

DT-B85D/DT-H81DL/TH-H81S Quick Installation Guide-V1.0

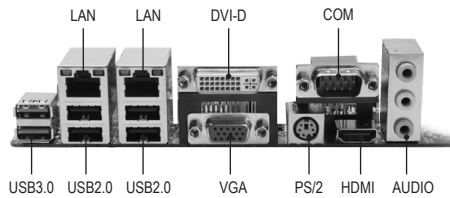
Tips:

- How to identify the first pin of the jumpers and connectors
- The first pin is marked as "1" or solder pad or bold lines or triangular symbols
 - The red line on the cable or other marks show that they should be connected with the first pin of the socket.

Warning!

Please adopt appropriate screw and proper installation methods (including board allocation, CPU and heat sink installation, etc.); otherwise, the board may be damaged.

Back Panel Interface:



2. HDMI

Pin#	Definition	Pin#	Definition
1	HDMID_TX2_DN	2	HDMID_HPD_SINK
3	HDMID_TX2_DP	4	GND
5	GND	6	DAC_5V
7	HDMID_TX1_DN	8	GND
9	HDMID_TX1_DP	10	HDMID_SCL
11	GND	12	HDMID_SDA
13	HDMID_TX0_DN	14	GND
15	HDMID_TX0_DP	16	HDMID_CLK_DN
17	GND	18	HDMID_CLK_DP

1. ATX 12V (12V Power receptacle)

Pin#	Definition
1	GND
2	GND
3	12V
4	12V

This board has special 12V power receptacle for CPU. For better and more stable processor power supply, we suggest keeping the connection on this socket. The definitions of the pins are described below (when power supply with 20-pin outlet is used, please make sure the numbers are matched correctly):

4. ME UPD (Intel ME Control Header)

PIN#	Definition
1	3.3V
2	AUD_LINK_SDO_R
3	GND

1-2 Enable 2-3 Disable

3. F_AUDIO (Front Panel Audio Header)

PIN#	Definition	PIN#	Definition
1	MIC_L	2	GND
3	MIC_R	4	N/A
5	FRONT_R	6	F_IO_SENCE
7	GND	8	N/A
9	FRONT_L	10	F_IO_SENCE

Be used connect to the second line-out and MIC in jacks that are at the front panel of you system

6. LGA1150

CPU Socket, Supports Intel® FCLGA1150 package Haswell processor, CPU power does not exceed 65W.

5. PCIE1

The board provide one PCIe x16 slot, marked as PCIE1 on board.

7. F_PANEL (Front-end control panel)

PIN#	Definition	PIN#	Definition
1	+HDLED	2	PLED+
3	-HDLED	4	PLED-
5	-RESET	6	PBTNJ_SIO
7	GND	8	GND
9	N/A	10	N/A

1-3 HDD-LED
2-4 PWR-LED
5-7 RESET-SWITCH
6-8 PWR-SWITCH

Be used connect the power switch, reset switch, chassis intrusion switch/sensor and system status indicator on the chassis.

8. SPK (Speaker)

PIN#	Definition
1	SPK+
2	N/A
3	N/A
4	SPK-

9. AUTO PW_ON

PIN#	Definition
1	AUTOPW_ON
2	PBTNJ_SIO
3	N/A

1-2 Enable 2-3 Disable

19. CPU_FAN (CPU FAN Socket)

Pin#	Definition
1	GND
2	12V
3	FAN_TAC1
4	FAN_CTL1

18. F_COM (Front end COM port)

Pin#	Definition	Pin#	Definition
1	-NDCD2	2	NRXD2
3	-NTXD2	4	-NDTR2
5	GND	6	-NDSR2
7	-NRTS2	8	-NCTS2
9	-NRT2		

Be used with modems, serial printers, remote display terminals and serial devices. COM2 default with +5V power is marked in yellow, COM3-COM6 uncharged

17. Mini-PCIe expanded slots

Mini-PCIe support M-SATA, for example, can use extend M-SATA SSD etc.

16. F_USB1 (Front-end USB2.0 Pin)

Pin#	Definition	Pin#	Definition
1	+5V	2	+5V
3	USB2_N	4	USB3_N
5	USB2_P	6	USB3_P
7	GND	8	GND
9	N/A	10	GND

15. F_USB2 (Front-end USB2.0 Pin+IR)

Pin#	Definition	Pin#	Definition
1	+5V	2	+5V
3	USBP11_N	4	USBP10N_L
5	USBP11_P	6	USBP10P_L
7	GND	8	GND
9	N/A	10	PLED+
11	PBTNJ_SIO	12	+HDLED
13	USB_5VSB	14	USB_5VSB

Be used connect to the USB2.0 and receive the IR Signal at the front panel

14. CLR_CMOS

PIN#	Definition
1	GND
2	CLR_CMOS

If you encounter the following,
a) CMOS data becomes corrupted.
b) You forgot the supervisor or user password.
You can reconfigure the system with the default values stored in the ROM BIOS.

To load the default values stored in the ROM BIOS, please follow the steps below.

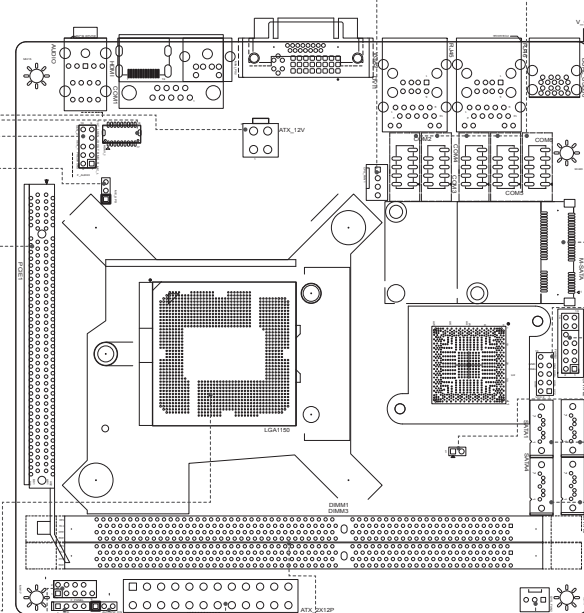
- Power-off the system and unplug the power cord.
- Short Pin1 and Pin2 for 3-5 seconds, then back to default setting
- Plug the power cord and power on the system

13. SATA (Serial ATA flat-cable sockets)

Pin#	Definition	Pin#	Definition
1	GND	6	SATA_RXP0
2	GND	7	SATA_RXN0
3	SATA_TXP0	8	GND
4	SATA_TXN0	9	GND
5	GND		

Blue color socket is SATAIII and Black color socket is SATAII

Connectors and Jumpers:



10. ATX 2 x 12P (Power Connector)

PIN#	Definition	PIN#	Definition
1	3.3V	2	3.3V
3	GND	4	+5V
5	GND	6	+5V
7	GND	8	PW-OK
9	5VSB	10	12V
11	3.3V	12	-12V
13	GND	14	PS-ON
15	GND	16	GND
17	GND	18	-5V
19	+5V	20	+5V
21	+12V	22	+5V
23	+3V	24	GND

Important:
Insufficient power supplied to the system may result in instability or the add-in boards and peripherals not functioning properly. Calculating the system's approximate power usage is important to ensure that the power supply meets the system's consumption requirements.

11. SYS_FAN (System FAN Socket)

PIN#	Definition
1	GND
2	12V
3	FAN_TAC2

12. Memory Slot

Support 2 x U-DIMM DDR3 memory, Up to 16G
In order to avoid damages to the motherboard or the components, the user must make sure the power supply to the computer is turned off before the memory or other component is installed or removed.

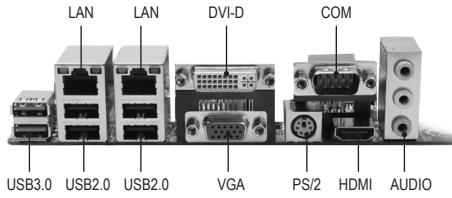
提示:

- 如何识别跳线、接口的第一脚
1. 第一脚通常用“1”或方形焊盘或加粗的线条或三角符号表示。
2. 电缆上的红线或其它第一脚标记要与插座的第一脚相接。

警告!

请务必选择合适的螺钉和使用正确的安装方法(包括板卡定位、CPU、散热器等安装),否则可能损坏板。

后 IO 接口:



19. CPU_FAN(CPU 风扇插针)

管脚	信号定义
1	GND
2	12V
3	FAN_TAC1
4	FAN_CTL1

18. F_COM(前端 COM 口插针)

管脚	信号定义	管脚	信号定义
1	-NDCD2	2	NRXD2
3	-NTXD2	4	-NDR2
5	GND	6	-NDSR2
7	-NRTS2	8	-NCTS2
9	-NRT2		

黄色插针带 +5V 电, 黑色不带电。

17. Mini-PCIe (Mini-PCIe 插槽)

Mini-PCIe 插槽支持 M-SATA 设备, 可扩展 SSD 等。

16. F_USB1(前面板 USB2.0 插针)

管脚	信号定义	管脚	信号定义
1	+5V	2	+5V
3	USB2_N	4	USB3_N
5	USB2_P	6	USB3_P
7	GND	8	GND
9	N/A	10	GND

2. HDMI(HDMI 插针)

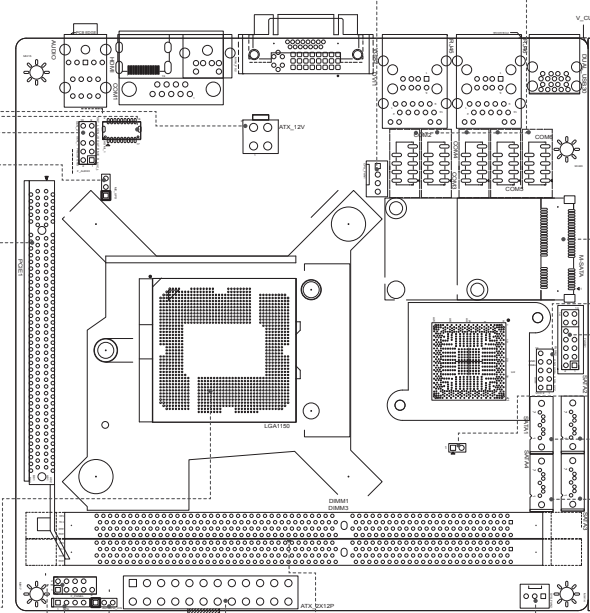
管脚	信号定义	管脚	信号定义
1	HDMID_TX2_DN	2	HDMID_HPD_SINK
3	HDMID_TX2_DP	4	GND
5	GND	6	DAC_5V
7	HDMID_TX1_DN	8	GND
9	HDMID_TX1_DP	10	HDMID_SCL
11	GND	12	HDMID_SDA
13	HDMID_TX0_DN	14	GND
15	HDMID_TX0_DP	16	HDMID_CLK_DN
17	GND	18	HDMID_CLK_DP

1. ATX 12V (12V 电源插座)

管脚	信号定义
1	GND
2	GND
3	12V
4	12V

为了更好的给 CPU 提供稳定的供电, 此板具有 12V 电源专为 CPU 供电。建议一直保持该插头的供电, 针脚的定义如下(使用 20 针插座的电源时, 请确保针脚是否正确匹配):

内部接口和插针:



15. F_USB2(前面板 USB2.0+ 红外插针)

管脚	信号定义	管脚	信号定义
1	+5V	2	+5V
3	USBP11_N	4	USBP10N_L
5	USBP11_P	6	USBP10P_L
7	GND	8	GND
9	N/A	10	PLED+
11	PBTNJ_SIO	12	+HDLED
13	USB_5VSB	14	USB_5VSB

4. ME_UPD(英特尔 ME 跳针)

管脚	信号定义
1	3.3V
2	AUD_LINK_SDO_R
3	GND

3. F_AUDIO(前面板音频接口)

管脚	信号定义	管脚	信号定义
1	MIC_L	2	GND
3	MIC_R	4	N/A
5	FRONT_R	6	F_IO_SENCE
7	GND	8	N/A
9	FRONT_L	10	F_IO_SENCE

6. LGA1150

支持 Intel® FCLGA1150 的 Haswell CPU, CPU 功率不超过 65W.

5. PCIE1 (PCIe 扩展槽)

主板提供 1 个 PCIe x16 插槽, 在主板上标记为 PCIE1

14. CLR_CMOS

管脚	信号定义
1	GND
2	CLR_CMOS

如果您遇到下列情形:

- a) CMOS 中的数据受到损坏。
- b) 忘记了管理员或用户密码。

您可以恢复存储在 BIOS 配置系统的默认值。

要载入 BIOS 配置系统的默认值, 请遵循以下步骤。

1. 关闭系统电源, 并拔掉电源线;
2. 短接 Pin1 和 Pin2 3-5 秒, BIOS 将恢复默认设置;
3. 连接电源线, 开机。

8. SPK(蜂鸣器插针)

管脚	信号定义
1	SPK+
2	N/A
3	N/A
4	SPK-

7. F_PANEL(前端控制面板接口)

管脚	信号定义	管脚	信号定义
1	+HDLED	2	PLED+
3	-HDLED	4	PLED-
5	-RESET	6	PBTNJ_SIO
7	GND	8	GND
9	N/A	10	N/A

10. ATX 2 x 12P(Power Connector)

PIN#	Definition	PIN#	Definition
1	3.3V	2	3.3V
3	GND	4	+5V
5	GND	6	+5V
7	GND	8	PW-OK
9	5VSB	10	12V
11	3.3V	12	-12V
13	GND	14	PS-ON
15	GND	16	GND
17	GND	18	-5V
19	+5V	20	+5V
21	+12V	22	+5V
23	+3V	24	GND

重要提示:
系统供电不足, 可能会导致扩展卡和外围设备的不稳定或不能正常工作。要确保计算机系统的总功率低于电源的额定功率。

11. SYS_FAN(系统风扇插针)

管脚	信号定义
1	GND
2	12V
3	FAN_TAC2

12. DIMM(内存插槽)

提供 2 个双通道台式机内存插槽, 可扩展到 16G。为了避免主板或组件受到损坏, 用户在安装内存前必须确保主板处于断电状态。

13. SATA(SATA 硬盘接口)

管脚	信号定义	管脚	信号定义
1	GND	6	SATA_RXP0
2	GND	7	SATA_RXN0
3	SATA_TXP0	8	GND
4	SATA_TXN0	9	GND
5	GND		