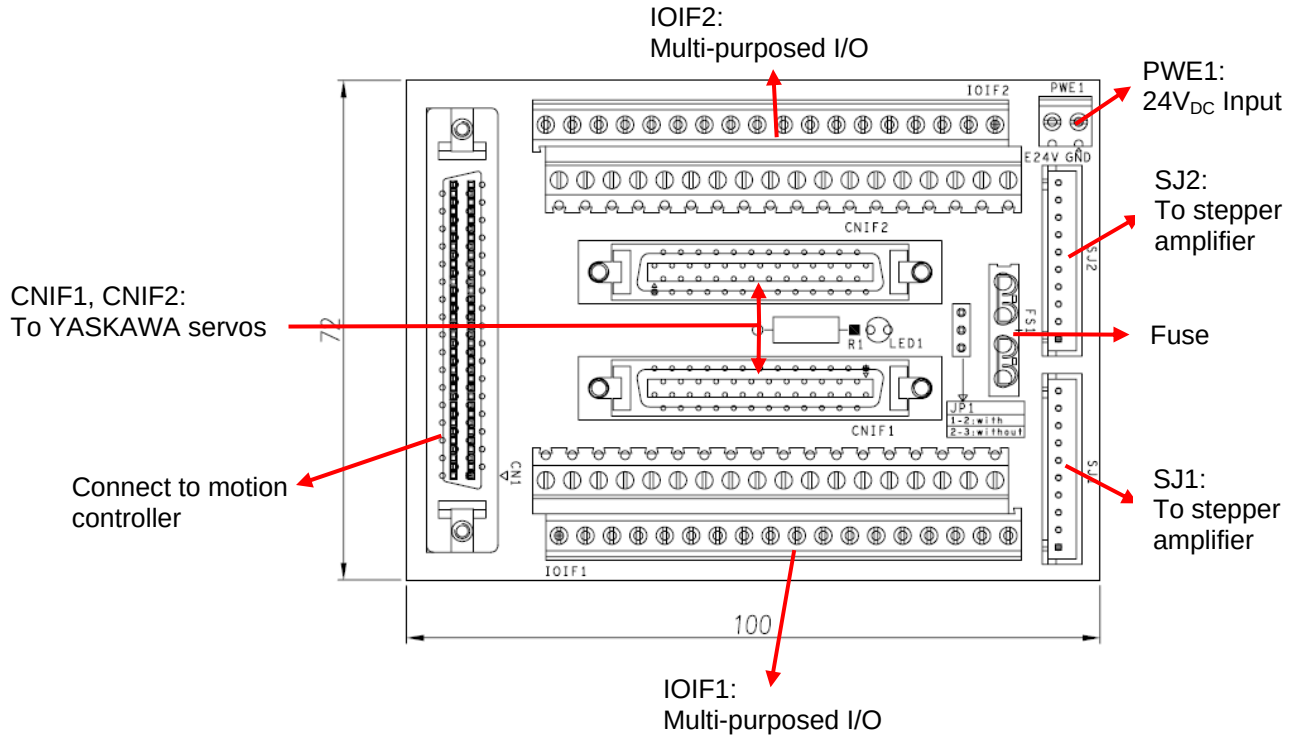


DIN-68Y-SGII User Guide

Notice

The DIN-68Y-SGII is used for wiring between **YASKAWA** series servo drivers / stepper with pulse trains input driver and **ADLINK cPCI-8168, PCI-8102** motion controller card **ONLY**. Never use this terminal board with any other servo driver or cards.

P/N: 50-xxxxx-xxx



Note:

- Servo & Stepper:** The DIN-68Y-SGII provides 2 connection methods for each axis: CNIF1 & CNIF2 connectors for YASKAWA series servo drivers, and a SJ connector for stepping drivers. DO NOT use both connectors at the same time.
- CNIF1 or CNIF2 cables:** One pin-to-pin 50-PIN cables are required for connection between the CNIF1(CNIF2) and the YASKAWA driver. It is available from ADLINK, or users may contact the local dealer or distributor to get cable information.
- JP1:** Fuse selection. Pin 1-2 short means the board is protected by fuse. Pin 2-3 short means the board is not protected by fuse.
- Fuse:** The fuse protects from damaging internal circuit. This guess can sustain 2A current. Users can buy it in local area when the fuse is burnt out.

PIN Assignments:

1. CNIF1/CNIF2 (YASKAWA AC Servo Driver)

No.	Name	I/O	Function	No.	Name	I/O	Function
1	IGND	--	Isolated Ground	2	IGND	--	Isolated Ground
3	PL1	I	Collector +12V Output	4	SEN	I	Reset Absolute Encoder
5	V-REF	I	Speed Command	6	IGND	--	Isolated Ground
7	OUT+	O	Pulse Signal (+)	8	OUT-	O	Pulse Signal (-)
9	T-REF	I	Torque Command	10	IGND	--	Isolated Ground
11	DIR+	O	Direction Signal (+)	12	DIR-	O	Direction Signal (-)
13	X			14	IGND	--	Isolated Ground
15	ERC	O	Dev. ctr, clr. Signal	16	X		
17	X			18	X		
19	EZ+	I	Encoder Z-phase (+)	20	EZ-	I	Encoder Z-phase (-)
21	BAT+	I	Battery (+)	22	BAT-	I	Battery (-)
23	X			24	X		
25	INP	I	In-position Signal	26	IGND	--	Isolated Ground
27	X			28	X		
29	RDY	I	Servo Ready Signal	30	IGND	--	Isolated Ground
31	ALM	I	Alarm Signal	32	IGND	--	Isolated Ground
33	EA+	I	Encoder A-phase (+)	34	EA-	I	Encoder A-phase (-)

35	EB+	I	Encoder B-phase (+)	36	EB-	I	Encoder B-phase (-)
37	AL01	O	Alarm Number1	38	AL02	O	Alarm Number2
39	AL03	O	Alarm Number3	40	SVON	O	Servo ON
41	P-CON	I	Proportion control	42	IGND	--	Isolated Ground
43	IGND	--	Isolated Ground	44	RES	I	Reset Signal
45	/P-CL	I	Forward Current	46	/N-CL	I	Reverse Current
47	+24V	O	Voltage output	48	PSO+	O	Encoder S-phase (+)
49	PSO-	O	Encoder S-phase (-)	50	X		

2. IOIF1/IOIF2 (External Motion Input Signal Interface)

IOIF1

No.	Name	I/O	Function	No.	Name	I/O	Function
1	PEL	I	Positive Limit (+)	19	SEN	I	Reset Absolute Encoder
2	MEL	I	Positive Limit (-)	20	BAT+	I	Battery (+)
3	ORG	I	Origin Signal	21	BAT-	I	Battery (-)
4	EMG	--	Internal EMG Signal	22	PSO+	O	Encoder S-phase (+)
5	LTC/SD /CS0/CLR0	I	Composite Function (Default: LTC)	23	PSO-	O	Encoder S-phase (-)
6	PA+ _ISO	I	Manual Pulser Input A	24	P-CON	I	Proportion control
7	PA- _ISO	I	Manual Pulser Input A	25	V-REF	I	Speed Command
8	CMP0	O	TTL Compare Output 0	26	T-REF	I	Torque Command
9	DIN0	I	Digital Input 0	27	/P-CL	I	Forward Current
10	DIN1	I	Digital Input 1	28	/N-CL	I	Reverse Current
11	DOU0	O	Digital Output 0, SVO RST	29	AL01	O	Alarm Number1
12	PL1	I	Collector +12V Output	30	AL02	O	Alarm Number2
13	RES	I	Reset Signal	31	AL03	O	Alarm Number3
14	+5V	O	Isolated +5V Output	32	IGND	--	Isolated Ground
15	I24V	O	Voltage output (With Fuse)	33	IGND	--	Isolated Ground
16	I24V	O	Voltage output (With Fuse)	34	IGND	--	Isolated Ground
17	E24V	O	Voltage output (Without Fuse)	35	IGND	--	Isolated Ground
18	E24V	O	Voltage output (Without Fuse)	36	IGND	--	Isolated Ground

IOIF2

No.	Name	I/O	Function	No.	Name	I/O	Function
1	PEL	I	Positive Limit (+)	19	SEN	I	Reset Absolute Encoder
2	MEL	I	Positive Limit (-)	20	BAT+	I	Battery (+)
3	ORG	I	Origin Signal	21	BAT-	I	Battery (-)
4	EMG	--	Internal EMG Signal	22	PSO+	O	Encoder S-phase (+)
5	LTC/SD /CS0/CLR0	I	Composite Function (Default: LTC)	23	PSO-	O	Encoder S-phase (-)
6	PB+ _ISO	I	Manual Pulser Input B	24	P-CON	I	Proportion control
7	PB- _ISO	I	Manual Pulser Input B	25	V-REF	I	Speed Command
8	CMP1	O	TTL Compare Output 1	26	T-REF	I	Torque Command
9	DIN2	I	Digital Input 2	27	/P-CL	I	Forward Current
10	DIN3	I	Digital Input 3	28	/N-CL	I	Reverse Current
11	DOU1	O	Digital Output 1, SVO RST	29	AL01	O	Alarm Number1
12	PL1	I	Collector +12V Output	30	AL02	O	Alarm Number2
13	RES	I	Reset Signal	31	AL03	O	Alarm Number3
14	+5V	O	Isolated +5V Output	32	IGND	--	Isolated Ground
15	I24V	O	Voltage output (With Fuse)	33	IGND	--	Isolated Ground
16	I24V	O	Voltage output (With Fuse)	34	IGND	--	Isolated Ground
17	E24V	O	Voltage output (Without Fuse)	35	IGND	--	Isolated Ground
18	E24V	O	Voltage output (Without Fuse)	36	IGND	--	Isolated Ground

3. SJ1/SJ2 (Stepping Motor Control Interface)

SJ1~SJ2

No.	Name	I/O	Function	No.	Name	I/O	Function
1	OUT+	O	Pulse Signal (+)	6	ALM	I	Servo Alarm
2	OUT-	O	Pulse Signal (-)	7	+5V	O	Voltage output
3	DIR+	O	Direction Signal (+)	8	SVON	O	Servo ON
4	DIR-	O	Direction Signal (-)	9	+5V	O	Voltage output
5	EZ+	I	Index Signal	10	IGND	--	Isolated Ground

4. PWE1 (External +24VDC Input Connector)

PWE1

No.	Name	I/O	Function
1	EX GND	--	External Power Supply Ground
2	EX +24V	I	External Power Supply Input (+24V DC+5%)

5. JP1 (Setting for fuse)



With fuse



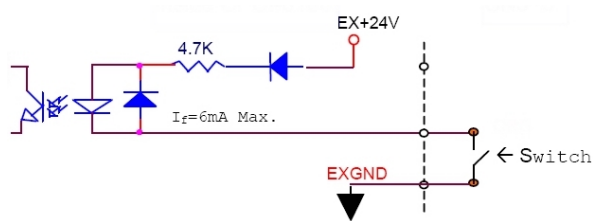
Without fuse(default)

Jumper

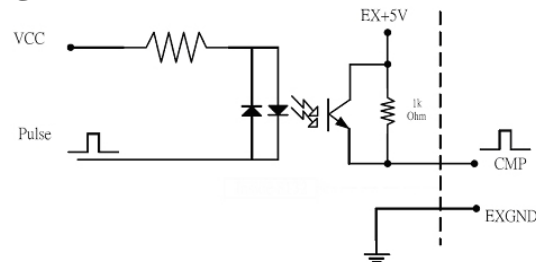
JP1	1-2 : With Fuse	2-3 : Without Fuse
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● Signal Connections of Interface Circuit

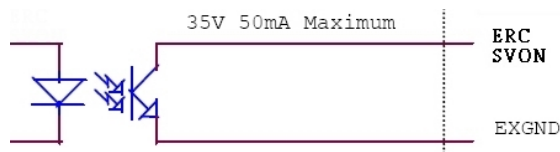
1. PEL、MEL、ORG、INP、ALM、RDY



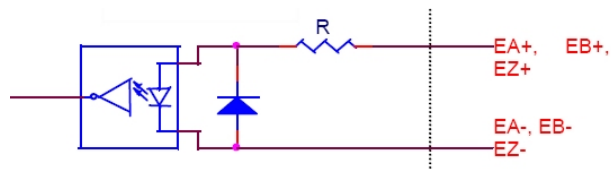
2. CMP



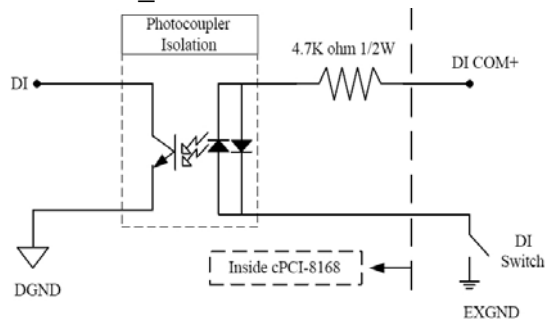
3. ERC、SVON



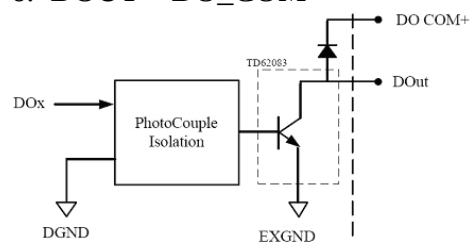
4. EA+、EB+、EZ+、EA-、EB-、EZ-



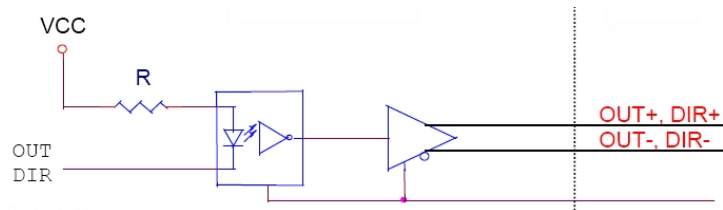
5. DIN、DI_COM



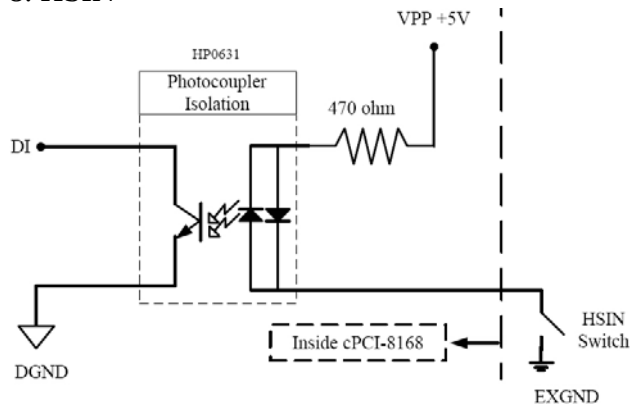
6. DOUT、DO_COM



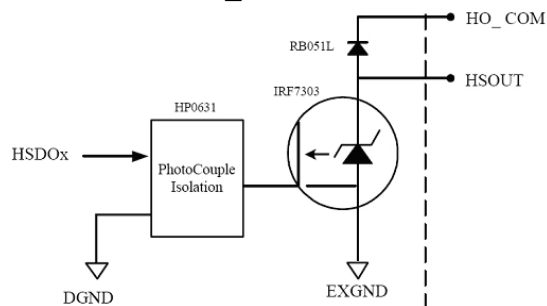
7. DIR+、OUT+、DIR-、OUT-



8. HSIN



9. HSOUT、HO_COM



Mechanical Dimensions:

