



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

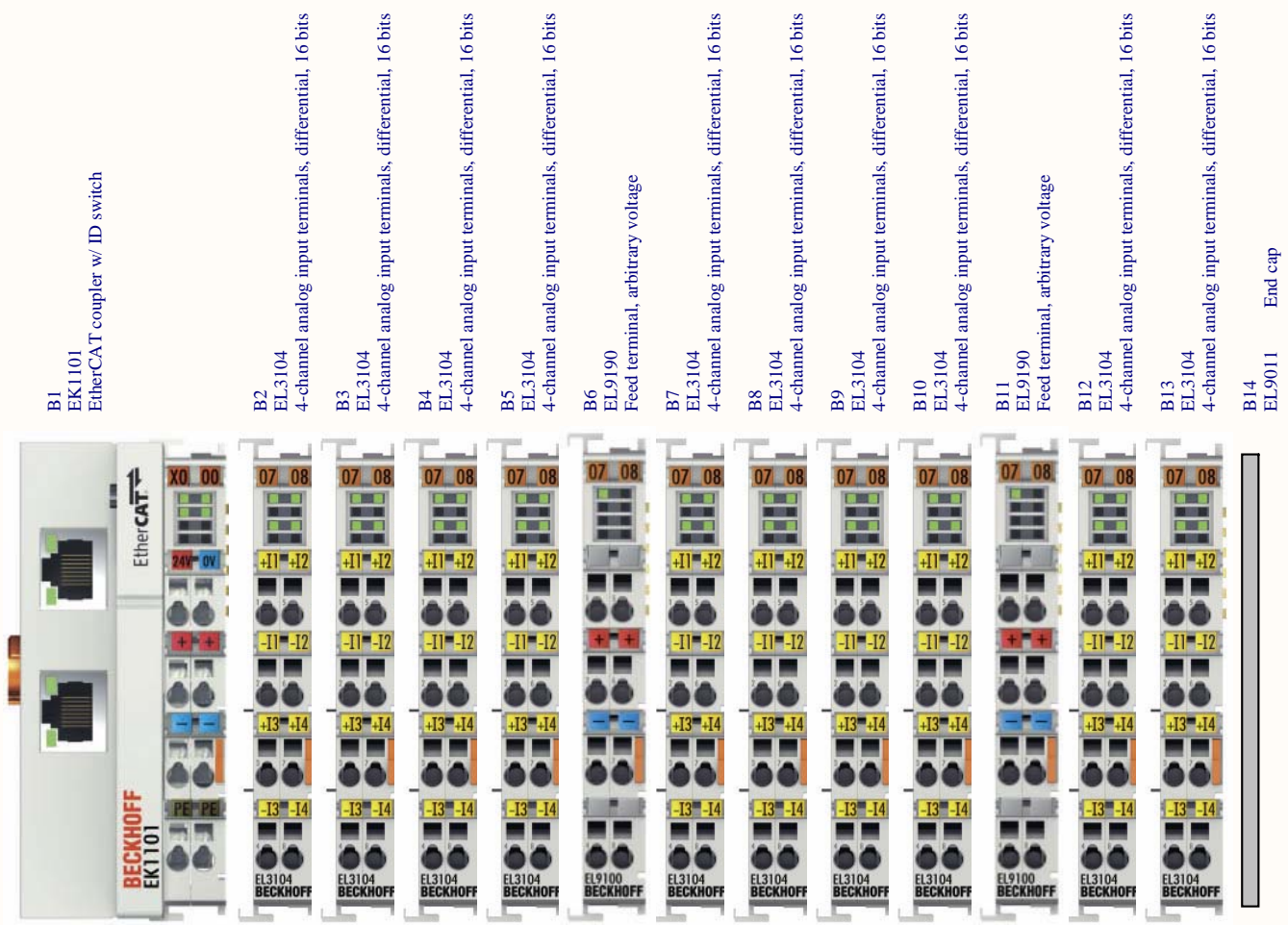
Slots

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	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	E13 #6-32 1/4" flat	E15 #6-32 1/4" flat	E17 #6-32 1/4" flat
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	E14 #6-32 1/4" flat	E16 #6-32 1/4" flat	E18 #6-32 1/4" flat
McMaster-Carr 91099A205	McMaster-Carr 91099A205	McMaster-Carr 91099A205	McMaster-Carr 91099A205	McMaster-Carr 91099A205	McMaster-Carr 91099A205	McMaster-Carr 91099A205	McMaster-Carr 91099A205	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 1
Date: 12/23/2011	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
EL9190
Feed terminal, arbitrary voltage

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

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

B14
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

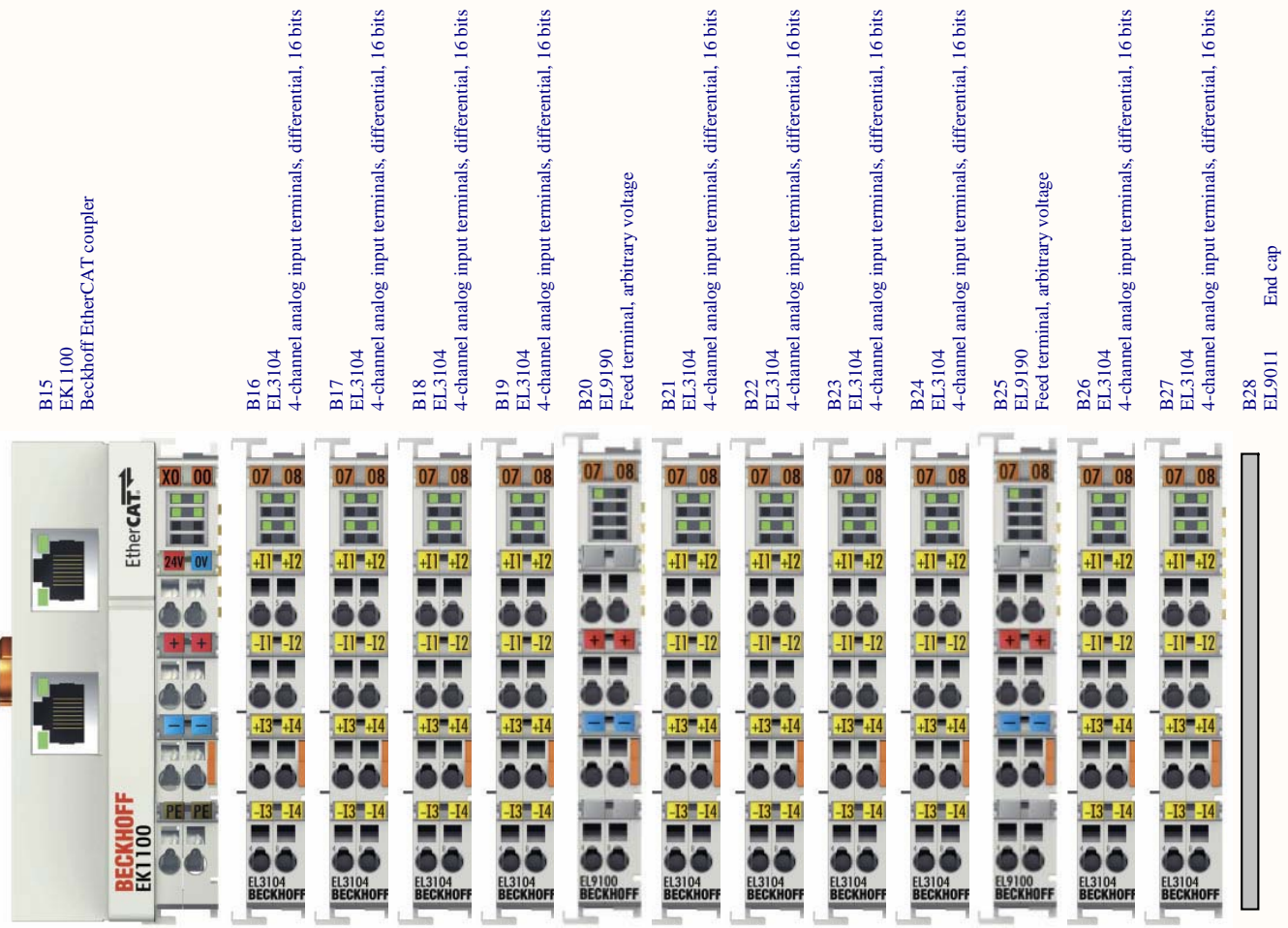
Demod K

Demod L

Power budget:
EL3104: 0.180 A (10x)

1.800 A

Title			EtherCAT Corner 4: Left Rail		
Size	Number			Revision	
B	D1101266			1	
Date:	12/23/2011	Sheet 2 of 4			
File:	C:\Users\...\EtherCATCornerD2.SchDoc	Drawn By: Daniel Sigg			



B15
EK1100
Beckhoff EtherCAT coupler

B16
EL3104
4-channel analog input terminals, differential, 16 bits

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
EL9190
Feed terminal, arbitrary voltage

B21
EL3104
4-channel analog input terminals, differential, 16 bits

B22
EL3104
4-channel analog input terminals, differential, 16 bits

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

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

B25
EL9190
Feed terminal, arbitrary voltage

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

B27
EL3104
4-channel analog input terminals, differential, 16 bits

B28
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

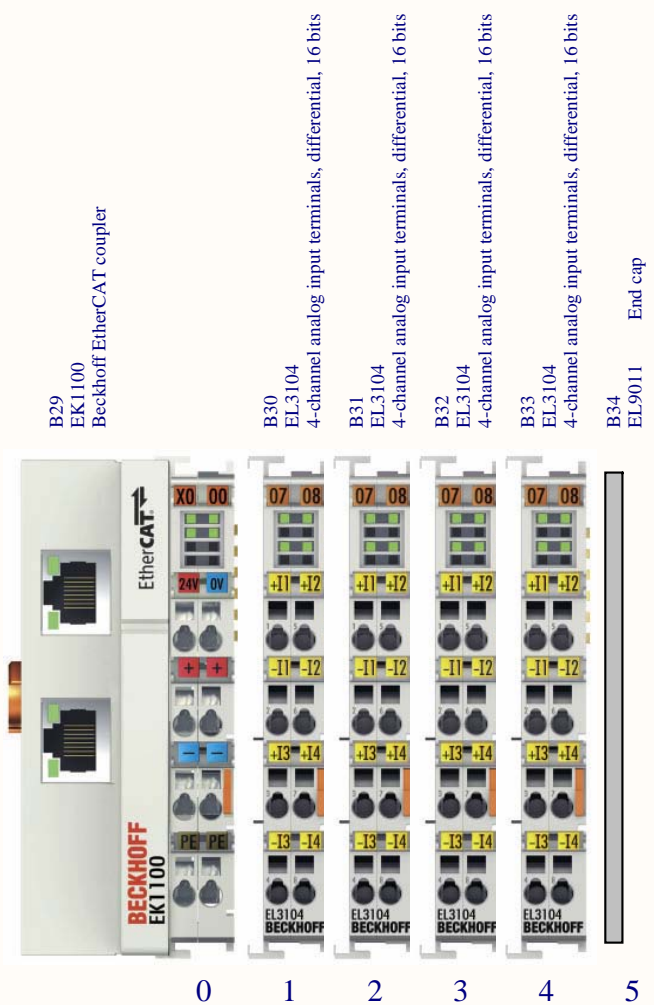
Demod G

Demod H

Power budget:
EL3104: 0.180 A (10x)

1.800 A

Title		EtherCAT Corner 4: Middle Rail	
Size	Number	Revision	
B	D1101266	1	
Date:	12/23/2011	Sheet 3 of 4	
File:	C:\Users\...\EtherCATCornerD3.SchDoc	Drawn By: Daniel Sigg	



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

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Power budget:
EL3104: 0.180 A (4x)
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0.720 A
  
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Title		EtherCAT Corner 4: Right Rail	
Size	Number	Revision	
B	D1101266	1	
Date:	12/23/2011	Sheet 4 of 4	
File:	C:\Users\...\EtherCATCornerD4.SchDoc	Drawn By: Daniel Sigg	