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 second one.
- Connect the output of the second coupler to the input of the third one.
- Connect the front panel output to the output of the last coupler (right rail).

Ports

IN	OUT	1A	2A
PN1 EtherCAT chassis LIGO D0902552-v3	PN5 Ethernet patch cable, 1'	PN9 Ethernet patch cable, 1'	PN13 Adapter panel LIGO D1100108-v1	PN16 Adapter panel LIGO D1100108-v1
PN2 Name Plate LIGO D1102435-v1	PN6 Ethernet patch cable, 1'	PN10 Ethernet patch cable, 1' Newark 21M5658		
CAT5 Corner	CAT5 Corner	Blank	Blank

TBLOCK

PN27 Terminal Block	PN33 Terminal Block	PN40 Terminal Block	PN46 Terminal Block
PN28 Terminal Block	PN34 Terminal Block	PN41 Terminal Block	PN47 Terminal Block
PN29 Terminal Block	PN35 Terminal Block	PN42 Terminal Block	PN48 Terminal Block
PN30 Terminal Block	PN36 Terminal Block	PN43 Terminal Block	PN49 Terminal Block
PN31 Terminal Block Digi-Key 277-1483-ND	PN37 Terminal Block	PN44 Terminal Block Digi-Key 277-1483-ND	PN50 Terminal Block
	PN38 Jumper, 10pos		PN51 Jumper, 10pos
PN32 End Plate Digi-Key 277-1495-ND	PN39 Jumper, 10pos Digi-Key 277-1494-ND	PN45 End Plate Digi-Key 277-1495-ND	PN52 Jumper, 10pos Digi-Key 277-1494-ND

Slots

1	2	3	4	5	6	7	8	9
PN3 Adapter panel LIGO D1102438-v1-A	PN7 Adapter panel LIGO D1102438-v1-B	PN11 Adapter panel LIGO D1102438-v1-C	PN14 Adapter panel LIGO D1102438-v1-D	PN17 Adapter panel LIGO D1102438-v1-E	PN19 Adapter panel LIGO D1102438-v1-F	PN21 Adapter panel LIGO D1102438-v1-G	PN23 Adapter panel LIGO D1102438-v1-H	PN25 Adapter panel LIGO D1102438-v1-I
PN4 DB37M adapter LIGO D0902569-v1	PN8 DB37M adapter LIGO D0902569-v1	PN12 DB37M adapter LIGO D0902569-v1	PN15 DB37M adapter LIGO D0902569-v1	PN18 DB37M adapter LIGO D0902569-v1	PN20 DB37M adapter LIGO D0902569-v1	PN22 DB37M adapter LIGO D0902569-v1	PN24 DB37M adapter LIGO D0902569-v1	PN26 DB37M adapter LIGO D0902569-v1
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	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	E13 #6-32 1/4" flat E14 #6-32 1/4" flat McMaster-Carr 91099A205	E15 #6-32 1/4" flat E16 #6-32 1/4" flat McMaster-Carr 91099A205	E17 #6-32 1/4" flat E18 #6-32 1/4" flat McMaster-Carr 91099A205
Demod E IMC WFS	Demod F REFL A	Demod G REFL B	Demod H POP A/B	Demod I Not used	Demod J AS A	Demod K AS B	Demod L AS 90	Demod M SQZ WFS

Title: **EtherCAT Corner 4**		
Size: B	Number: D1101266	Revision: 3
Date: 4/15/2017		Sheet 1 of 4
File: C:\Users\..\EtherCATCornerD1.SchDoc		Drawn By:Daniel Sigg

B1
EK1101
EtherCAT coupler w/ ID switch

B2
EL3104
4-channel analog input terminals, differential, 16 bits

B3
EL3104
4-channel analog input terminals, differential, 16 bits

B4
EL3104
4-channel analog input terminals, differential, 16 bits

B5
EL3104
4-channel analog input terminals, differential, 16 bits

B6
EL9190
Feed terminal, arbitrary voltage

B7
EL3104
4-channel analog input terminals, differential, 16 bits

B8
EL3104
4-channel analog input terminals, differential, 16 bits

B9
EL3104
4-channel analog input terminals, differential, 16 bits

B10
EL3104
4-channel analog input terminals, differential, 16 bits

B11
EL9410
Power supply terminals for E-bus, diagnostics

B12
EL3104
4-channel analog input terminals, differential, 16 bits

B13
EL3104
4-channel analog input terminals, differential, 16 bits

B14
EL3104
4-channel analog input terminals, differential, 16 bits

B15
EL3104
4-channel analog input terminals, differential, 16 bits

B16
EL9190
Feed terminal, arbitrary voltage

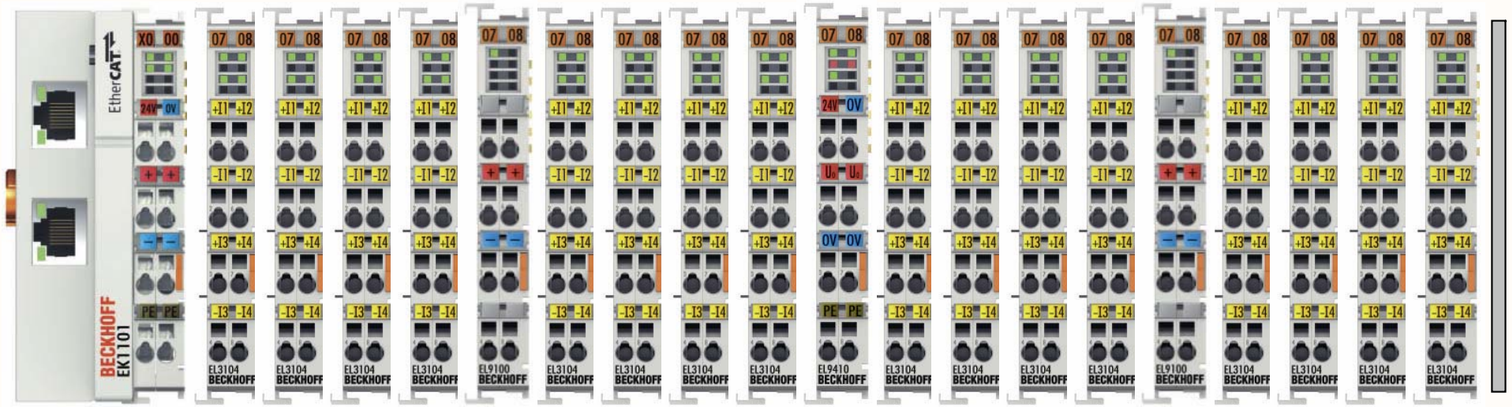
B17
EL3104
4-channel analog input terminals, differential, 16 bits

B18
EL3104
4-channel analog input terminals, differential, 16 bits

B19
EL3104
4-channel analog input terminals, differential, 16 bits

B20
EL3104
4-channel analog input terminals, differential, 16 bits

B21
EL9011
End cap



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Ebus	24V		—		24V		—
Power contacts	—		—		—		—

Demod J

```
Power budget:
EL3104: 0.180 A (8x)
-----------------
        1.440 A
```

Demod K

Demod L

```
Power budget:
EL3104: 0.180 A (8x)
-----------------
        1.440 A
```

Demod M

Title: **EtherCAT Corner 4: Left Rail**		
Size: B	Number: D1101266	Revision: 3
Date: 4/15/2017		Sheet 2 of 4
File: C:\Users\..\EtherCATCornerD2.SchDoc		Drawn By: Daniel Sigg

B22
EK1100
Beckhoff EtherCAT coupler

B23
EL3104
4-channel analog input terminals, differential, 16 bits

B24
EL3104
4-channel analog input terminals, differential, 16 bits

B25
EL3104
4-channel analog input terminals, differential, 16 bits

B26
EL3104
4-channel analog input terminals, differential, 16 bits

B27
EL9190
Feed terminal, arbitrary voltage

B28
EL3104
4-channel analog input terminals, differential, 16 bits

B29
EL3104
4-channel analog input terminals, differential, 16 bits

B30
EL3104
4-channel analog input terminals, differential, 16 bits

B31
EL3104
4-channel analog input terminals, differential, 16 bits

B32
EL9410
Power supply terminals for E-bus, diagnostics

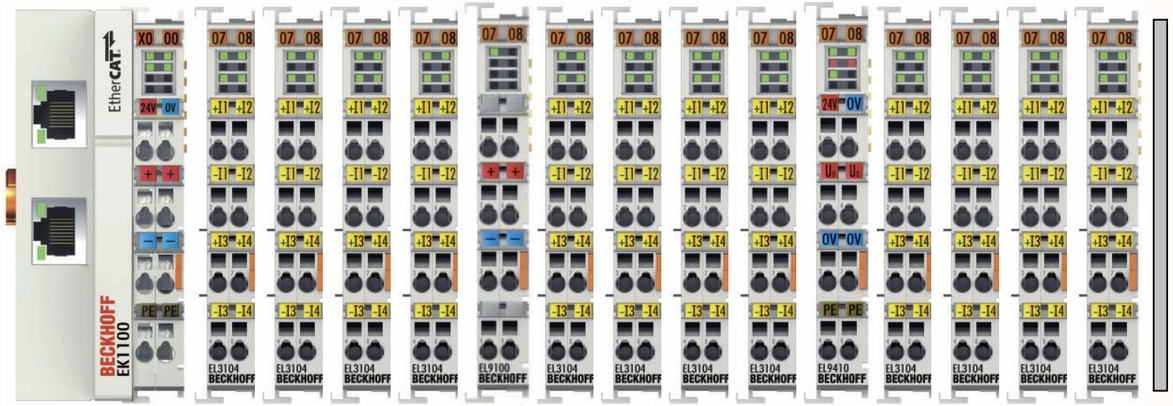
B33
EL3104
4-channel analog input terminals, differential, 16 bits

B34
EL3104
4-channel analog input terminals, differential, 16 bits

B35
EL3104
4-channel analog input terminals, differential, 16 bits

B36
EL3104
4-channel analog input terminals, differential, 16 bits

B37
EL9011
End cap



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Ebus	24V		—		24V		—
Power contacts	—		—		—		—

Demod F

```
Power budget:
EL3104: 0.180 A (8x)
----------------
        1.440 A
```

Demod G

Demod H

```
Power budget:
EL3104: 0.180 A (4x)
----------------
        0.720 A
```

Demod I

Title	**EtherCAT Corner 4: Middle Rail**		
Size: B	Number: D1101266		Revision: 3
Date: 4/15/2017		Sheet 3 of 4	
File: C:\Users\..\EtherCATCornerD3.SchDoc		Drawn By: Daniel Sigg	

B38
EK1100
Beckhoff EtherCAT coupler

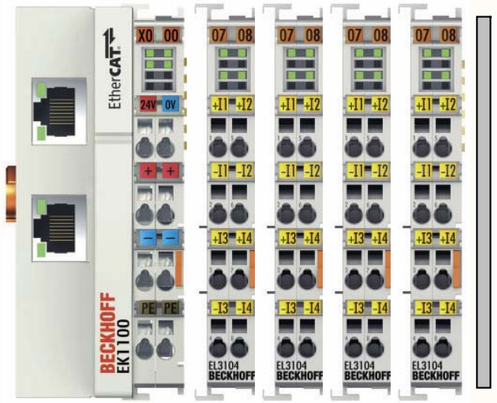
B39
EL3104
4-channel analog input terminals, differential, 16 bits

B40
EL3104
4-channel analog input terminals, differential, 16 bits

B41
EL3104
4-channel analog input terminals, differential, 16 bits

B42
EL3104
4-channel analog input terminals, differential, 16 bits

B43
EL9011
End cap



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

Ebus 24V

Power contacts —

Demod E

```
Power budget:
EL3104: 0.180 A (4x)
----------------
        0.720 A
```

Title	EtherCAT Corner 4: Right Rail		
Size: B	Number: D1101266	Revision: 3	
Date: 4/15/2017		Sheet 4 of 4	
File: C:\Users\..\EtherCATCornerD4.SchDoc		Drawn By: Daniel Sigg	