

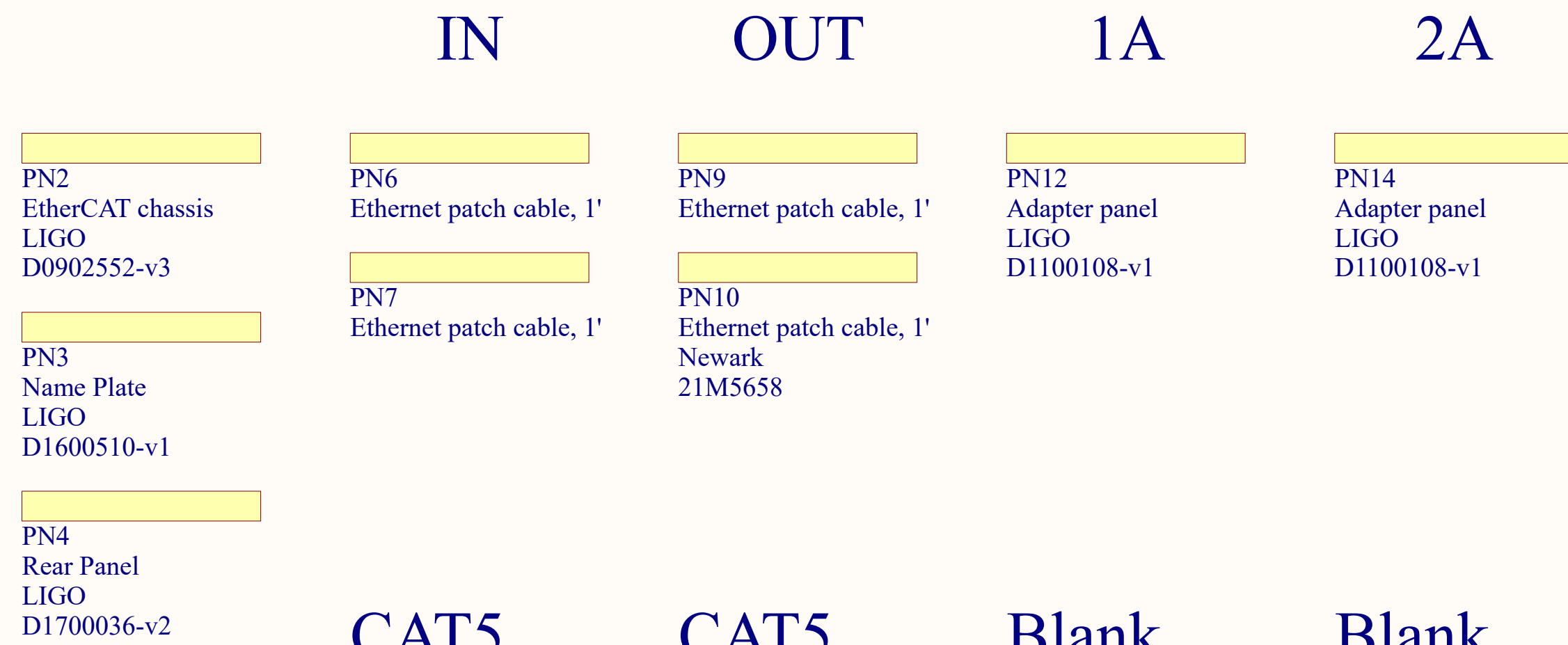
Mount the terminal block on spare DIN rail space.  
Use the terminal block to distribute the 24V supply.

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

Using CAT5 patch cables:

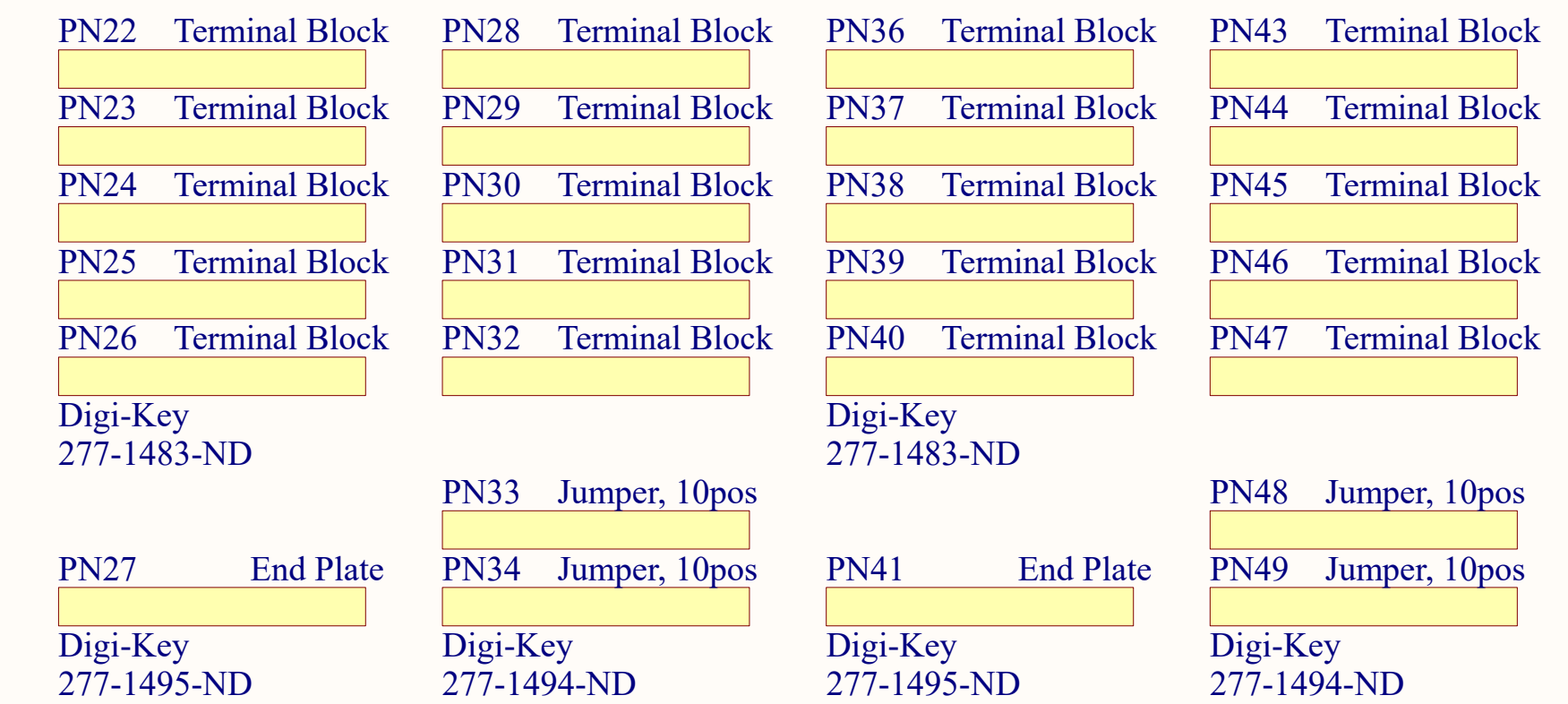
- Connect the front panel input to the first coupler (left rail).
- Connect the output of the first coupler to the input of the second one.
- Connect the output of the second coupler to the input of the third one.
- Connect the front panel output to the output of the last coupler (right rail).

### Ports

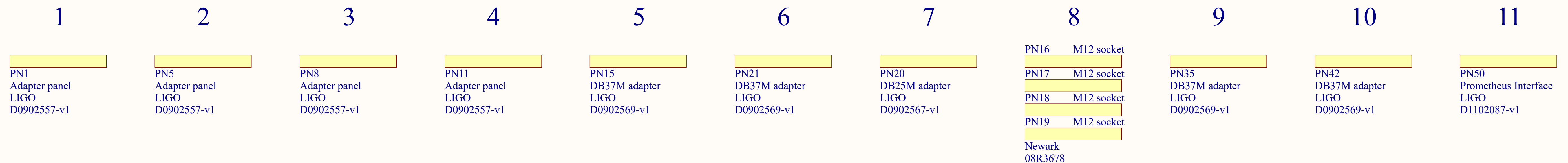


CAT5 Squeezer    CAT5 Squeezer    Blank    Blank

### TBLOCK



### Slots



M12	Color	PT100
1	brown	RL+
2	white	R+
3	blue	RL-
4	black	R-

External Sensor, e.g.,  
Newark 35M2405 & 15M4877  
Connector, e.g.,  
Newark 15M4864

Title <b>EtherCAT Squeezer 3</b>		
Size B	Number <b>D1600509</b>	Revision <b>1</b>
Date: 7/24/2017	Sheet 1 of 4	
File: D:\Users\...\EtherCATSqueezerC1.SchDot	Drawn By: Daniel Sigg	

B1  
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B2  
EK1101  
EtherCAT coupler w/ ID switch

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

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

B5  
EL1124  
4-channel digital input terminals, 5V

B12  
EL9190  
Feed terminal, arbitrary voltage

B13  
EL2124  
4-channel digital output terminals, 5V

B14  
EL2124  
4-channel digital output terminals, 5V

B15  
EL2124  
4-channel digital output terminals, 5V

B16  
EL2124  
4-channel digital output terminals, 5V

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

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

B19  
EL9410  
Power supply terminals for E-bus, diagnostics

B20  
EL2124  
4-channel digital output terminals, 5V

B21  
EL2124  
4-channel digital output terminals, 5V

B22  
EL2124  
4-channel digital output terminals, 5V

B23  
EL3102  
2-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

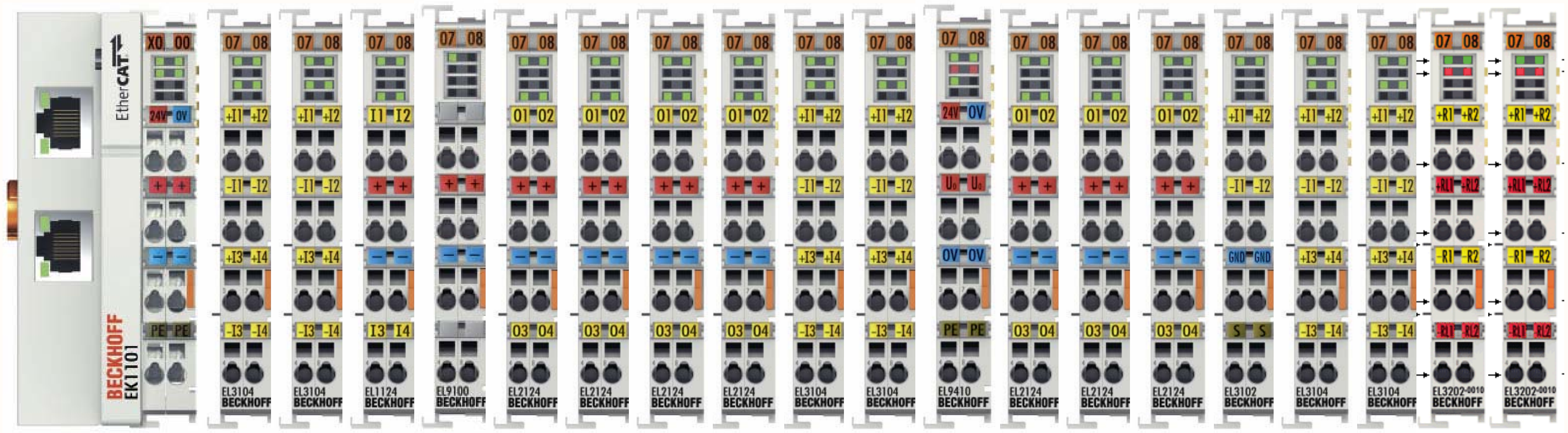
B38  
EL3692  
2-channel high precision resistance terminal

B39  
EL3692  
2-channel high precision resistance terminal

B26  
EL9011  
End cap

B27  
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B28  
5V/0.6A isolated DC-DC converter, Omron S82S-7305



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

Ebus 24V — 24V  
Power contacts 5V 5V

DC\_1 Laser DC PDs DC PDs Temperature DC\_2 DC\_3  
concentrator 8 concentrator 7

Power budget:  
EL3104: 0.130 A (4x)  
EL4234: 0.265 A (0x)  
EL1124: 0.090 A (1x)  
EL2124: 0.130 A (4x)  
-----  
1.130 A

Power budget:  
EL3104: 0.130 A (2x)  
EL3102: 0.170 A (1x)  
EL3692: 0.220 A (2x)  
EL1124: 0.090 A (1x)  
EL2124: 0.130 A (2x)  
-----  
1.220 A

Title		
<b>EtherCAT Squeezer 3: Left Rail</b>		
Size	Number	Revision
B	<b>D1600509</b>	<b>1</b>
Date:	7/24/2017	Sheet 2 of 4
File:	D:\Users\...\EtherCATSqueezerC2.SchDoc Drawn By:Daniel Sigg	

B50  
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B31  
EK1100  
Beckhoff EtherCAT coupler

B35  
EL1124  
4-channel digital input terminals, 5V

B36  
EL1124  
4-channel digital input terminals, 5V

B37  
EL1124  
4-channel digital input terminals, 5V

B32  
EL2124  
4-channel digital output terminals, 5V

B33  
EL2124  
4-channel digital output terminals, 5V

B34  
EL2124  
4-channel digital output terminals, 5V

B12  
EL9190  
Feed terminal, arbitrary voltage

B41  
EL1124  
4-channel digital input terminals, 5V

B42  
EL2124  
4-channel digital output terminals, 5V

B43  
EL2124  
4-channel digital output terminals, 5V

B44  
EL2124  
4-channel digital output terminals, 5V

B45  
EL3104  
4-channel analog input terminals, differential, 16 bits

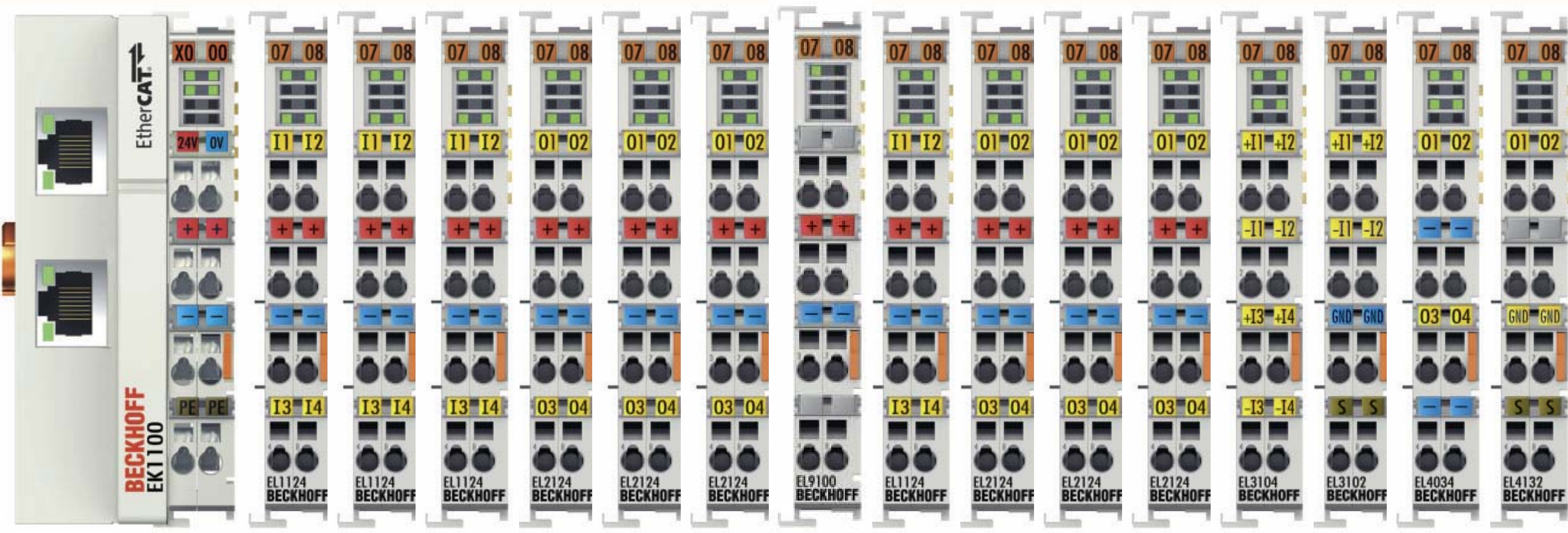
B46  
EL3102  
2-channel analog input terminals, differential, 16 bits

B47  
EL4134  
4-channel analog output terminals, differential, 16 bits

B48  
EL4132  
2-channel analog output terminals, differential, 16 bits

B49  
EL9011  
End cap

B50  
5V/0.6A isolated DC-DC converter, Omron S82S-7305



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 5V

24V  
5V

DC\_4 Flipper/TTL IO

TTFSS

DC\_5

Power budget:  
 EL3102: 0.170 A (1x)  
 EL3104: 0.130 A (1x)  
 EL4132: 0.210 A (1x)  
 EL4134: 0.265 A (1x)  
 EL1124: 0.090 A (4x)  
 EL2124: 0.130 A (6x)  
 -----  
 1.915 A

Title		
<b>EtherCAT Squeezer 3: Middle Rail</b>		
Size	Number	Revision
B	<b>D1600509</b>	<b>1</b>
Date:	7/24/2017	Sheet 3 of 4
File:	D:\Users\...\EtherCATSqueezerC3.SchDoc Drawn By:Daniel Sigg	

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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 21 22

Ebus 24V  
 Power contacts 5V

Empty

Title		<b>EtherCAT Squeezer 3: Right Rail</b>	
Size	Number	Revision	
B	<b>D1600509</b>	<b>1</b>	
Date:	7/24/2017	Sheet 4 of 4	
File:	D:\Users\...\EtherCATSqueezerC4.SchDoc Drawn By:Daniel Sigg		

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