

Mount the terminal block on spare DIN rail space.
Use the terminal block to distribute the 24V supply.

This EtherCAT chassis uses fiber for input and copper for output.
Mount the fiber feedthroughs into the IN front panel.
Using LC-to-SC fiber patch cables:

- Connect the front panel fiber input to the input of the media converter.

Mount the modular adapters to the OUT front panel.

Using CAT5 patch cables:

- Connect the output of the media converter to the input of the coupler on the right rail.
- Connect the output of this coupler to the front panel output.
- Connect the first coupler on the left rail to the X1 port of the EK1122 terminal.
- Connect the second coupler on the left rail to the X2 port of the EK1122 terminal.

Twist power supply cable pair for motor supply, and wind around toroid 10 times.

Ports

IN

OUT

1A

2A

PN1 EtherCAT chassis LIGO D0902552-v3	PN5 Fiber coupler panel adapter LIGO	PN11 Ethernet patch cable, 1' LIGO	PN15 Adapter panel LIGO D1100108-v1	PN17 Adapter panel LIGO D1100108-v1
PN2 Name Plate LIGO D1101121-v2	PN6 Fiber coupler panel adapter LIGO D1100095-v2	PN12 Ethernet patch cable, 1' LIGO		
	PN7 Fiber LC-LC coupler Newark 52M9124	PN13 Ethernet patch cable, 1' Newark 21M5658		

Fiber/LC Corner

CAT5 Corner

Blank

Blank

PN8
Fiber patch cable, LC-SC
L-Com
FODSC50-LC-01

TBLOCK

PN24 Terminal Block	PN32 Terminal Block	PN42 Terminal Block	PN48 Terminal Block
PN25 Terminal Block	PN33 Terminal Block	PN43 Terminal Block	PN49 Terminal Block
PN26 Terminal Block	PN34 Terminal Block	PN44 Terminal Block	PN50 Terminal Block
PN27 Terminal Block	PN35 Terminal Block	PN45 Terminal Block	PN51 Terminal Block
PN28 Terminal Block	PN36 Terminal Block	PN46 Terminal Block	PN52 Terminal Block
Digi-Key 277-1483-ND		Digi-Key 277-1483-ND	
	PN37 Jumper, 10pos		PN53 Jumper, 10pos
PN29 End Plate	PN38 Jumper, 10pos	PN47 End Plate	PN54 Jumper, 10pos
Digi-Key 277-1495-ND	Digi-Key 277-1494-ND	Digi-Key 277-1495-ND	Digi-Key 277-1494-ND

Slots

1

2

3

4

5

6

7

8

9

PN3 Adapter panel LIGO D1101120-v1	PN9 Adapter panel LIGO D1101122-v1	PN14 Adapter panel LIGO D0902557-v1	PN16 Adapter panel LIGO D0902557-v1	PN18 Adapter panel LIGO D1300132-v1/D	PN20 Adapter panel LIGO D1300132-v1/B	PN22 Adapter panel LIGO D1300132-v1/C	PN30 Adapter panel LIGO D1300132-v1/A	PN39 Adapter panel LIGO D1300143-v1	E13 Jack screw
PN4 DB25F adapter LIGO D0902568-v1	PN10 DB25F adapter LIGO D0902568-v1			PN19 Rotation stage adapter LIGO D1300131-v1/E	PN21 Rotation stage adapter LIGO D1300131-v1/E	PN23 Rotation stage adapter LIGO D1300131-v1/E	PN31 Rotation stage adapter LIGO D1300131-v1/E	PN40 DB15/male	E14 Jack screw
E1 #6-32 1/4" flat	E3 #6-32 1/4" flat			E5 #6-32 1/4" flat	E7 #6-32 1/4" flat	E9 #6-32 1/4" flat	E11 #6-32 1/4" flat	PN41 DB15/male	E15 Jack screw
E2 #6-32 1/4" flat	E4 #6-32 1/4" flat			E6 #6-32 1/4" flat	E8 #6-32 1/4" flat	E10 #6-32 1/4" flat	E12 #6-32 1/4" flat	Digi-Key A32503-ND	E16 Jack screw
McMaster-Carr 91099A205	McMaster-Carr 91099A205			McMaster-Carr 91099A205	McMaster-Carr 91099A205	McMaster-Carr 91099A205	McMaster-Carr 91099A205	L-Com SDG450XS	

LASER ANTE

DIODE/ CHILLER

Blank

Blank

Spare Rotation Stage

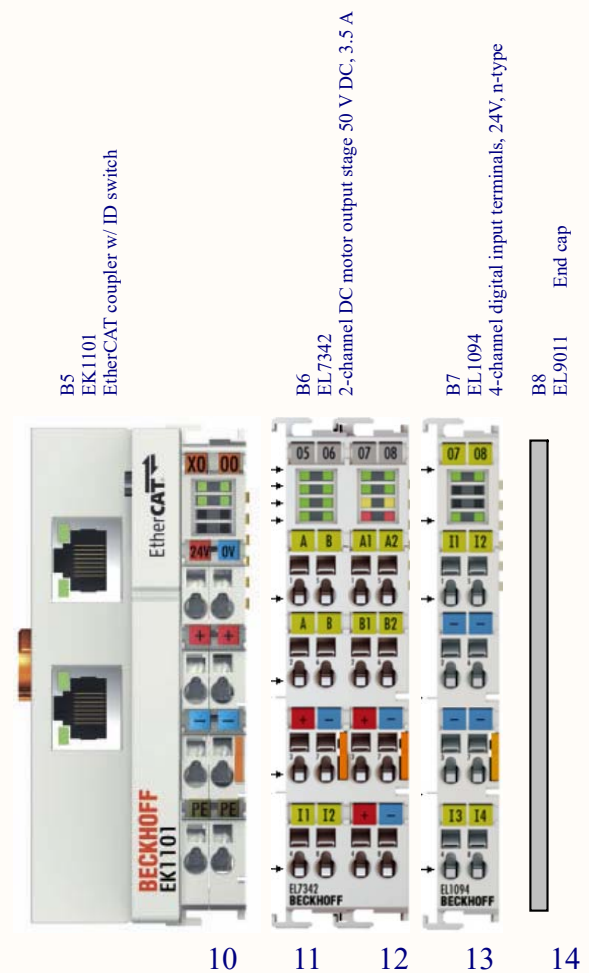
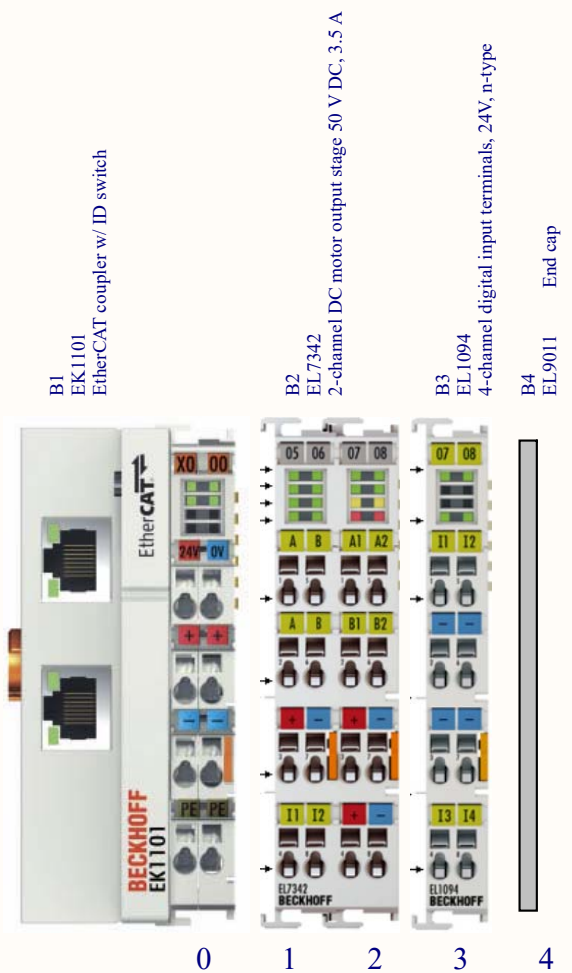
TCS X Rotation Stage

TCS Y Rotation Stage

IO/PSL Rotation Stage

IO PZT

Title PSL/IO/TCS Controls Chassis		
Size B	Number D1101114	Revision 5
Date: 2/8/2019	Sheet 1 4 of	Drawn By: Daniel Sigg
File: C:\Users\...\PSLControls1.SchDoc		



Ebus 24V
Power contacts 24V

Rotation Stage PSL

Power budget:
EL1094: 0.090 A (1x)
EL7342: 0.140 A (1x)

0.230 A

24V
24V

Rotation Stage TCS

Coupler +24V supply voltage wire is connected through relay contacts of EL2612 terminal.
PSL rotation stage on relay contact 1 NC.
TCS rotation stage on relay contact 2 NC.

24V

Media Converter

Media converter needs to be mounted sideways to prevent fiber from bending too fast.
The rotary switch needs to be set to 0.

Title		
P/I/T Controls Chassis: Left Rail		
Size	Number	Revision
B	D1101114	5
Date:	2/8/2019	Sheet 2 4 of
File:	C:\Users\...\PSLControls2.SchDoc	Drawn By: Daniel Sigg

1

2

3

4

5

6

A

A

B

B

C

C

D

D

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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Ebus	24V						24V								24V						
Power contacts	24V						5V								5V						

Spare

Title		P/I/T Controls Chassis: Middle Rail	
Size	Number	Revision	
B	D1101114	5	
Date:	2/8/2019	Sheet 3	4 of
File:	C:\Users\...\PSLControls3.SchDoc	Drawn By:	Daniel Sigg

1

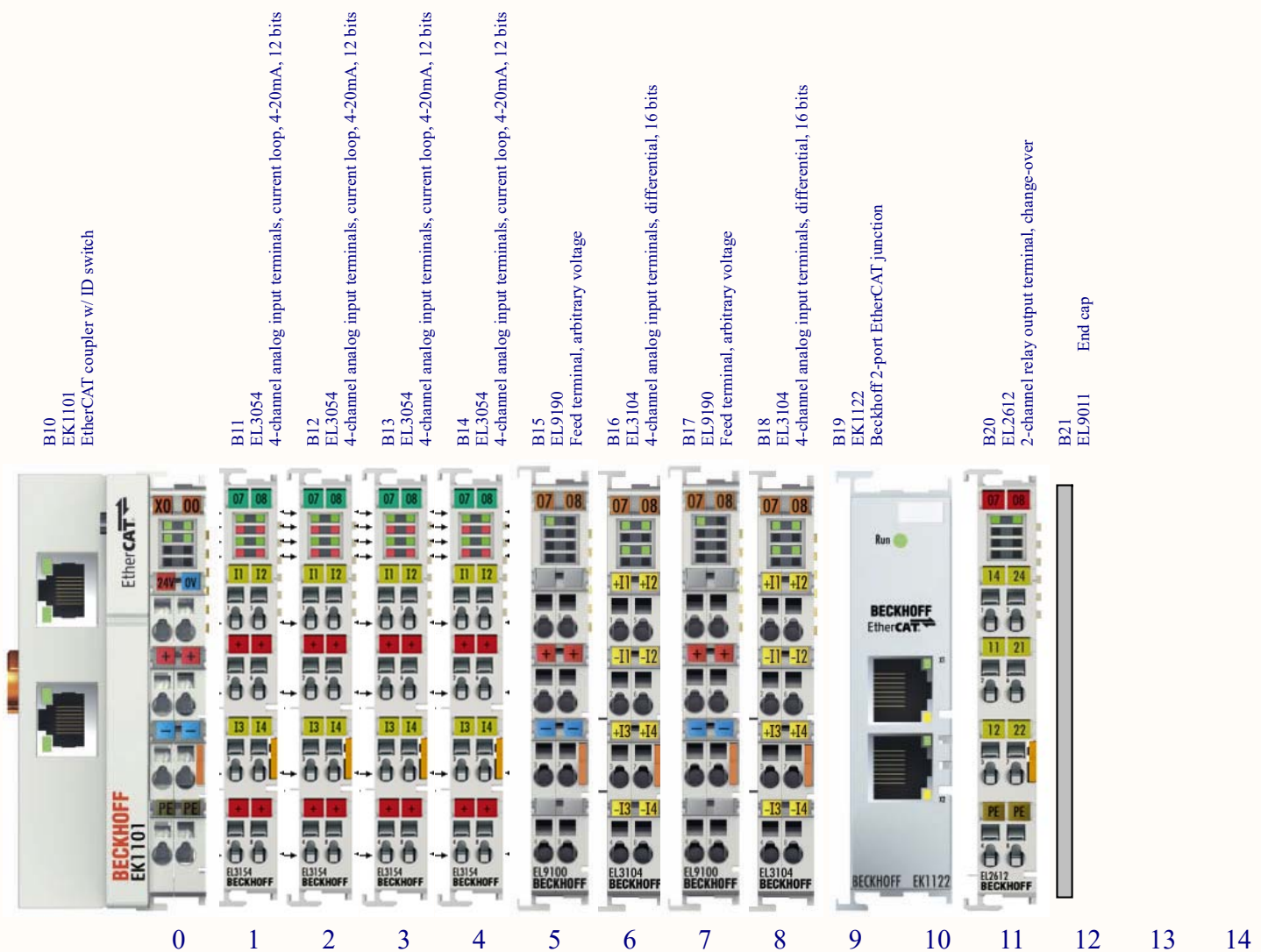
2

3

4

5

6



Ebus 24V
 Power contacts 24V

Environmental IO PZT Rotation Stage Feed

Power budget:
 EL3054: 0.130 A (4x)
 EL3104: 0.130 A (2x)
 EK1122: 0.220 A
 EL2612: 0.150 A

 1.150 A

Title P/I/T Controls Chassis: Right Rail		
Size B	Number D1101114	Revision 5
Date: 2/8/2019	Sheet 4	4 of
File: C:\Users\...\PSLControls4.SchDoc	Drawn By: Daniel Sigg	