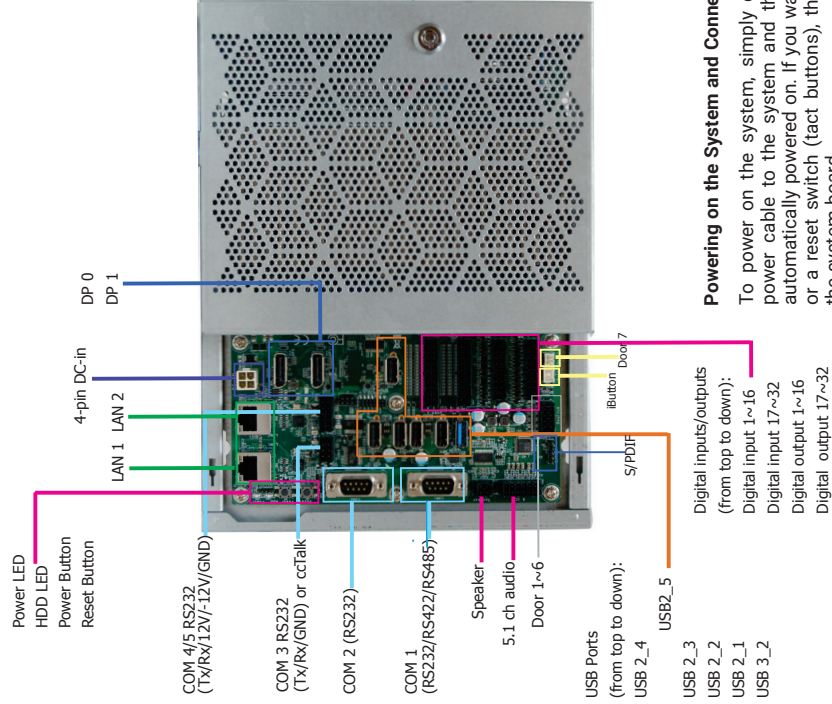


Package Contents

- One GM330-BFF system unit
- Demonstration kit (optional):
 - I/O board
 - Five I/O cables (red, blue, green, yellow, and orange)
 - A USB cable (type-A connector to type B-connector)
 - Gaming software package


Ports and Connectors



Powering on the System and Connecting the Display

To power on the system, simply connect the 4-pin power cable to the system and the system will be automatically powered on. If you want to use a power or a reset switch (tact buttons), they are located on the system board.

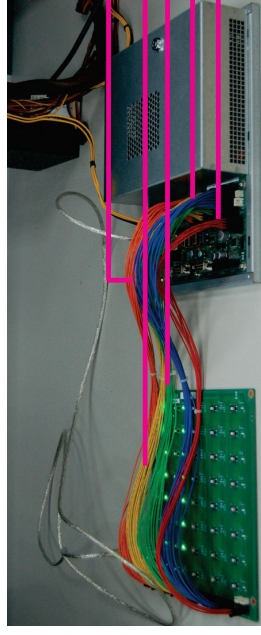
Note: DFI reserves the right to change the specifications at any time prior to the product's release. For the latest revision and more details of the installation procedure, please refer to related technical docs at go.dfi.com/GM330-BFF or scan the QR code on the right.



Connecting the I/O Board

The system supports 32 digital inputs and outputs. The I/O board that came with the package can be connected to the system to test the digital input and output function. Please observe the following guidelines and follow the procedure to connect the I/O board.

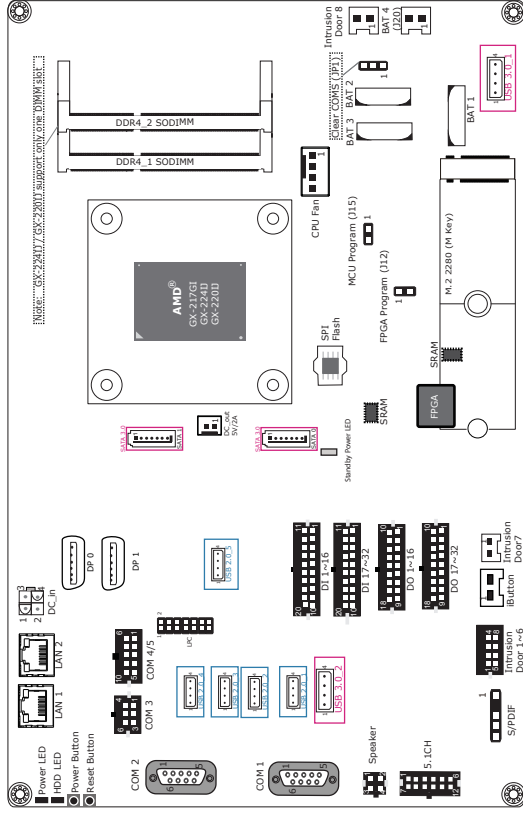
1. Make sure the system and all other peripheral devices connected to it have been powered off.
2. Disconnect all power cords and cables.
3. Connect one end of the USB cable (type-A connector) to the system and the other end of the USB cable (type-B connector) to the I/O board.
4. Connect the I/O board to the system's intrusion detection connector (labeled door 1~6) using the red cable.
5. Connect the I/O board to the system's DIO port (labeled DO: 17~32) using the blue cable.
6. Connect the I/O board to the system's DIO port (labeled DO: 1~16) using the green cable.
7. Connect the I/O board to the system's DIO port (labeled DI: 17~32) using the yellow cable.
8. Connect the I/O board to the system's DIO port (labeled DI: 1~16) using the orange cable.



The tact buttons on the I/O board can be used to invoke a door intrusion event or set the high/low level of a digital I/O port. You can also use the demonstration application to alter a digital I/O port's level. For more information, please refer to the software application guide.

Note: The software package that came with the system contains application and code samples to implement gaming software for the system.

Board Layout and Jumper Settings



Pin Assignments

DC-out

Pins	Pin Assignment
1	+5V DC power out
2	GND

5.1ch Audio

Pins	Pin Assignment	Pins	Pin Assignment
1	LINEOUT-L	7	LINEOUT-R
2	GND	8	GND
3	CENOUT-L	9	LFEOUT-R
4	GND	10	GND
5	SIDEOUT-L	11	SIDEOUT-R
6	GND	12	GND

4-pin Speaker

Pins	Pin Assignment
1	R-CH+
2	L-CH+
3	R-CH-
4	L-CH-

DC-in

Pins	Pin Assignment
1	GND 1
2	GND 2
3	12V 2
4	12V 1

Intrusion Door 1~6

Pins	Pin Assignment	Pins	Pin Assignment
1	Door 1	5	Door 5
2	Door 2	6	Door 6
3	Door 3	7	GND
4	Door 4	8	GND

S/PDIF

Pins	Pin Assignment
1	+5V
2	Key
3	SPDIF Out
4	GND
5	NC

Digital Input 1~16/17~32

Pins	Pin Assignment	Pins	Pin Assignment
1	D11 / DI 17	11	DI 11 / DI 27
2	D12 / DI 18	12	DI 12 / DI 28
3	D13 / DI 19	13	DI 13 / DI 29
4	D14 / DI 20	14	DI 14 / DI 30
5	D15 / DI 21	15	DI 15 / DI 31
6	D16 / DI 22	16	DI 16 / DI 32
7	D17 / DI 23	17	GND
8	D18 / DI 24	18	GND
9	D19 / DI 25	19	GND
10	DI 10 / DI 26	20	GND

Digital Output 1~16/17~32

Pins	Pin Assignment	Pins	Pin Assignment
1	DO 1 / DO 17	11	DO 10 / DO 26
2	DO 2 / DO 18	12	DO 11 / DO 27
3	DO 3 / DO 19	13	DO 12 / DO 28
4	DO 4 / DO 20	14	DO 13 / DO 29
5	DO 5 / DO 21	15	DO 14 / DO 30
6	DO 6 / DO 22	16	DO 15 / DO 31
7	DO 7 / DO 23	17	DO 16 / DO 32
8	DO 8 / DO 24	18	GND
9	DO 9 / DO 25	19	GND

COM 3: RS232 (Tx/Rx/GND/ccTalk)

Pins	Pin Assignment
1	COM3 RS232-TX
2	COM3 RS232-RX
3	GND
4	+12V power out
5	ccTalk
6	GND

COM 4/5: RS232 (Tx/Rx/±12V/GND)

Pins	Pin Assignment	Pins	Pin Assignment
1	COM4 RS232-TX	6	COM5 RS232-TX
2	COM4 RS232-RX	7	COM5 RS232-RX
3	+12V power out	8	+12V power out
4	-12V power out	9	-12V power out
5	GND	10	GND

Clear CMOS Data	J1
Normal (default)	1-2 On
Clear CMOS Data	2-3 On

MCU Programming Mode	J15
F.W. update programmable	1-2 On
Protective mode	None

FPGA Programming Mode	J12
F.W. update programmable	1-2 On
Protective mode	None

COM 1: RS232/RS422/RS485

COM 2: RS232

