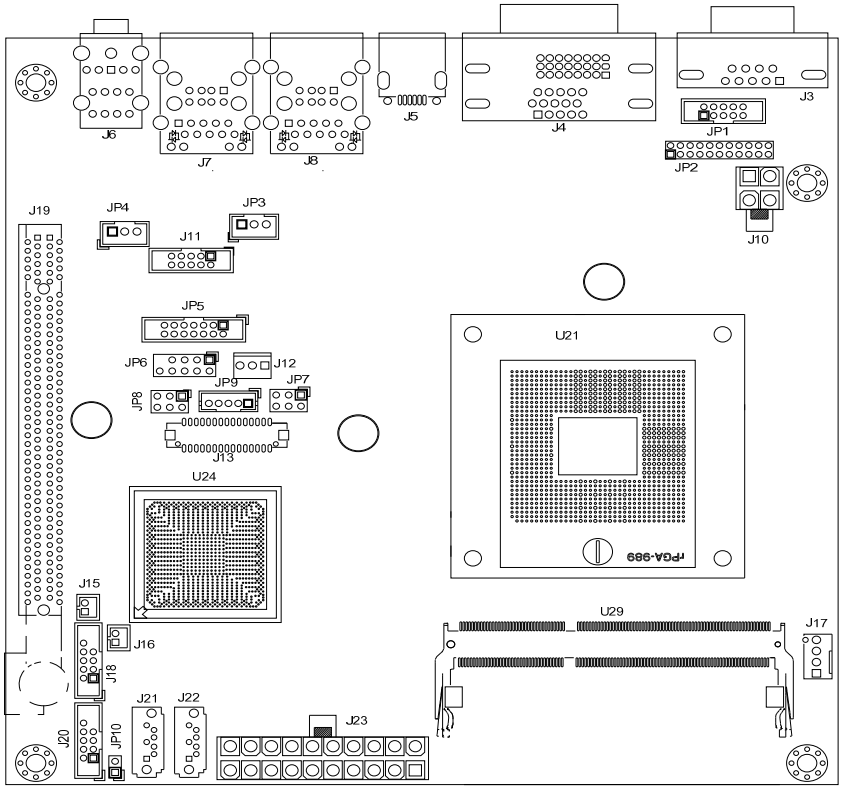
# Hardware Configuration Setting

This chapter gives the definitions and shows the positions of jumpers, headers and connectors. All of the configuration jumpers on WADE-8321-LU are in the proper position. The default settings shipped from factory are marked with an asterisk (♣).

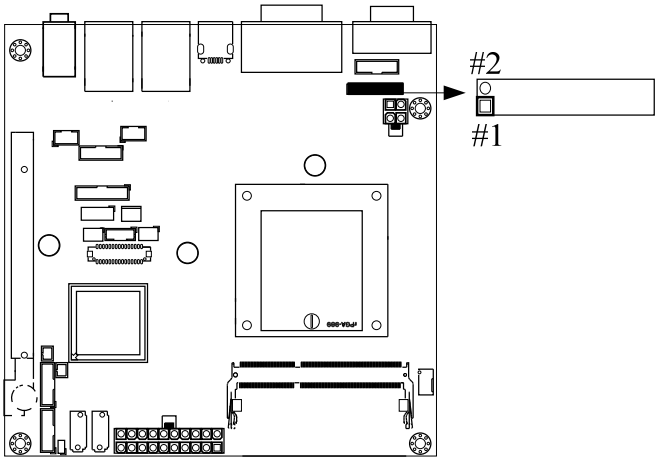
## 2-1 Jumpers

In general, jumpers on the single board computer are used to select options for certain features. Some of the jumpers are designed to be user-configurable, allowing for system enhancement. The others are for testing purpose only and should not be altered. To select any option, cover the jumper cap over (SHORT) or remove (NC) it from the jumper pins according to the following instructions. Here NC stands for “Not Connect”.



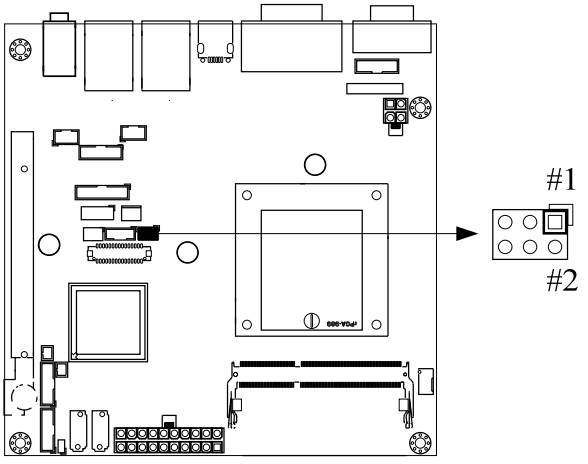
## JP2: COM2 (JP1) Interface Selection

| JP2 | Function |
|---|---|
| 5-6, 9-11, 10-12, 15-17, 16-18 Short | RS-232 ★ |
| 3-4, 7-9, 8-10, 13-15, 14-16, 21-22 Short | RS-422 |
| 1-2, 7-9, 8-10, 19-20 Short | RS-485 |



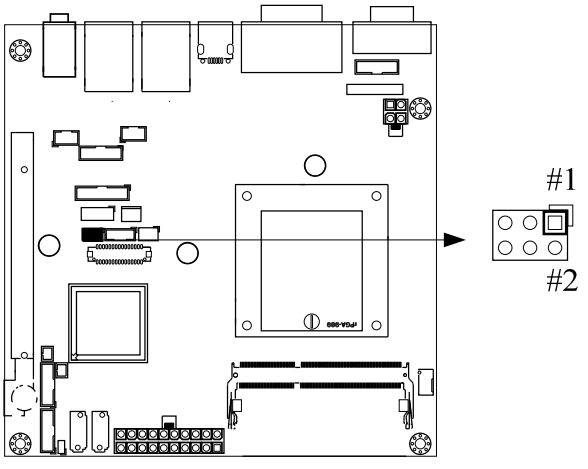

## JP7 : PANEL Voltage Selection

| JP8 | Function |
|---|---|
| 1-3 Short | VCC3 ★ |
| 3-5 Short | VCC |
| 3-4 Short | +12V |



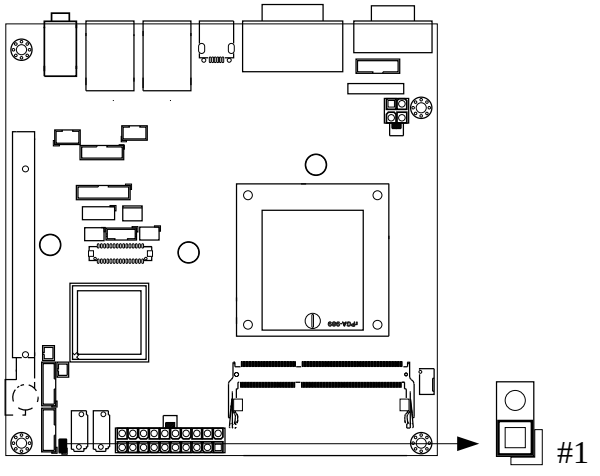

## JP8: PANEL BACKLIGHT Selection

| Pin No. | Signal Description |
|---|---|
| 1-3, 2-4 | 5V, Active High ★ |
| 1-3, 4-6 | 12V, Active High |
| 3-5,2-4 | 5V, Active Low |
| 3-5,4-6 | 12V, Active Low |



## JP10: CMOS Clear

| JP10 | Function |
|---|---|
| Open | Normal Operation ★ |
| short | Clear CMOS Contents |



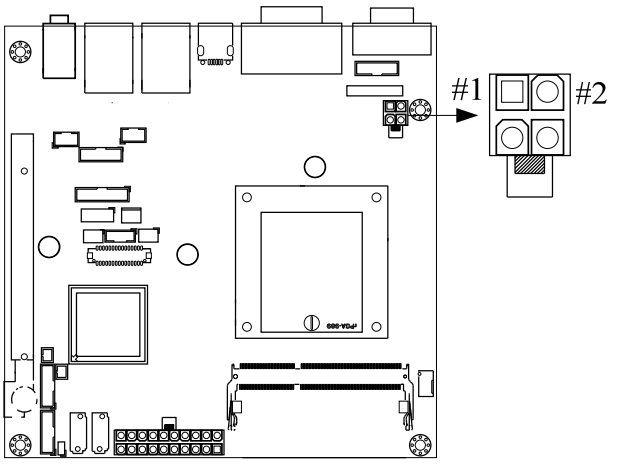
## 2.2 Connectors

I/O peripheral devices and Flash disk will be connected to these interface connectors

| CONNECTOR | FUNCTION | REMARK |
|---|---|---|
| J3 | COM2 Connector | |
| J4 | VGA + DVI Connector | |
| J5 | IEEE1394 Connector | |
| J6 | Audio Jack ( Mic + Line_out ) | |
| J7 | RJ45 + USB Connector | |
| J8 | RJ45 + USB Connector | |
| J10 | +12V Power Connector | Connect to CPU |
| J11 | General Purpose I/O Connector | |
| J12 | FAN_3pin (SYSTEN FAN) Power Connector | |
| J13 | LVDS Connector | |
| J15/J16 | SATA Power Connector | |
| J17 | FAN_4pin (CPU FAN) Power Connector | |
| J18/J20 | External USB Connector | |
| J19 | PCIe x 16 SLOT | |
| J21/J22 | SATA GEN3 Connector | |
| J23 | ATX Power Connector | |
| J26 | Mini-PCIe Connector | |
| JP1 | COM1 Connector | |
| JP3/JP4 | SMBUS Connector | |
| JP5 | Front Panel Pin HDR | |
| JP6 | LPC Port 80H | |

**J10: +12V POWER Connector**

| PIN No. | Signal Description |
|---|---|
| 1 | Ground |
| 2 | Ground |
| 3 | +12V |
| 4 | +12V |

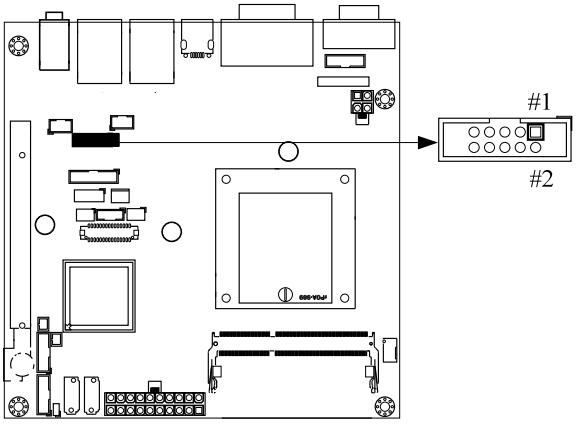



## J11 : General Purpose I/O Connector

| PIN No. | Signal Description | PIN No. | Signal Description |
|---|---|---|---|
| 1 | GPIO0 | 2 | GPIO1 |
| 3 | GPIO2 | 4 | GPIO3 |
| 5 | GPIO4 | 6 | GPIO5 |
| 7 | GPIO6 | 8 | GPIO7 |
| 9 | Ground | 10 | +5V |

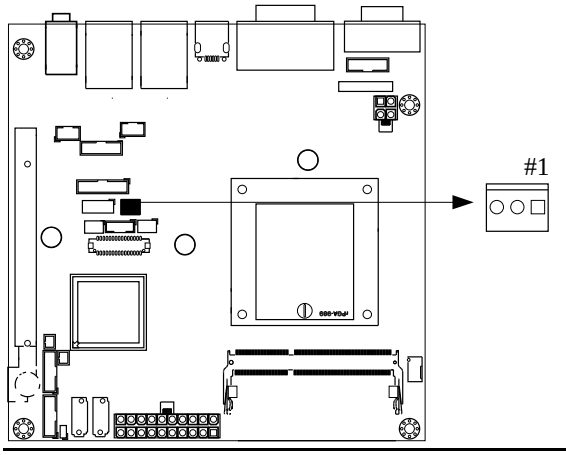
**Note:**

All General Purpose I/O ports can only apply to standard TTL ± 5% signal level (0V/5V), and each Fan.



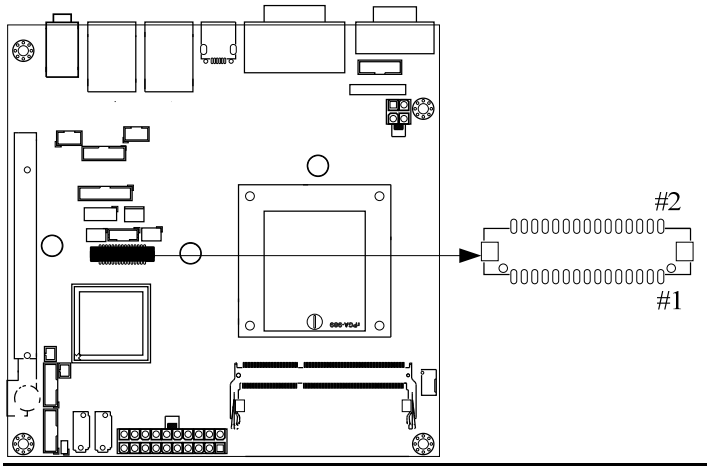

## J12 : System Fan Connector

| PIN No. | Signal Description |
|---|---|
| 1 | Ground |
| 2 | Fan speed control |
| 3 | Fan on/off output |



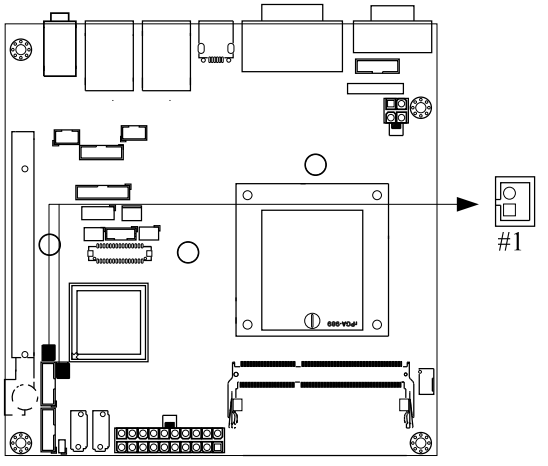
**J13 : LVDS Connector**

| PIN No. | Signal Description | PIN No. | Signal Description |
|---|---|---|---|
| 1 | LVDS_VDD | 2 | LVDS_VDD |
| 3 | LVDSA_DATA0 | 4 | LVDSA_DATA#0 |
| 5 | LVDSA_DATA1 | 6 | LVDSA_DATA#1 |
| 7 | LVDSA_DATA2 | 8 | LVDSA_DATA#2 |
| 9 | LVDSA_DATA3 | 10 | LVDSA_DATA#3 |
| 11 | LVSDA_CLKP | 12 | LVDSA_CLKN |
| 13 | LVDS_DDC_CLK | 14 | LVDS_DDC_DATA |
| 15 | Ground | 16 | Ground |
| 17 | LVDSB_DATA0 | 18 | LVDSB_DATA#0 |
| 19 | LVDSB_DATA1 | 20 | LVDSB_DATA#1 |
| 21 | LVDSB_DATA2 | 22 | LVDSB_DATA#2 |
| 23 | LVDSB_DATA3 | 24 | LVDSB_DATA#3 |
| 25 | LVSDB_CLKP | 26 | LVDSB_CLKN |
| 27 | n/c | 28 | n/c |
| 29 | Ground | 30 | Ground |



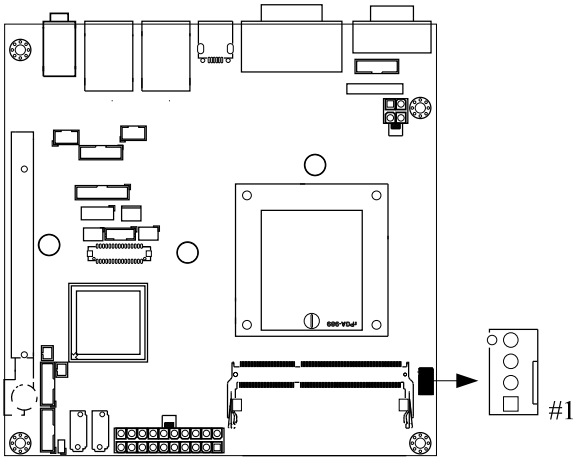
## J15/J16 : SATA Power Connector

| PIN No. | Signal Description |
|---|---|
| 1 | Ground |
| 2 | +5V |




## J17: CPU Fan Connector

| PIN No. | Signal Description |
|---|---|
| 1 | Ground |
| 2 | +12V |
| 3 | Fan on/off output |
| 4 | Fan Speed control |

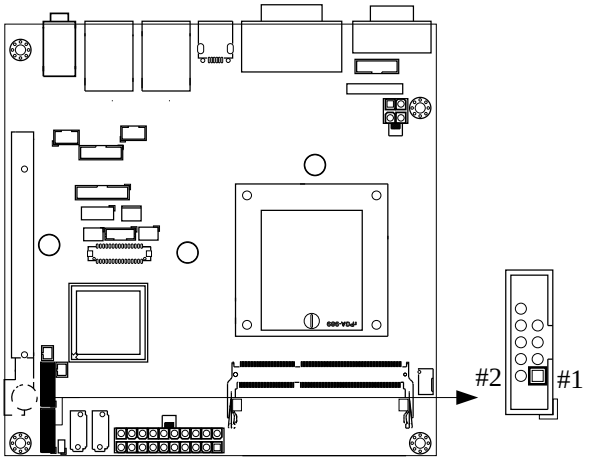



## J18/J20 : External USB Connector

| PIN No. | Signal Description | PIN No. | Signal Description |
|---|---|---|---|
| 1 | 5V Dual | 2 | 5V Dual |
| 3 | USB- | 4 | USB- |
| 5 | USB+ | 6 | USB+ |
| 7 | Ground | 8 | Ground |
| | Key( no pin ) | 10 | N/C |

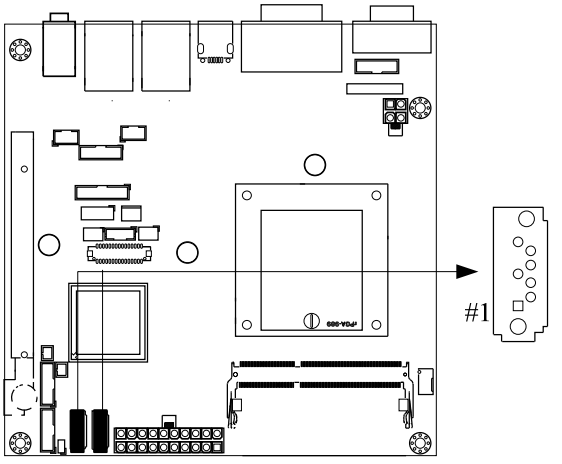
**Note:**

5V Dual is always available. It's supplied by either 5V VCC power source in normal operation mode or 5V standby power source in standby mode.



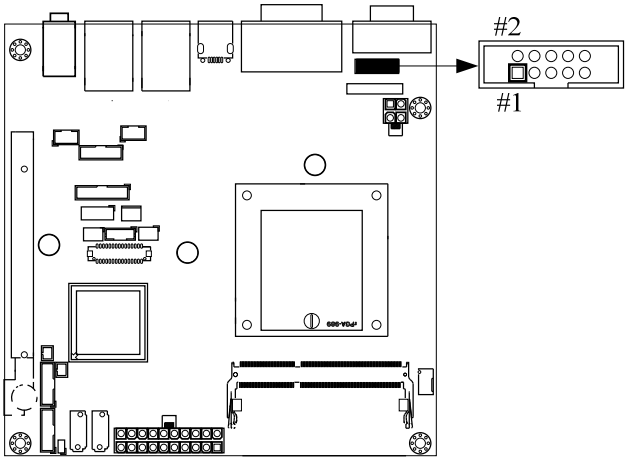

## J21/J22 : SATA GEN3 Connector

| PIN No. | Signal Description |
|---|---|
| 1 | Ground |
| 2 | TX+ |
| 3 | TX- |
| 4 | Ground |
| 5 | RX- |
| 6 | RX+ |
| 7 | Ground |



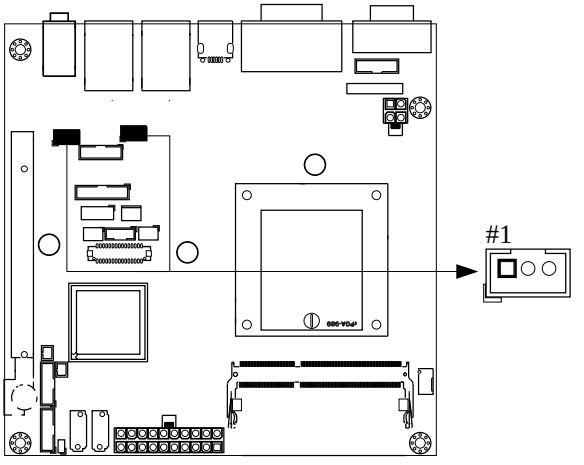

## JP1 : COM1 Connector

| PIN No. | Signal Description | PIN No. | Signal Description |
|---|---|---|---|
| 1 | DCD | 2 | DSR |
| 3 | RXD | 4 | RTS |
| 5 | TXD | 6 | CTS |
| 7 | DTR | 8 | RI |
| 9 | Ground | 10 | N/C |



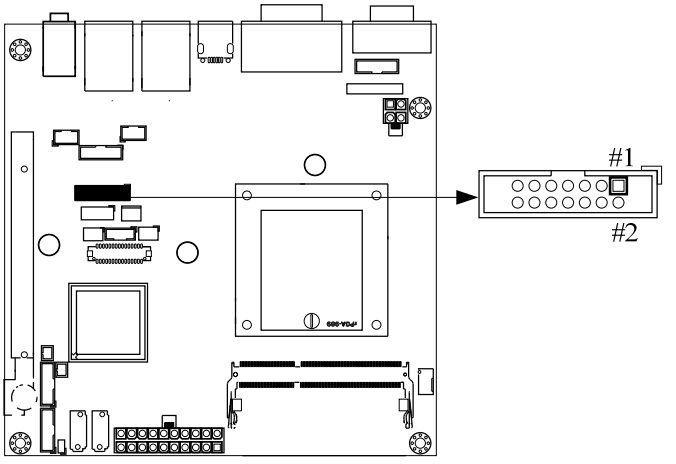
## JP3/JP4 : SMBUS Connector

| PIN No. | Signal Description |
|---|---|
| 1 | SMB_CLK |
| 2 | SMB_DAT |
| 3 | Ground |




## JP5 : Front Panel Pin HDR

| PIN No. | Signal Description | PIN No. | Signal Description |
|---|---|---|---|
| 1 | HDD_LED(+) | 2 | PWR_LED(+) |
| 3 | HDD_LED(-) | 4 | PWR_LED(-) |
| 5 | Reset (-) | 6 | Power On(+) |
| 7 | Reset (+) | 8 | Power On(-) |
| 9 | N/C | 10 | N/C |
| 11 | Ground | 12 | Ground |
| 13 | +5V | 14 | N/C |




## JP6 : LPC Port 80H Connector

| PIN No. | Signal Description | PIN No. | Signal Description |
|---|---|---|---|
| 1 | LAD0 | 2 | VCC3 |
| 3 | LAD1 | 4 | PLT_RST# |
| 5 | LAD2 | 6 | LFRAME# |
| 7 | LAD3 | 8 | CLK |
| 9 | Key | 10 | Ground |

