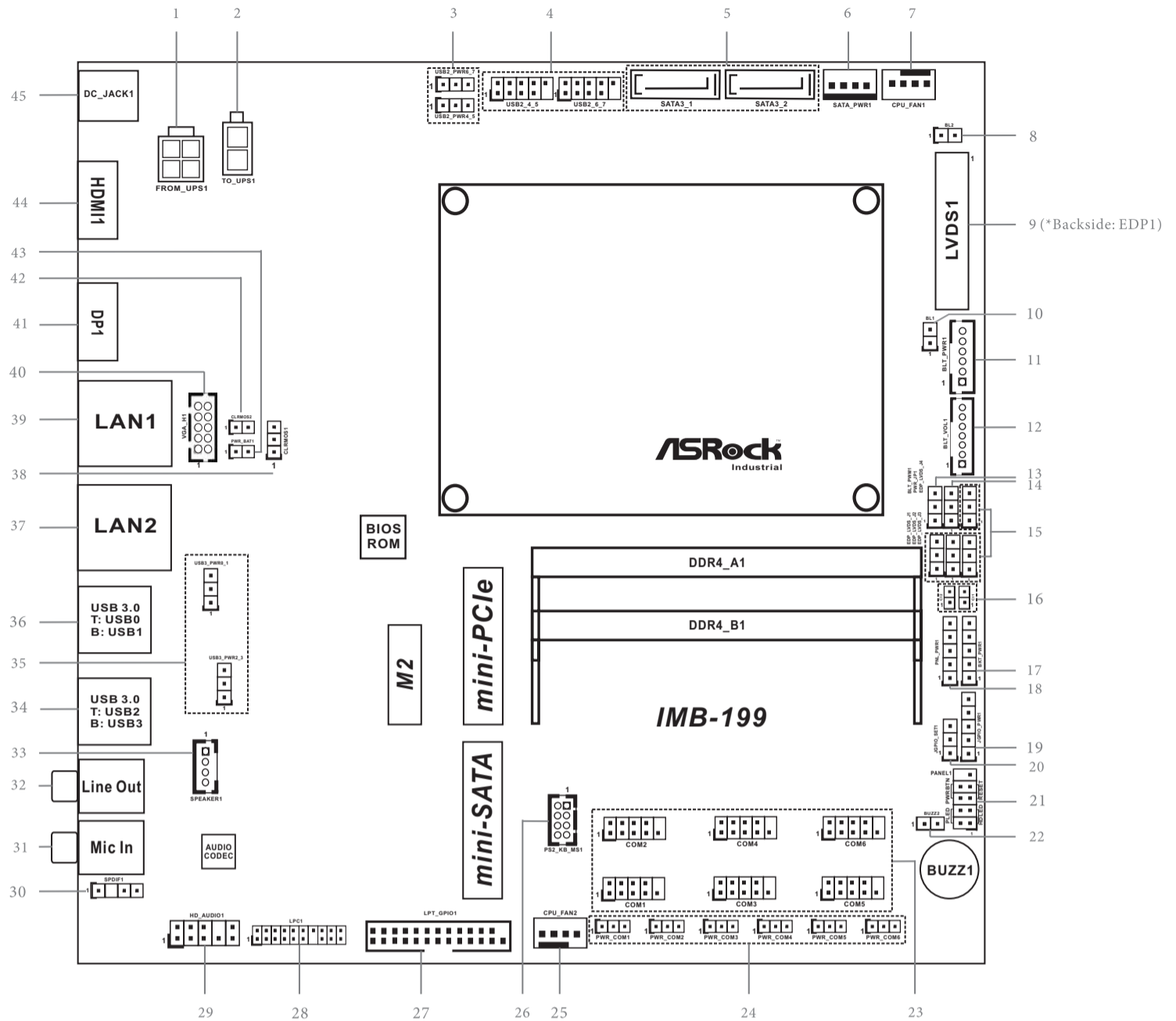


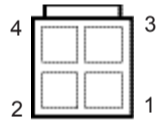
ASRock® Jumpers and Headers Setting Guide

IMB-199

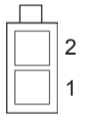
The terms HDMI™ and HDMI High-Definition Multimedia Interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



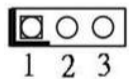
1 : ATX Power Connector
(Input 12V or 19-24V)
1-2 : GND
3-4 : DC Input



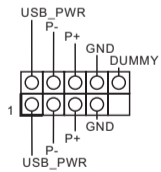
2 : 2-pin UPS Module Power Input Connector
Pin1 : GND
Pin2 : DC Input



3 : USB Power Setting Jumpers
(USB2_PWR4_5 (For USB2_4_5))
(USB2_PWR6_7 (For USB2_6_7))
1-2 : +5V
2-3 : +5VSB



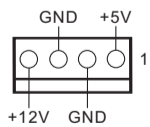
4 : USB2.0 Headers (USB2_4_5, USB2_6_7)



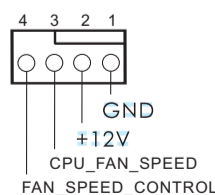
5 : SATA3 Connectors (SATA3_1, SATA3_2)



6 : SATA Power Output Connector



7 : 4-Pin CPU FAN Connector (+12V)



8 : BL2

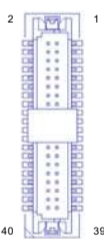


10 : BL1



9 : LVDS Panel Connector

| PIN | Signal Name | PIN | Signal Name |
|-----|---------------|-----|---------------|
| 2 | LCD_VCC | 1 | LCD_VCC |
| 4 | LDCC_CLK | 3 | +3.3V |
| 6 | LVDS_A_DATA0# | 5 | LDCC_DATA |
| 8 | GND | 7 | LVDS_A_DATA0 |
| 10 | LVDS_A_DATA1 | 9 | LVDS_A_DATA1# |
| 12 | LVDS_A_DATA2# | 11 | GND |
| 14 | GND | 13 | LVDS_A_DATA2 |
| 16 | LVDS_A_DATA3 | 15 | LVDS_A_DATA3# |
| 18 | LVDS_A_CLK# | 17 | GND |
| 20 | GND | 19 | LVDS_A_CLK |
| 22 | LVDS_B_DATA0 | 21 | LVDS_B_DATA0# |
| 24 | LVDS_B_DATA1# | 23 | GND |
| 26 | GND | 25 | LVDS_B_DATA1 |
| 28 | LVDS_B_DATA2 | 27 | LVDS_B_DATA2# |
| 30 | LVDS_B_DATA3# | 29 | DPLVDD_EN |
| 32 | GND | 31 | LVDS_B_DATA3 |
| 34 | LVDS_B_CLK | 33 | LVDS_B_CLK# |
| 36 | CON_LBKLT_EN | 35 | GND |
| 38 | LCD_BLT_VCC | 37 | CON_LBKLT_CTL |
| 40 | LCD_BLT_VCC | 39 | LCD_BLT_VCC |



* eDP Connector
(on the Backside of PCB)



11 : Backlight Power Connector (BLT_PWR1)

| PIN | Signal Name |
|-----|---------------|
| 6 | LCD_BLT_VCC |
| 5 | LCD_BLT_VCC |
| 4 | CON_LBKLT_EN |
| 3 | CON_LBKLT_CTL |
| 2 | GND |
| 1 | GND |

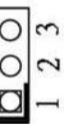


12 : Backlight Volume Control (BLT_VOL1)

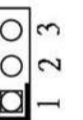
| PIN | Signal Name |
|-----|-------------|
| 7 | GND |
| 6 | GND |
| 5 | BLT_DW |
| 4 | BLT_UP |
| 3 | PWRDN |
| 2 | GPIO_VOL_DW |
| 1 | GPIO_VOL_UP |



13 : Backlight Control Level
(CON_LBKLT_CTL) (BLT_PWM1)
1-2 : +3V
2-3 : +5V



14 : ATX/AT Mode Select (PWR_JP1)
1-2 : AT Mode
2-3 : ATX Mode



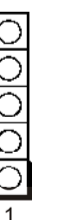
15 : EDP_LVDS_J1~EDP_LVDS_J4
1-2 : LVDS
2-3 : eDP



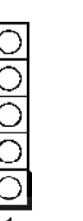
16 : Chassis Intrusion Headers
CI1
Close : Active case open
Open : Normal
CI2
Close : Normal
Open : Active case open



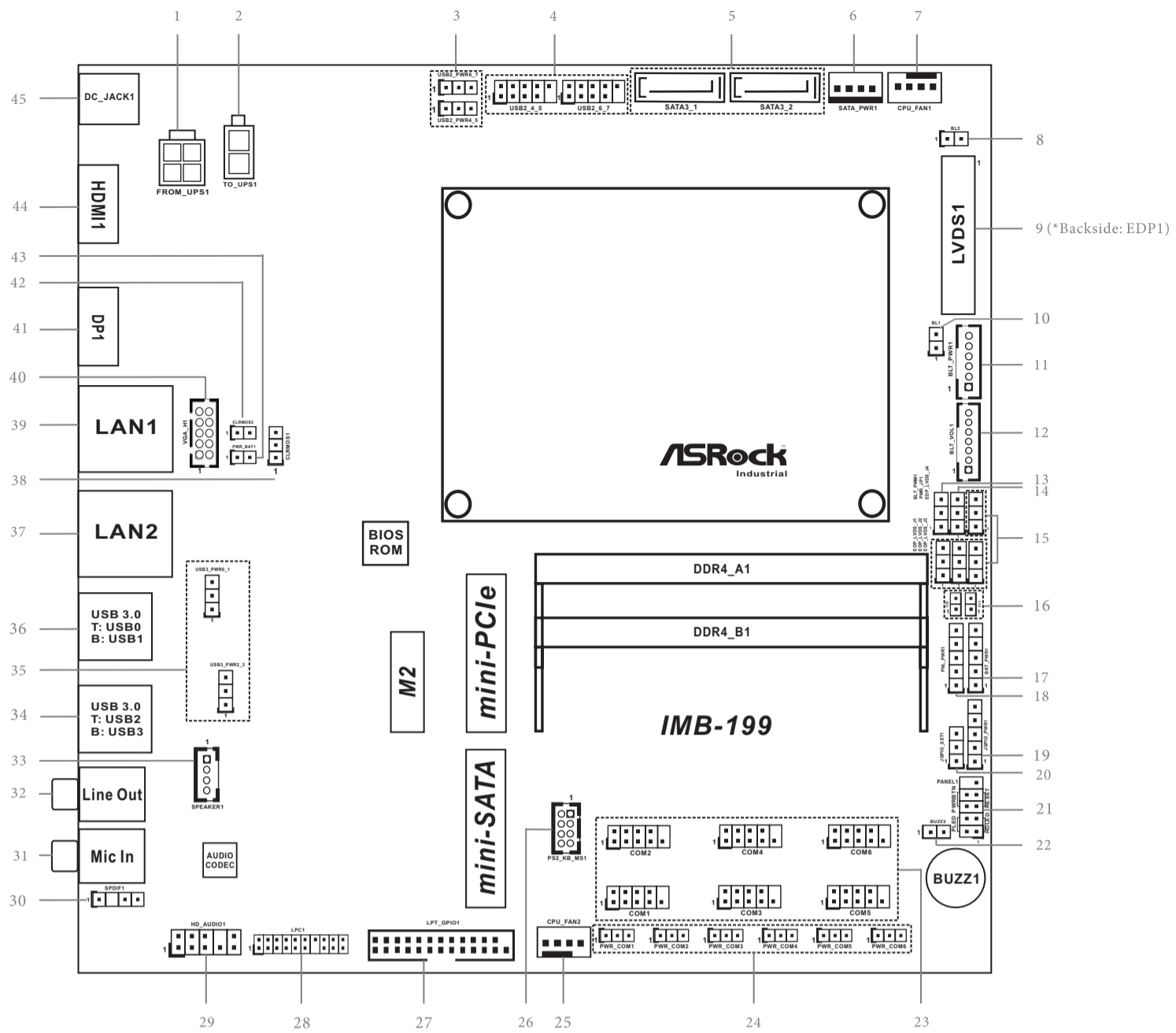
17 : Backlight Power Select
(LCD_BLT_VCC) (BKT_PWR1)
1-2 : LCD_BLT_VCC : +5V
2-3 : LCD_BLT_VCC : +12V
4-5 : LCD_BLT_VCC : DC_IN



18 : Panel Power Select (LCD_VCC)
(PNL_PWR1)
1-2 : LCD_VCC : +3V
2-3 : LCD_VCC : +5V
4-5 : LCD_VCC : +12V



| PIN | Signal Name |
|-----|---------------|
| 40 | NA |
| 39 | LCD_BLT_VCC |
| 38 | LCD_BLT_VCC |
| 37 | LCD_BLT_VCC |
| 36 | LCD_BLT_VCC |
| 35 | NA |
| 34 | NA |
| 33 | CON_LBKLT_CTL |
| 32 | CON_LBKLT_EN |
| 31 | GND |
| 30 | GND |
| 29 | GND |
| 28 | GND |
| 27 | eDP_HPD_CON |
| 26 | GND |
| 25 | GND |
| 24 | GND |
| 23 | GND |
| 22 | NA |
| 21 | LCD_VCC |
| 20 | LCD_VCC |
| 19 | LCD_VCC |
| 18 | LCD_VCC |
| 17 | GND |
| 16 | eDP_AUX#_CON |
| 15 | eDP_AUX_CON |
| 14 | GND |
| 13 | eDP_TX0_CON |
| 12 | eDP_TX0_CON |
| 11 | GND |
| 10 | eDP_TX1_CON |
| 9 | eDP_TX#1_CON |
| 8 | GND |
| 7 | eDP_TX2_CON |
| 6 | eDP_TX#2_CON |
| 5 | GND |
| 4 | eDP_TX3_CON |
| 3 | eDP_TX#3_CON |
| 2 | GND |
| 1 | NA |



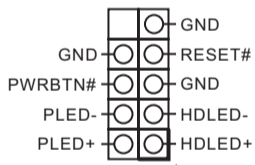
19 : Digital Input / Output Power Select (JGPIO_PWR) (JGPIO_PWR1)
 1-2 : +12V
 2-3 : +5V
 3-4 : +5V
 4-5: GND



20 : Digital Input / Output Default Value Setting (JGPIO_SET1)
 1-2 : Pull-High
 2-3 : Pull-Low



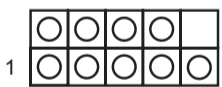
21 : System Panel Header



22 : Buzzer



23 : COM1, 2, 3, 4, 5, 6 Headers



| PIN | Signal Name | PIN | Signal Name | PIN | Signal Name | PIN | Signal Name | PIN | Signal Name |
|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|
| 2 | RRXD | 4 | DDTR# | 6 | DDSR# | 8 | CCTS# | 10 | NC |
| 1 | DDCD# | 3 | TTXD | 5 | GND | 7 | RRTS# | 9 | PWR |

* This motherboard supports RS232/422/485 on COM1, 2 ports. Please refer to below table for the pin definition. In addition, COM1, 2 port (RS232/422/485) can be adjusted in BIOS setup utility > Advanced Screen > Super IO Configuration. You may refer to our user manual for details.

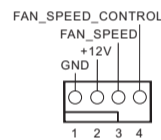
COM1, 2 Ports Pin Definition

| PIN | RS232 | RS422 | RS485 |
|-----|-------|-------|-------|
| 1 | DCD | TX- | RTX- |
| 2 | RXD | RX+ | N/A |
| 3 | TXD | TX+ | RTX+ |
| 4 | DTR | RX- | N/A |
| 5 | GND | GND | GND |
| 6 | DSR | N/A | N/A |
| 7 | RTS | N/A | N/A |
| 8 | CTS | N/A | N/A |
| 9 | PWR | PWR | PWR |

24 : COM Port Pin9 PWR Setting Jumpers
 PWR_COM1 (For COM Port1)
 PWR_COM2 (For COM Port2)
 PWR_COM3 (For COM Port3)
 PWR_COM4 (For COM Port4)
 PWR_COM5 (For COM Port5)
 PWR_COM6 (For COM Port6)



25 : 4-Pin CPU FAN Connector (+12V)



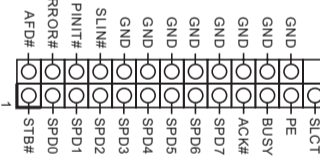
26 : PS2 Keyboard/Mouse Header

| PIN | Signal Name | PIN | Signal Name |
|-----|-------------|-----|-------------|
| 2 | +5VSB | 1 | KBCLK |
| 4 | +5VSB | 3 | KBDATA |
| 6 | GND | 5 | MSDATA |
| 8 | GND | 7 | MSCLK |



27 : Printer Port / GPIO Header (LPT_GPIO1)

Printer Port:

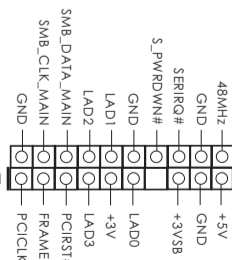


GPIO:

| PIN | Signal Name | PIN | Signal Name |
|-----|-------------|-----|-------------|
| 2 | SIO_Gp46 | 25 | NA |
| 4 | SIO_Gp45 | 26 | NC |
| 6 | SIO_Gp44 | 27 | SIO_Gp30 |
| 8 | SIO_Gp43 | 28 | GND |
| 10 | JGPIO_PWR | 29 | SIO_Gp31 |
| 12 | JGPIO_PWR | 30 | SIO_Gp32 |
| 14 | GND | 31 | SIO_Gp33 |
| 16 | GND | 32 | SIO_Gp34 |
| 18 | GND | 33 | SIO_Gp35 |
| 20 | GND | 34 | SIO_Gp36 |
| 22 | GND | 35 | SIO_Gp37 |
| 24 | GND | 36 | SIO_Gp38 |
| 26 | NC | 37 | SIO_Gp39 |
| 28 | GND | 38 | SIO_Gp40 |
| 30 | SIO_Gp30 | 39 | SIO_Gp41 |
| 32 | SIO_Gp32 | 40 | SIO_Gp42 |
| 34 | SIO_Gp34 | 41 | SIO_Gp43 |
| 36 | SIO_Gp36 | 42 | SIO_Gp44 |
| 38 | SIO_Gp38 | 43 | SIO_Gp45 |
| 40 | SIO_Gp40 | 44 | SIO_Gp46 |
| 42 | SIO_Gp42 | 45 | SIO_Gp47 |

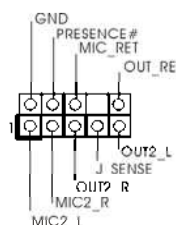
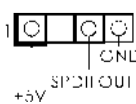
* If you want to use the printer port function, please short pin4 and pin5 on Digital Input / Output Power Select (JGPIO_PWR1).

28 : LPC Header



29 : Front Panel Audio Header

30 : SPDIF Header



Audio Jacks

31 : Pink - Mic In
 32 : Green - Line Out

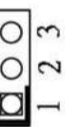
33 : 3W Audio AMP Output Wafer

| PIN | Signal Name |
|-----|-------------|
| 1 | OUTLN |
| 2 | OUTLP |
| 3 | OUTRP |
| 4 | OUTRN |



34 : USB3.0 Ports (USB3_2_3)

35 : USB Power Setting Jumpers (USB3_PWR0_1 (For USB3_0_1)) (USB3_PWR2_3 (For USB3_2_3))
 1-2 : +5V
 2-3 : +5VSB



36 : USB3.0 Ports (USB3_0_1)
37 : RJ45 LAN Port (LAN2)

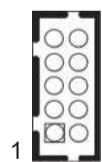
38 : Clear CMOS Header (CLRMO1)
 1-2 : Normal
 2-3 : Clear CMOS



39 : RJ45 LAN Port (LAN1)

40 : VGA Connector (Optional)

| PIN | Signal Name | PIN | Signal Name |
|-----|-------------|-----|-------------|
| 9 | DDC_CLK | 10 | DDC_DATA |
| 7 | HSYNC | 8 | VSYNC |
| 5 | BLUE | 6 | GND |
| 3 | GREEN | 4 | GND |
| 1 | RED | 2 | GND |



* VGA Connector is shared with DisplayPort. If you enable one, the other one will not function.

41 : DisplayPort (Optional)

42 : Clear CMOS Jumper (CLRMO2)
 Open : Normal
 Short : Auto Clear CMOS (Power Off)



43 : PWR_BAT1
 Open : Normal
 Short : When Using Rechargeable Battery



44 : HDMI Port
 45 : DC Jack