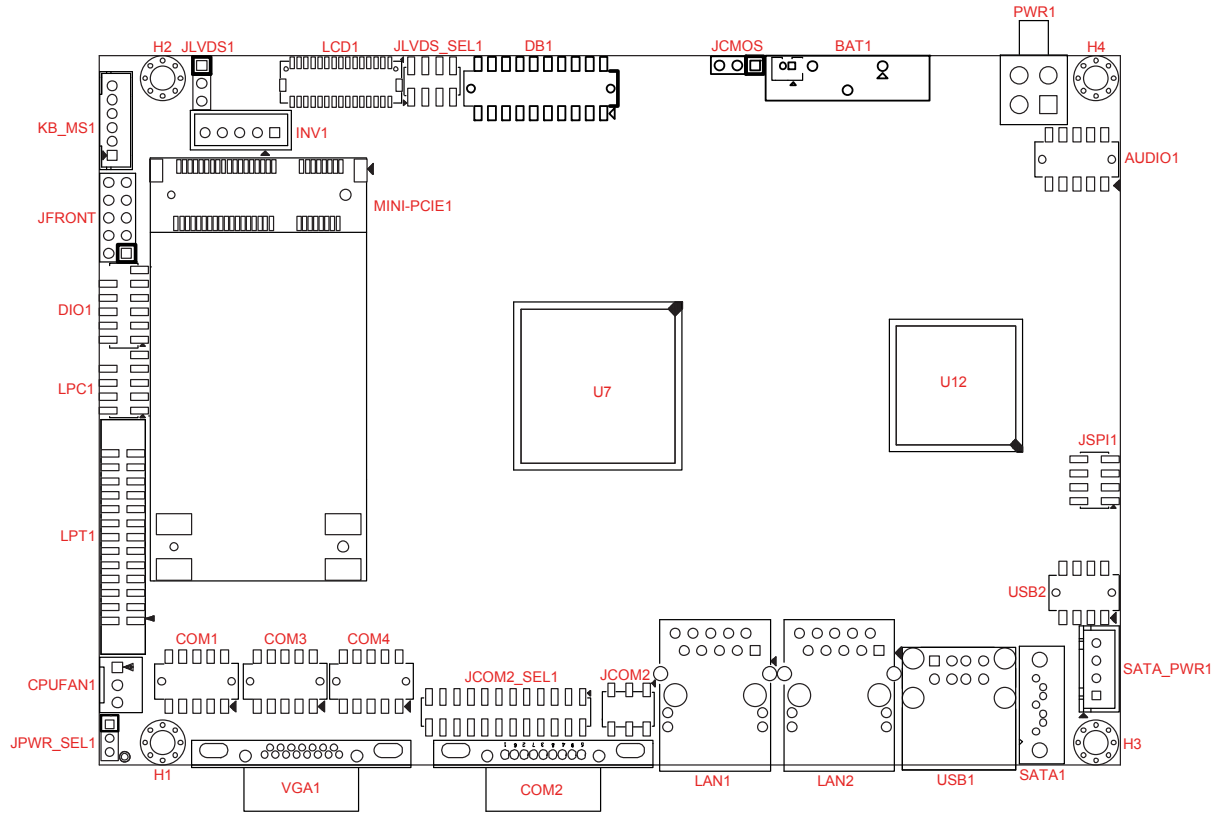
Watchdog Timer	Mode	AT/ATX Mode support (by jumper selector)
	Interval	Programmable 1~255 sec./min.
	Output	System reset
Environment *Note2	Operating Temp.	0°C~ 60°C
	Storage Temp.	-20°C~ 80°C
	Relative Humidity	0%~ 95% (non-condensing)
Form Factor	Dimension (L*W)	146mm x 102mm

***Note:**

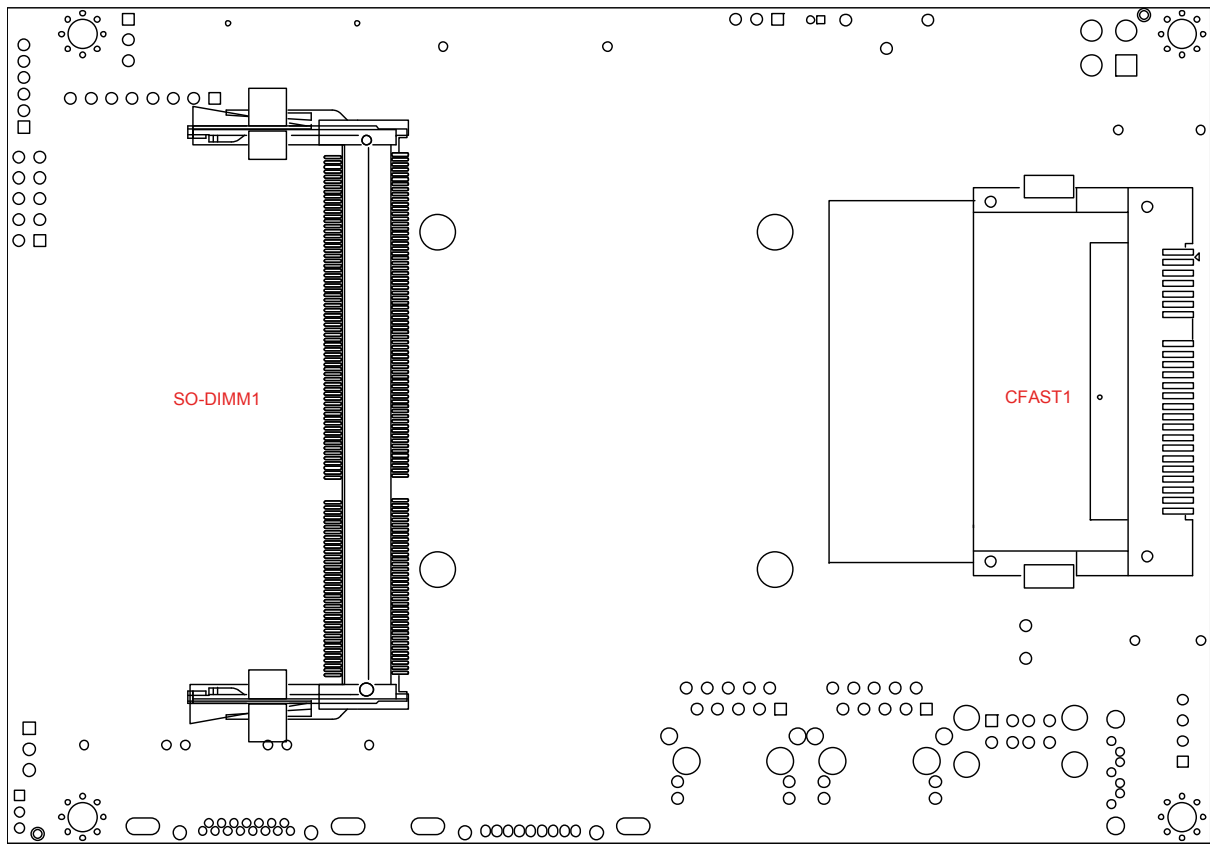
1. Digital I/O: - Input: 12V-tolerance & TTL inputs with ESD protection. - Output: Open-drain outputs with minimum **100mA** sinking capability.
2. Laboratory Stress Test Results: - Operating Temperature: 0°C ~ 60°C (0%~95% R.H., non-condensing) - Cold Boot Temperature: **-40°C**

PCB Layout

Top view

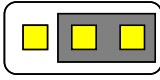
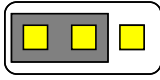


Bottom View

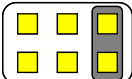
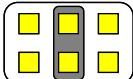
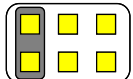


Jumper Setting

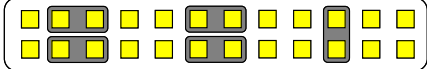
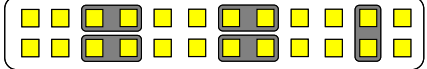
JCMOS: CMOS Clear (2.54mm)

Pin No.	1-2	2-3
Function	Normal Operation (Default)	Clear CMOS Contents
Jumper Setting	 3 2 1	 3 2 1


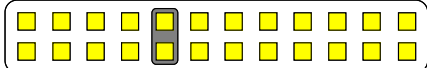
JCOM2: (5V/12V/RI) Select (2.54mm)

Pin No.	1-2	3-4	5-6
Function	+5V	Modem Ring In (Default)	+12V
Jumper Setting	 5 3 1 6 4 2	 5 3 1 6 4 2	 5 3 1 6 4 2

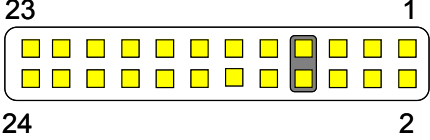
JCOM2 SEL: COM2 (RS-232/RS-422/RS-485) Select (1/3) (2.0mm)

Pin No.	5-6, 11-13, 12-14, 19-21, 20-22	3-4, 9-11, 10-12, 17-19, 18-20
Function	RS-232 (Default)	RS-422
Jumper Setting	 23 1 24 2	 23 1 24 2

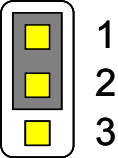
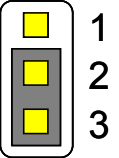
JCOM2 SEL: COM2 (RS-232/RS-422/RS-485) Select (2/3) (2.0mm)

Pin No.	1-2, 9-11, 10-12, 23-24	15-16
Function	RS-485	RS-422 RX 100Ω Termination
Jumper Setting	 23 1 24 2	 23 1 24 2

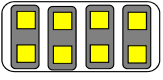
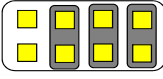
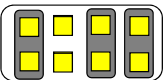
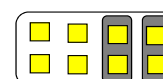
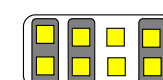
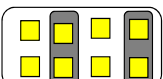
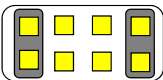
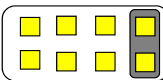
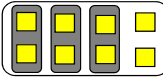
JCOM2 SEL1: COM2 (RS-232/RS-422/RS-485) Select (3/3) (2.0mm)

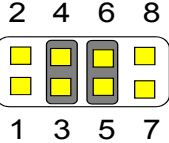
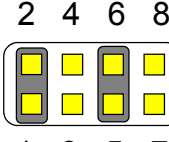
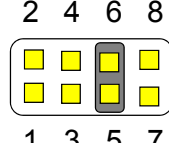
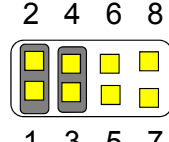
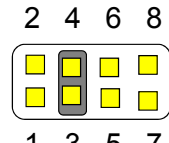
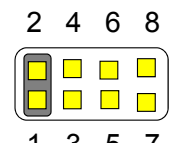
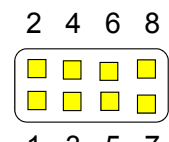
Pin No.	7-8
Function	RS-422 TXD Pair 100Ω (Not recommended)/ RS-485 Data Pair Termination
Jumper Setting	

JLVDS1: LCD Power (+3.3V/+5V) Select

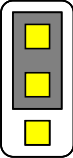
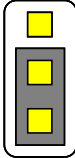
Pin No.	1-2	2-3
Function	LCD Power +3.3V (Default)	LCD Power +5V
Jumper Setting		

JLVDS SEL1: LVDS Panel Type Select

Jumper Setting	LVDS Panel Type
<p>2 4 6 8</p>  <p>1 3 5 7</p>	<p>800*600/18bit Single Channel</p>
<p>2 4 6 8</p>  <p>1 3 5 7</p>	<p>1024*768/18bit Single Channel</p>
<p>2 4 6 8</p>  <p>1 3 5 7</p>	<p>1024*768/24bit Single Channel</p>
<p>2 4 6 8</p>  <p>1 3 5 7</p>	<p>1280*768/18bit Single Channel</p>
<p>2 4 6 8</p>  <p>1 3 5 7</p>	<p>1280*800/18bit Single Channel</p>
<p>2 4 6 8</p>  <p>1 3 5 7</p>	<p>1280*960/18bit Single Channel</p>
<p>2 4 6 8</p>  <p>1 3 5 7</p>	<p>1280*1024/24bit Dual Channel</p>
<p>2 4 6 8</p>  <p>1 3 5 7</p>	<p>1366*768/18bit Single Channel</p>
<p>2 4 6 8</p>  <p>1 3 5 7</p>	<p>1366*768/24bit Single Channel</p>

	<p>1440*900/24bit Dual Channel</p>
	<p>1400*1050/24bit Dual Channel</p>
	<p>1600*900/24bit Dual Channel</p>
	<p>1680*1050/24bit Dual Channel</p>
	<p>1600*1200/24bit Dual Channel</p>
	<p>1920*1080/24bit Dual Channel</p>
	<p>1920*1200/24bit Dual Channel</p>

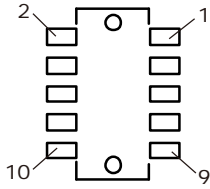
JPWR SEL1: AT/ATX Mode Select

Pin No.	1-2	2-3
Function	AT Mode	ATX Mode (Default)
Jumper Setting		

Connector Function List

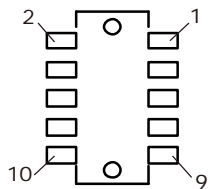
Connector	Function	Note
AUDIO1	Audio Amplifier Output with Box-header	
COM1, 3, 4	Serial Port with Box-header	
COM2	Serial Port with DSUB-9P connector	
CPUFAN1	CPUFAN 3-pin connector	
DIO1	Digital I/O with Pin-header	
INV1	Inverter with Box-header	
JFRONT	Front Panel with Pin-header	
KB_MS1	Keyboard and mouse connector	
LAN1, 2	LAN connector	
LCD1	LVDS Panel Signal with Box-header	
LPC1	Debug Port with Pin-header	
LPT1	Parallel Port with Box-header	
MINI-PCIE1	Mini PCI Express connector	
PWR1	ATX 2x2 connector (DC12V-IN)	
SATA1	SATA connector	
SATA_PWR1,	SATA Power with Box-header	
USB1	USB0/1 Port connector	
USB2	USB2/3 connector with Pin-header	
DB1	External DVI or HDMI Box-header	
CFAST1	C-FAST Connector	
VGA1	VGA connector	

Internal Connector Pin Define



AUDIO: Audio Amplifier Output with Wafer connector (2.0mm)

Pin No.	Signal	Pin No.	Signal
1	Line-In Right	2	Line-In Left
3	Line-In Jack Detect	4	MIC Jack Detect
5	MIC-In Right	6	MIC-In Left
7	Line-Out Jack Detect	8	Audio Ground
9	Line-Out Right	10	Line-Out Left



COM1, 3, 4: Serial Port with Box-header (2.0mm)

Pin No.	Signal	Pin No.	Signal
1	DCD	2	DSR
3	RXD	4	RTS
5	TXD	6	CTS
7	DTR	8,10	RI/+5V/+12V
9	Ground		



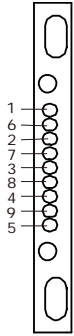
COM2: RS 232 Serial Port with DSUB-9P connector (1/3)

Pin No.	Signal	Pin No.	Signal
1	DCD	2	RXD
3	TXD	4	DTR
5	Ground	6	DSR
7	RTS	8	CTS
9	RI/+5V/+12V		



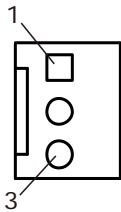
COM2: RS 422 Serial Port with DSUB-9P connector (2/3)

Pin No.	Signal	Pin No.	Signal
1	DATA TX-	2	DATA TX+
3	DATA RX+	4	DATA RX-
5	NC	6	NC
7	NC	8	NC
9	NC		



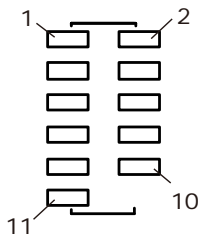
COM2: RS 485 Serial Port with DSUB-9P connector (3/3)

Pin No.	Signal	Pin No.	Signal
1	DATA-	2	DATA+
3	NC	4	NC
5	NC	6	NC
7	NC	8	NC
9	NC		



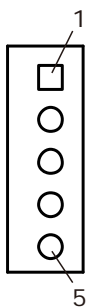
CPUFAN: 3Pin FAN connector

Pin No.	Signal
1	Ground
2	Fan Power (+12V)
3	Speed Sense



DIO: Digital I/O with Pin-header (2.00mm)

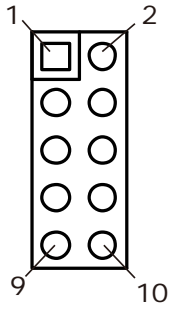
Pin No.	Signal	Pin No.	Signal
1	DIO-Out0	2	DIO-In0
3	DIO-Out1	4	DIO-In1
5	DIO-Out2	6	DIO-In2
7	DIO-Out3	8	DIO-In3
9	+12V	10	+5V
11	Ground		



INV1: Inverter with Box-header (2.50mm)

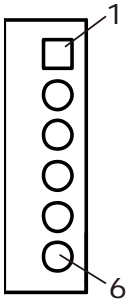
Pin No.	Signal
1	+12V
2	+12V
3	Ground
4	Inverter Brightness control
5	Inverter Enable

JFRONT: Front Panel Connector with Pin-header (2.54mm)



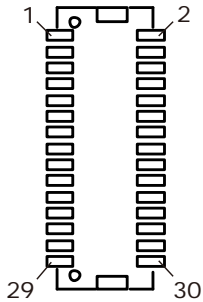
Pin No.	Signal	Pin No.	Signal
1	Power LED + (+5V, 470Ω)	2	Power LED – (Ground)
3	HDD LED + (470Ω)	4	HDD LED -
5	Suspend LED + (+V5S, 470Ω)	6	Suspend LED -
7	Reset Switch +	8	Reset Switch – (Ground)
9	Power Switch +	10	Power Switch – (Ground)

KB MS1: Keyboard and mouse connector (2.00mm)



Pin No.	Signal
1	PS2 Power (+5V)
2	PS2 Mouse Data
3	PS2 Mouse Clock
4	PS2 Keyboard Data
5	PS2 Keyboard Clock
6	PS2 Ground

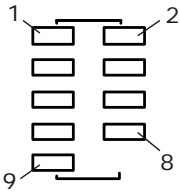
LCD1: LVDS Panel Signal with Box-header (1.0mm)



Pin No.	Signal	Pin No.	Signal
1	Ground	2	Ground
3	LA_DC3+	4	LA_DC3-
5	LA_CLK+	6	LA_CLK-
7	LA_DC2+	8	LA_DC2-
9	LA_DC1+	10	LA_DC1-
11	LA_DC0+	12	LA_DC0-
13	Ground	14	Ground
15	LB_DC7P	16	LB_DC7N
17	LB_CLK2P	18	LB_CLK2N
19	LB_DC6P	20	LB_DC6N
21	LB_DC5P	22	BL_DC5N
23	LB_DC4P	24	LB_DC4N
25	Ground	26	Ground
27	LVDS Power	28	LVDS Power
29	LVDS Power	30	LVDS Power

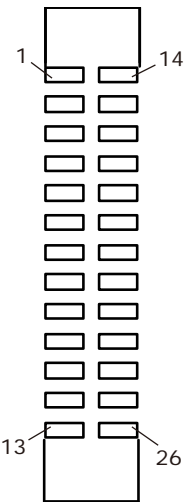
Note1: LVDS Power = +5V or +3.3V (Default)

LPC1: Debug Port with Pin-header (2.0mm)



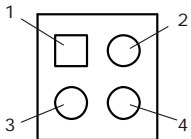
Pin No.	Signal	Pin No.	Signal
1	LAD0	2	LPC Reset#
3	LAD1	4	LFRAME#
5	LAD2	6	+3.3V
7	LAD3	8	Ground
9	LPC33MHz	10	NC

LPT1: Parallel Port with Box-header (2.0mm)



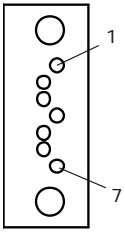
Pin No.	Signal	Pin No.	Signal
1	Strobe#	14	Auto Form Feed#
2	Data 0	15	Error#
3	Data 1	16	Initialization#
4	Data 2	17	Printer Select IN#
5	Data 3	18	Ground
6	Data 4	19	Ground
7	Data 5	20	Ground
8	Data 6	21	Ground
9	Data 7	22	Ground
10	Acknowledge#	23	Ground
11	Busy	24	Ground
12	Paper Empty	25	Ground
13	Printer Select	26	Ground

PWR1: ATX 2x2 +12V Input (4.20mm)



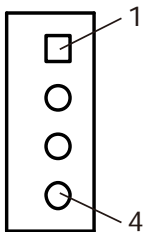
Pin No.	Signal	Pin No.	Signal
1	Ground	2	Ground
3	+12V	4	+12V

SATA1: SATA Connector (2.50mm)



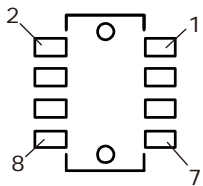
Pin No.	Signal
1	Ground
2	TX+
3	TX-
4	Ground 1
5	RX-
6	RX+
7	Ground 2

SATA PWR1: SATA Power with Box-header (2.50mm)



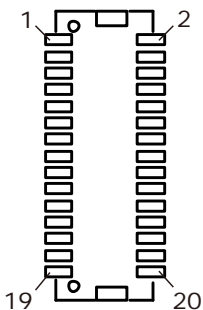
Pin No.	Signal
1	+5V
2	Ground
3	Ground
4	+12V

USB2/3: USB connector with Pin header (2.0mm)



Pin No.	Signal	Pin No.	Signal
1	USB Power (+5V)	2	USB Power (+5V)
3	USB DATA-	4	USB DATA-
5	USB DATA+	6	USB DATA+
7	Ground	8	Ground

DB1: External DVI or HDMI Box-header (2.0mm)



Pin No.	Signal	Pin No.	Signal
1	TX0_DP	2	TX3_DP
3	TX0_DN	4	TX3_DN
5	Ground	6	Ground
7	TX1_DP	8	DDC_SCL
9	TX1_DN+	10	DDC_SDA
11	Ground	12	Ground
13	TX2_DP	14	HPD_N
15	TX2_DN	16	+V5
17	Ground	18	Ground
19	+V3.3	20	+V3.3

