

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' PN6 Ethernet patch cable, 1'	PN9 Ethernet patch cable, 1' PN10 Ethernet patch cable, 1' Newark 21M5658	PN13 Adapter panel LIGO D1100108-v1	PN16 Adapter panel LIGO D1100108-v1
PN2 Name Plate LIGO D1102435-v1				

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	PN37 Terminal Block	PN44 Terminal Block	PN50 Terminal Block
Digi-Key 277-1483-ND		Digi-Key 277-1483-ND	
	PN38 Jumper, 10pos		PN51 Jumper, 10pos
PN32 End Plate	PN39 Jumper, 10pos	PN45 End Plate	PN52 Jumper, 10pos
Digi-Key 277-1495-ND	Digi-Key 277-1494-ND	Digi-Key 277-1495-ND	Digi-Key 277-1494-ND

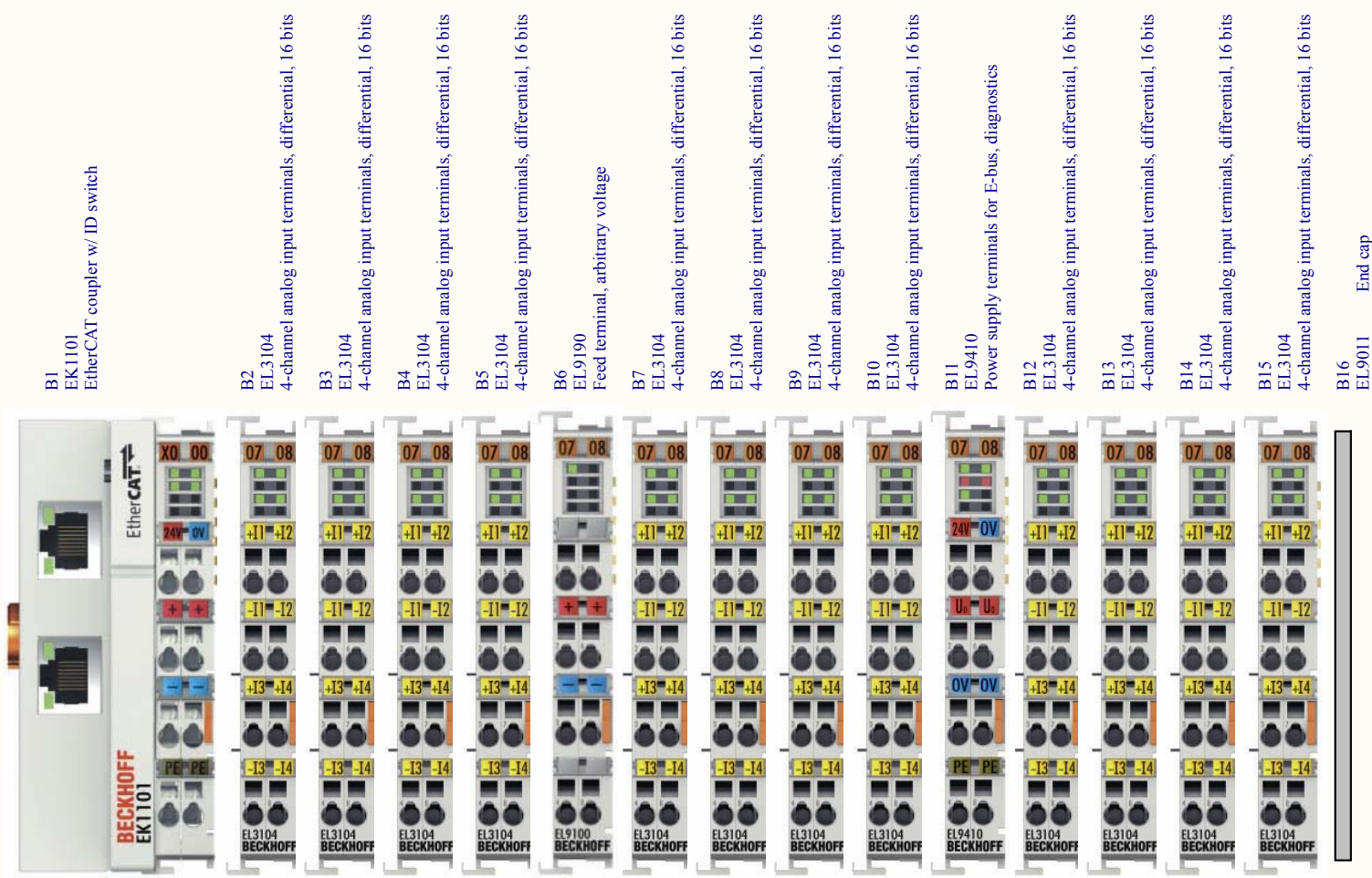
Slots

1 2 3 4 5 6 7 8 9

PN3 Adapter panel LIGO 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 MC Demod F REFL A Demod G REFL B Demod H REFL C Demod I REFL D Demod J AS A Demod K AS B Demod L AS C Demod M AS D

Title EtherCAT Corner 4		
Size B	Number D1101266	Revision 2
Date: 12/4/2015	Sheet 1 of 4	
File: D:\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
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
Power contacts —

Demod J

Power budget:
EL3104: 0.180 A (8x)

1.440 A

Demod K

Demod L

Power budget:
EL3104: 0.180 A (4x)

0.720 A

Title			EtherCAT Corner 4: Left Rail		
Size	Number			Revision	
B	D1101266			2	
Date:	12/4/2015	Sheet 2 of 4			
File:	D:\Users\...\EtherCATCornerD2.SchDoc	Drawn By: Daniel Sigg			

A

B

C

D

A

B

C

D

B17
EK1100
Beckhoff EtherCAT coupler

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

B22
EL9190
Feed terminal, arbitrary voltage

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

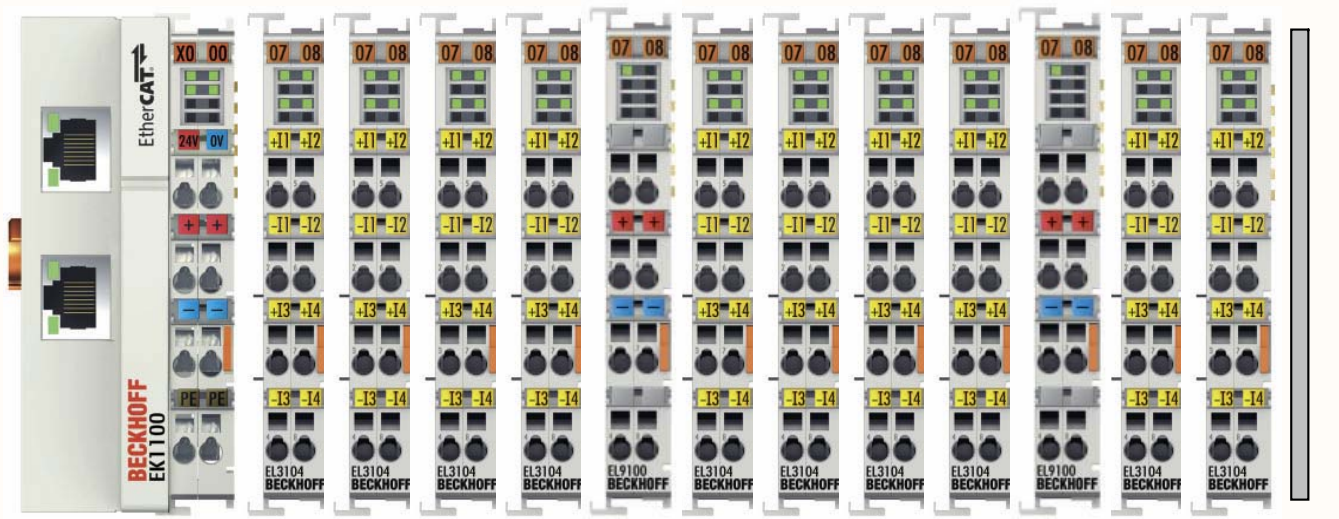
B26
EL3104
4-channel analog input terminals, differential, 16 bits

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
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

Power contacts —

Demod F

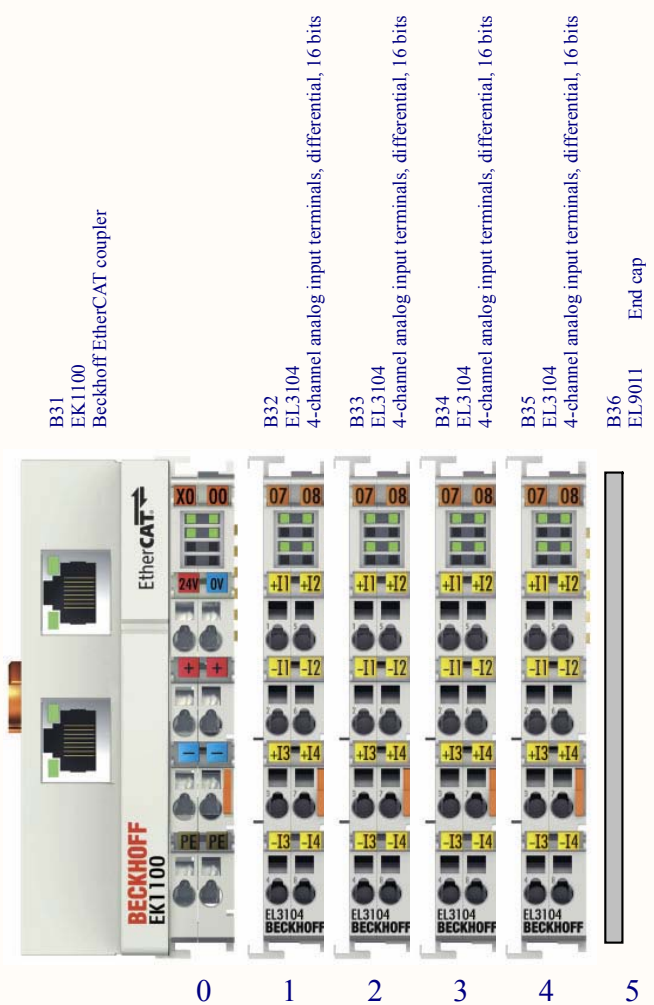
Demod G

Demod H

Power budget:
EL3104: 0.180 A (10x)

1.800 A

Title			EtherCAT Corner 4: Middle Rail	
Size	Number	Revision		
B	D1101266	2		
Date:	12/4/2015	Sheet 3 of 4		
File:	D:\Users\...\EtherCATCornerD3.SchDoc	Drawn By: Daniel Sigg		



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 2
Date: 12/4/2015	Sheet 4 of 4	
File: D:\Users\...\EtherCATCornerD4.SchDoc	Drawn By: Daniel Sigg	