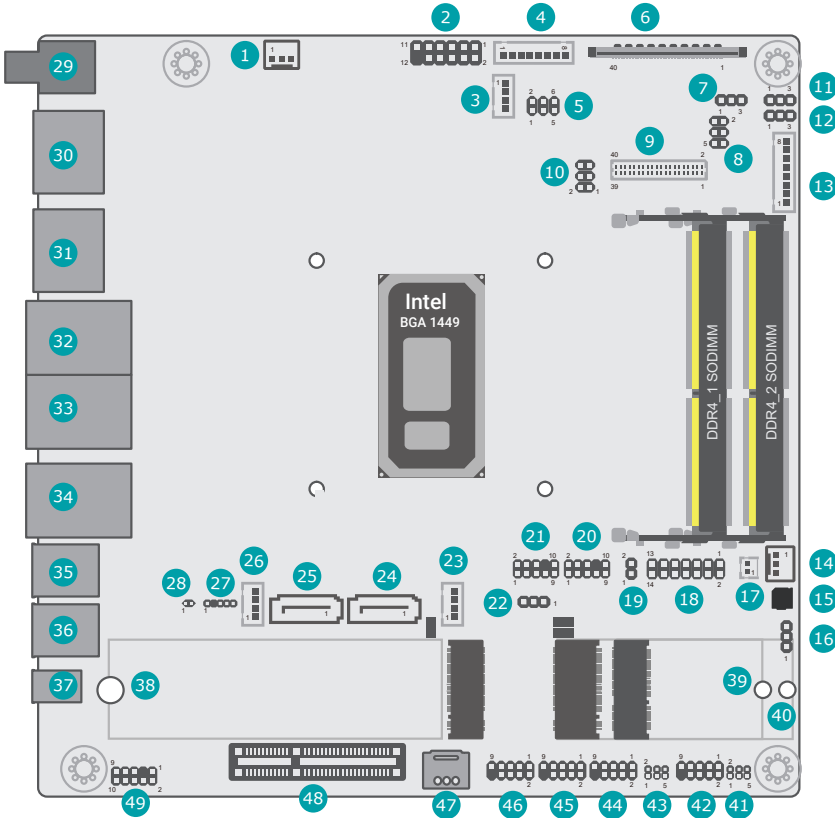


# Quick Reference

## TGU171/TGU173

### Board Layout



- |                              |                       |                         |                     |
|------------------------------|-----------------------|-------------------------|---------------------|
| 1 CPU FAN                    | 13 LCD/Inverter Power | 25 SATA0                | 37 USB Type-C       |
| 2 Front Panel                | 14 System FAN         | 26 SATA0 Power          | 38 M.2-M            |
| 3 Digital I/O Power          | 15 Buzzer             | 27 Debug                | 39 M.2-E            |
| 4 Digital I/O                | 16 Clear CMOS         | 28 Debug                | 40 M.2-B            |
| 5 SMBus                      | 17 Battery            | 29 DC-in                | 41 COM4 RS232 Power |
| 6 eDP                        | 18 Debug Card         | 30 DP++                 | 42 COM4             |
| 7 eDP Inverter Power         | 19 CASEOPEN-          | 31 HDMI                 | 43 COM3 RS232 Power |
| 8 Panel Power Jumper         | 20 USB 7/8            | 32 LAN1                 | 44 COM3             |
| 9 LVDS                       | 21 USB 5/6            | 33 LAN2                 | 45 COM2             |
| 10 Innoage HDR1              | 22 SATA Selection     | 34 2.5G LAN1            | 46 COM1             |
| 11 Panel Inverter Power      | 23 SATA1 Power        | 35 USB 1/2 (USB3.0/2.0) | 47 SIM slot         |
| 12 Panel Backlight Selection | 24 SATA1              | 36 USB 3/4 (USB3.0/2.0) | 48 PCIe x4          |
|                              |                       |                         | 49 Front Audio      |

# Jumper Settings

## 16 Clear CMOS

JP1

Normal (default)	1-2 On
Clear CMOS Data	2-3 On

## 41 43 COM 3/4 RS232 Power

JP2 / JP3

Standard RS232 (default)	1-3 & 2-4 On
RS232 with Power	3-5 & 4-6 On

## 7 eDP Inverter Power

DPJP1

+12V (default)	1-2 On
5V	2-3 On

## 11 Panel Inverter Power

DPJP2

5V (default)	1-2 On
12V	2-3 On

## 8 Panel Power Jumper

DPJP3

12V	1-2 On
5V	3-4 On
3.3V (default)	5-6 On

## 12 Panel Backlight Selection

DPJP4

3.3V (default)	1-2 On
5V	2-3 On

## 22 SATA Selection

JP8

M.2 Key B (default)	1-2 On
SATA1	2-3 On

\*It can be able to swap each function below in BIOS

JP8	SATA0	SATA1	M.2_B_KEY	
1-2	SATA0 (via PCIe11)	N/A	PCIe x1/SATA (controlled by M.2 Pin69)	USB3.0 (from PCIe Switch)
2-3	SATA0 (via PCIe11)	SATA1 (via PCIe12)	N/A	USB3.0 (from PCIe Switch)
1-2	N/A	N/A	PCIe x2 (via PCIe11/12)	

# Pin Assignment

## 3 Digital I/O Power

Pin	Function	Pin	Function
1	+12V	2	GND
3	5VSB	4	5V

## 4 Digital I/O

Pin	Function	Pin	Function
1	DIO_0	5	DIO_4
2	DIO_1	6	DIO_5
3	DIO_2	7	DIO_6
4	DIO_3	8	DIO_7

## 5 SMBus

Pin	Assignment	Pin	Assignment
1	3V3SB	2	GND
3	SMB_CLK	4	SMB_DATA
5	SMB_ALERT	6	--

## 2 Front Panel

Pin	Assignment	Pin	Assignment
1	N.C.	2	3V3SB
3	3V3	4	3V3SB
5	HDD_LED	6	Power_LED
7	Ground	8	Ground
9	RESET	10	Power_Button
11	N.C.	12	---

46 45 COM 1/2

Pin	Function	Pin	Function
1	MDCD1(2)#	2	MSIN1(2)
3	MSOUT1(2)	4	MDTR1(2)#
5	GND	6	MDSR1(2)#
7	MRTS1(2)#	8	MCTS1(2)#
9	MRI1(2)#	10	--

19 CASEOPEN-

Pin	Function	Pin	Function
1	CASEOPEN-	2	GND

21 USB 5/6

Pin	Assignment	Pin	Assignment
1	5V	2	5V
3	USB2_5_C_N	4	USB2_6_C_N
5	USB2_5_C_P	6	USB2_6_C_P
7	GND	8	GND
9	---	10	N.C.

20 USB 7/8

Pin	Assignment	Pin	Assignment
1	5V	2	5V
3	USB2_7_C_N	4	USB2_8_C_N
5	USB2_7_C_P	6	USB2_8_C_P
7	GND	8	GND
9	---	10	N.C.

26 23 SATA0/1 HDD Power

Pin	Assignment	Pin	Assignment
1	+12V_SATA	2	GND
3	GND	4	5V_SATA

44 42 COM 3/4

Pin	Function	Pin	Function
1	X_MDCD3(4)#	2	MSIN3(4)#
3	MSO3(4)#	4	MDTR3(4)#
5	GND	6	MDSR3(4)#
7	MRTS3(4)#	8	MCTS3(4)#
9	X_MRI3(4)#	10	--

49 Front Audio

Pin	Assignment	Pin	Assignment
1	Mic2-L	2	GND
3	Mic2-R	4	N.C.
5	Line2-R	6	Mic2-JD
7	GND	8	---
9	Line2-L	10	Line2-JD

13 LCD/Inverter Power

Pin	Assignment
1	GND
2	GND
3	Panel Inverter Brightness Voltage Control
4	Panel Power
5	+3.3V
6	Panel Backlight On/Off Control
7	12V / 5V (default)
8	12V / 5V (default)

## 9 LVDS

Pin	Assignment	Pin	Assignment
1	GND	2	GND
3	LVDS_A3+	4	LVDS_B3+
5	LVDS_A3-	6	LVDS_B3-
7	GND	8	GND
9	LVDS_A2+	10	LVDS_B2+
11	LVDS_A2-	12	LVDS_B2-
13	GND	14	GND
15	LVDS_A1+	16	LVDS_B1+
17	LVDS_A1-	18	LVDS_B1-
19	GND	20	GND
21	LVDS_A0+	22	LVDS_B0+
23	LVDS_A0-	24	LVDS_B0-
25	GND	26	GND
27	LVDS_CLK1+	28	LVDS_CLK2+
29	LVDS_CLK1-	30	LVDS_CLK2-
31	GND	32	GND
33	LVDS_DDC_CLK	34	NC
35	LVDS_DDC_DATA	36	+3.3V
37	Panel Power	38	Panel Power
39	Panel Power	40	Panel Power

## 6 eDP

Pin	Assignment	Pin	Assignment
1	--	2	GND
3	eDPA_LANE3_C_N	4	eDPA_LANE3_C_P
5	GND	6	eDPA_LANE2_C_N
7	eDPA_LANE2_C_P	8	GND
9	eDPA_LANE1_C_N	10	eDPA_LANE1_C_P
11	GND	12	eDPA_LANE0_C_N
13	eDPA_LANE0_C_P	14	GND
15	eDPA_AUXP_C	16	eDPA_AUXN_C
17	GND	18	EDP_VDD
19	EDP_VDD	20	EDP_VDD
21	EDP_VDD	22	--
23	GND	24	GND
25	GND	26	GND
27	eDPA_HPD	28	GND
29	GND	30	GND
31	GND	32	EDP_BKLTEN
33	EDP_BKLTCTL	34	--
35	--	36	eDP_INV_PWR
37	eDP_INV_PWR	38	eDP_INV_PWR
39	eDP_INV_PWR	40	--

## BIOS Variation

BIOS	Interface Support	Remark
<b>Default support SATA/PCIe*</b>	SATA0 + M.2 Key B*/SATA1	by JP8
<b>Option support PCIe2</b>	M.2 key B(PCIe x2)	JP8 1-2 only

\*Note: The effective signal depends on the device installed on M.2 Key B



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