



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

This EtherCAT chassis uses copper only.
Mount the modular adapters to the front panel.

Using CAT5 patch cables:

- Connect the front panel input to the first coupler (left rail).
 - Connect the output of the first coupler to the input of the third one.
 - Connect the front panel output to the output of the last coupler (right rail).
- 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
Ethernet patch cable, 1'

PN9
Ethernet patch cable, 1'

PN12
Adapter panel
LIGO
D1100108-v1

PN14
Adapter panel
LIGO
D1100108-v1

PN2
Name Plate
LIGO
D1101121-v2

PN6
Ethernet patch cable, 1'

PN10
Ethernet patch cable, 1'
Newark
21M5658

CAT5
Corner

CAT5
Corner

Blank

Blank

TBLOCK

PN21 Terminal Block	PN29 Terminal Block	PN39 Terminal Block	PN48 Terminal Block
PN22 Terminal Block	PN30 Terminal Block	PN40 Terminal Block	PN49 Terminal Block
PN23 Terminal Block	PN31 Terminal Block	PN41 Terminal Block	PN50 Terminal Block
PN24 Terminal Block	PN32 Terminal Block	PN42 Terminal Block	PN51 Terminal Block
PN25 Terminal Block	PN33 Terminal Block	PN43 Terminal Block	PN52 Terminal Block
Digi-Key 277-1483-ND		Digi-Key 277-1483-ND	
	PN34 Jumper, 10pos		PN53 Jumper, 10pos
PN26 End Plate	PN35 Jumper, 10pos	PN44 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

PN7
Adapter panel
LIGO
D1101122-v1

PN11
Adapter panel
LIGO
D0902557-v1

PN13
Adapter panel
LIGO
D0902557-v1

PN15
Adapter panel
LIGO
D1300132-v1/D

PN17
Adapter panel
LIGO
D1300132-v1/B

PN19
Adapter panel
LIGO
D1300132-v1/C

PN27
Adapter panel
LIGO
D1300132-v1/A

PN36
Adapter panel
LIGO
D1300143-v1

PN4
DB25F adapter
LIGO
D0902568-v1

PN8
DB25F adapter
LIGO
D0902568-v1

Blank

Blank

PN16
Rotation stage adapter
LIGO
D1300131-v1/E

PN18
Rotation stage adapter
LIGO
D1300131-v1/E

PN20
Rotation stage adapter
LIGO
D1300131-v1/E

PN28
Rotation stage adapter
LIGO
D1300131-v1/E

PN37
DB15/male

E1 #6-32 1/4" flat
E2 #6-32 1/4" flat
McMaster-Carr
91099A205

E3 #6-32 1/4" flat
E4 #6-32 1/4" flat
McMaster-Carr
91099A205

Blank

Blank

E5 #6-32 1/4" flat
E6 #6-32 1/4" flat
McMaster-Carr
91099A205

E7 #6-32 1/4" flat
E8 #6-32 1/4" flat
McMaster-Carr
91099A205

E9 #6-32 1/4" flat
E10 #6-32 1/4" flat
McMaster-Carr
91099A205

E11 #6-32 1/4" flat
E12 #6-32 1/4" flat
McMaster-Carr
91099A205

PN38
DB15/male
Digi-Key
A32503-ND

E13 Jack screw
E14 Jack screw
E15 Jack screw
E16 Jack screw
L-Com
SDG450XS

LASER
ANTE

DIODE/
CHILLER

Blank

Blank

Spare
Rotation Stage

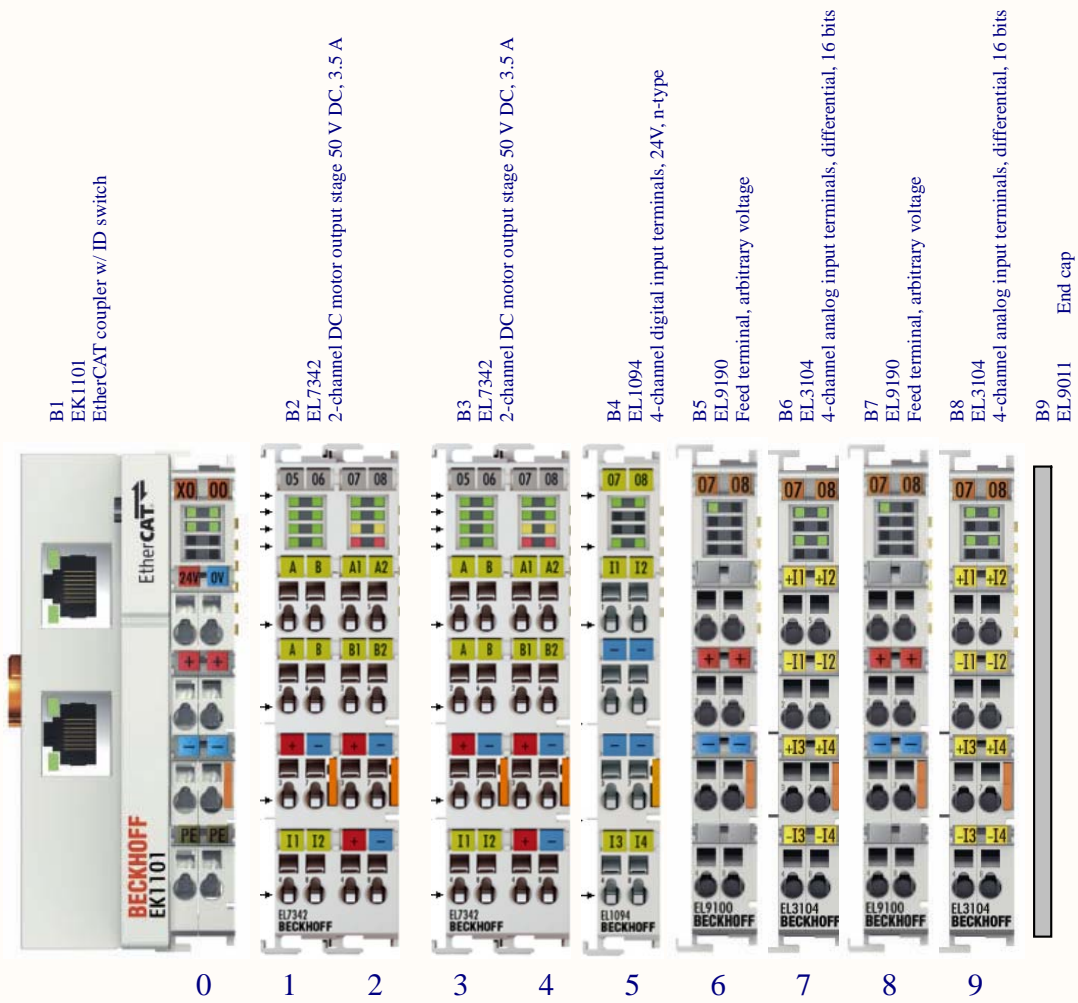
TCS X
Rotation Stage

TCS Y
Rotation Stage

IO
Rotation Stage

IO PZT

Title PSL/IO/TCS Controls Chassis		
Size B	Number D1101114	Revision 3
Date: 5/9/2013	Sheet 1 of 4	
File: D:\Users\...\PSLControls1.SchDoc	Drawn By: Daniel Sigg	



Ebus	24V	—	—
Power contacts	24V	—	—

Rotation Stage

IO PZT

Power budget:
 EL3104: 0.180 A (2x)
 EL1094: 0.090 A (1x)
 EL7342: 0.140 A (2x)

 0.730 A

Title P/I/T Controls Chassis: Left Rail		
Size B	Number D1101114	Revision 3
Date: 5/9/2013	Sheet 2 of 4	
File: D:\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	3			
Date:	5/9/2013	Sheet 3 of 4			
File:	D:\Users\...\PSLControls3.SchDoc	Drawn By: Daniel Sigg			

1

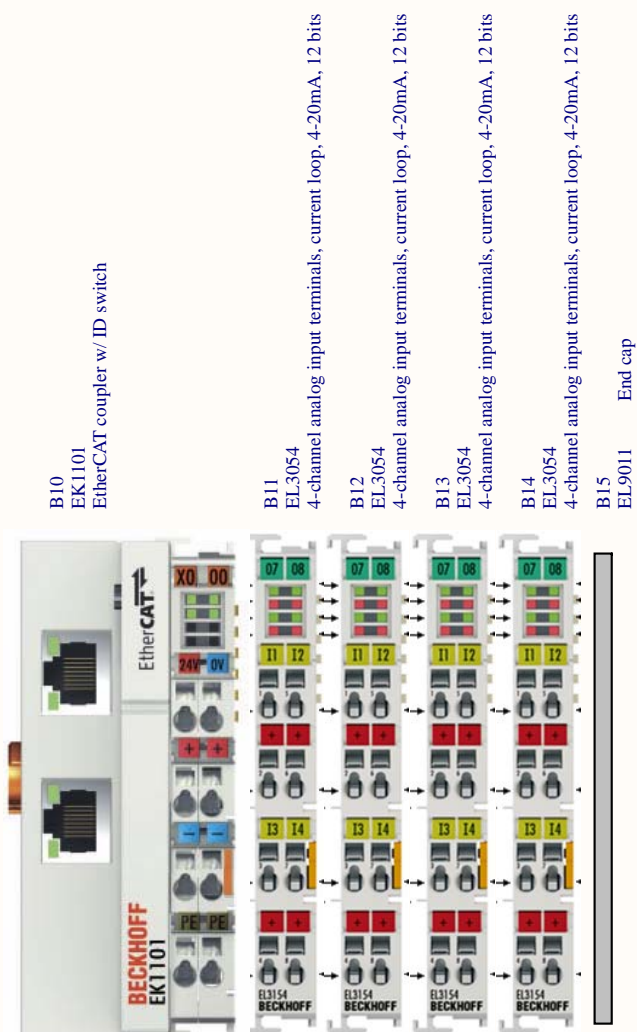
2

3

4

5

6



B10
EK1101
EtherCAT coupler w/ ID switch

B11
EL3054
4-channel analog input terminals, current loop, 4-20mA, 12 bits

B12
EL3054
4-channel analog input terminals, current loop, 4-20mA, 12 bits

B13
EL3054
4-channel analog input terminals, current loop, 4-20mA, 12 bits

B14
EL3054
4-channel analog input terminals, current loop, 4-20mA, 12 bits

B15
EL9011
End cap

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Ebus 24V
Power contacts 24V

Environmental

Power budget:
EL3054: 0.130 A (4x)

0.520 A

Title P/I/T Controls Chassis: Right Rail		
Size B	Number D1101114	Revision 3
Date: 5/9/2013	Sheet 4 of 4	
File: D:\Users\...\PSLControls4.SchDoc	Drawn By: Daniel Sigg	