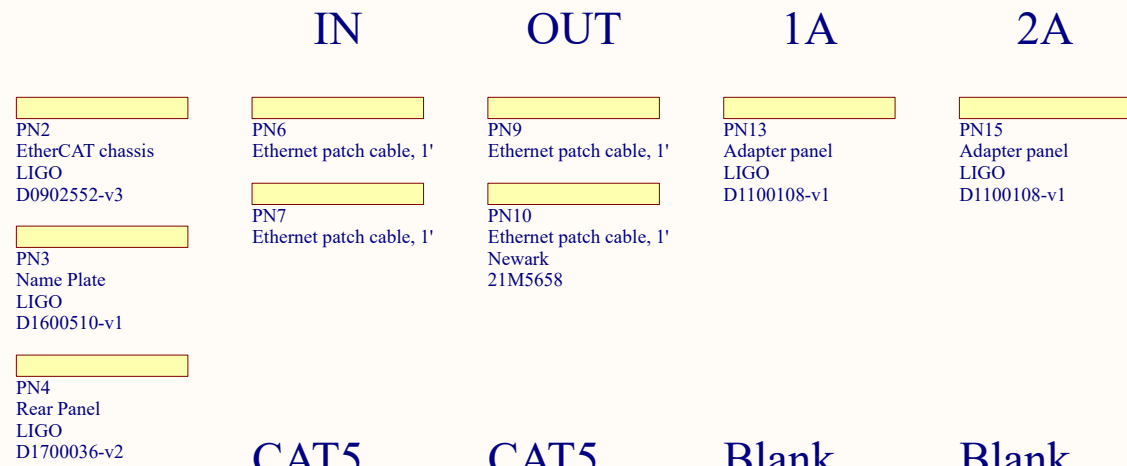


Mount the terminal block on spare DIN rail space.  
Use the terminal block to distribute the 24V supply.

This EtherCAT chassis uses copper only.  
Mount the modular adapters to the front panel.  
Using CAT5 patch cables:

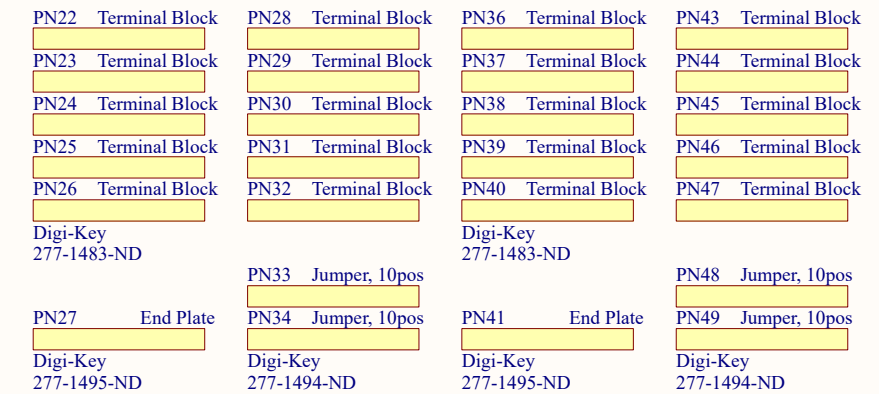
- Connect the front panel input to the first coupler (left rail).
- Connect the output of the first coupler to the input of the second one.
- Connect the output of the second coupler to the input of the third one.
- Connect the front panel output to the output of the last coupler (right rail).

### Ports

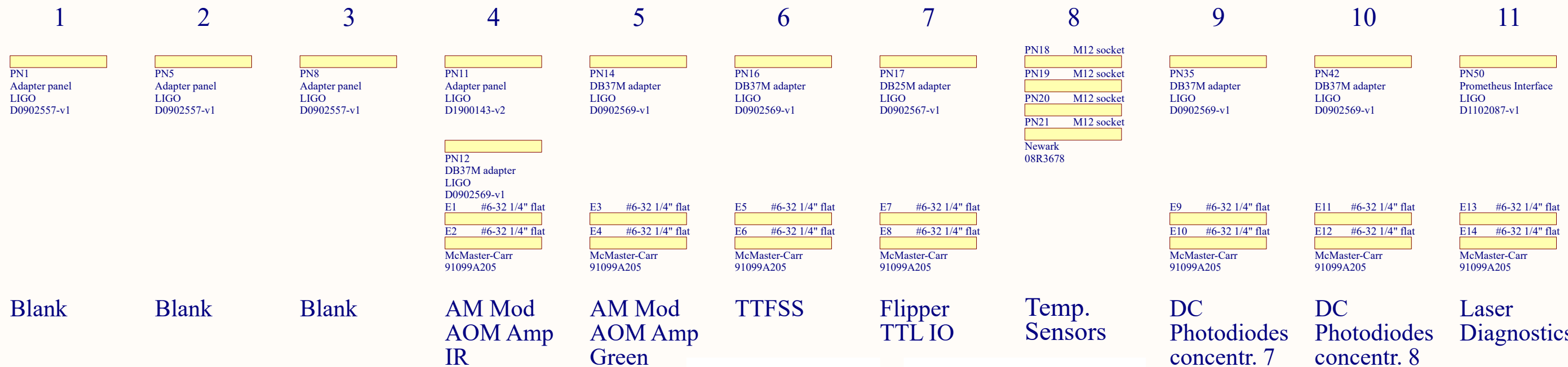


CAT5 Squeezer    CAT5 Squeezer    Blank    Blank

### TBLOCK



### Slots



Blank    Blank    Blank    AM Mod AOM Amp IR    AM Mod AOM Amp Green    TTFSS    Flipper TTL IO    Temp. Sensors    DC Photodiodes concentr. 7    DC Photodiodes concentr. 8    Laser Diagnostics

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>3</b>
Date: 7/31/2019	Sheet 1	4 of 4
File: C:\Users\...\EtherCATSqueezerC1.SchDoc 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

B6  
EL9190  
Feed terminal, arbitrary voltage

B7  
EL2124  
4-channel digital output terminals, 5V

B8  
EL2124  
4-channel digital output terminals, 5V

B9  
EL2124  
4-channel digital output terminals, 5V

B10  
EL2124  
4-channel digital output terminals, 5V

B11  
EL3104  
4-channel analog input terminals, differential, 16 bits

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

B13  
EL9410  
Power supply terminals for E-bus, diagnostics

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  
EL3102  
2-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

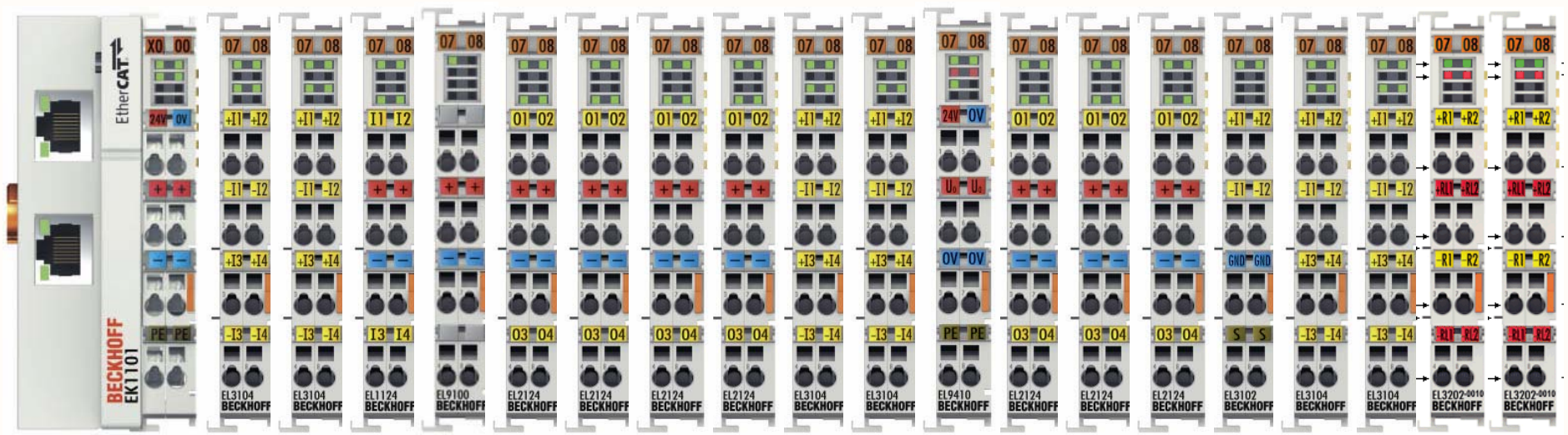
B20  
EL3692  
2-channel high precision resistance terminal

B21  
EL3692  
2-channel high precision resistance terminal

B22  
EL9011  
End cap

B23  
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B24  
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 5V

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

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 B	Number <b>D1600509</b>	Revision <b>3</b>
Date: 7/31/2019	Sheet 2 4 of	Drawn By: Daniel Sigg
File: C:\Users\...\EtherCATSqueezerC2.SchDoc		

A

B

C

D

A

B

C

D

B25  
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B26  
EK1100  
Beckhoff EtherCAT coupler

B27  
EL1124  
4-channel digital input terminals, 5V

B28  
EL1124  
4-channel digital input terminals, 5V

B29  
EL1124  
4-channel digital input terminals, 5V

B30  
EL2124  
4-channel digital output terminals, 5V

B31  
EL2124  
4-channel digital output terminals, 5V

B32  
EL2124  
4-channel digital output terminals, 5V

B33  
EL9410  
Power supply terminals for E-bus, diagnostics

B34  
EL1124  
4-channel digital input terminals, 5V

B35  
EL2124  
4-channel digital output terminals, 5V

B36  
EL2124  
4-channel digital output terminals, 5V

B37  
EL2124  
4-channel digital output terminals, 5V

B38  
EL3104  
4-channel analog input terminals, differential, 16 bits

B39  
EL3102  
2-channel analog input terminals, differential, 16 bits

B40  
EL4134  
4-channel analog output terminals, differential, 16 bits

B41  
EL4132  
2-channel analog output terminals, differential, 16 bits

B42  
EL9410  
Power supply terminals for E-bus, diagnostics

B43  
EL3104  
4-channel analog input terminals, differential, 16 bits

B44  
EL4134  
4-channel analog output terminals, differential, 16 bits

B45  
EL1124  
4-channel digital input terminals, 5V

B46  
EL2124  
4-channel digital output terminals, 5V

B47  
EL2124  
4-channel digital output terminals, 5V

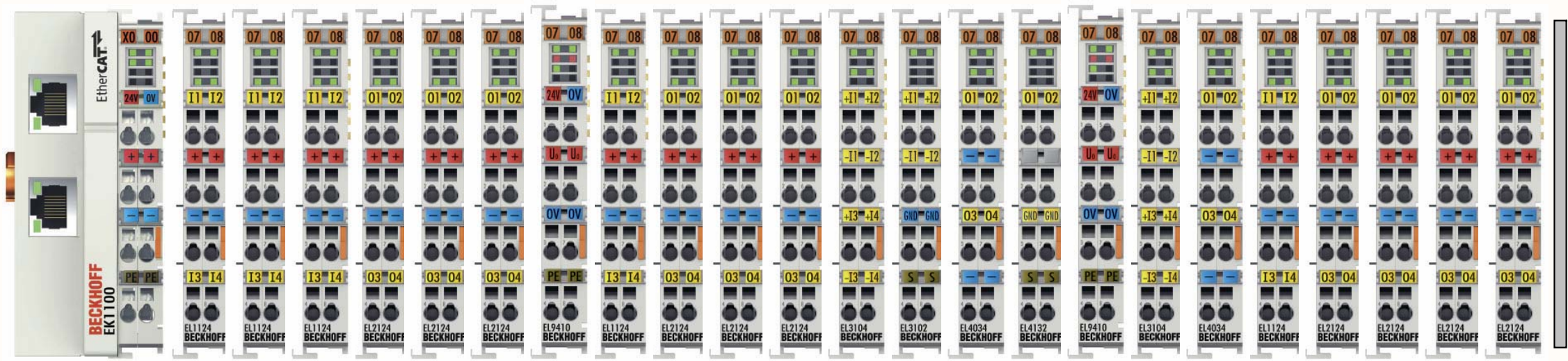
B48  
EL2124  
4-channel digital output terminals, 5V

B49  
EL2124  
4-channel digital output terminals, 5V

B50  
EL9011  
End cap

B51  
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B52  
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

24V  
5V

DC\_4 Flipper/TTL IO

TTFSS

AM Mod. AOM Amp (Green)

DC\_5  
DC\_6

Power budget:  
EL1124: 0.090 A (3x)  
EL2124: 0.130 A (3x)  
-----  
0.660 A

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 (1x)  
EL2124: 0.130 A (3x)  
-----  
1.255 A

Power budget:  
EL3104: 0.130 A (1x)  
EL4134: 0.265 A (1x)  
EL1124: 0.090 A (1x)  
EL2124: 0.130 A (4x)  
-----  
1.005 A

Title		
<b>EtherCAT Squeezer 3: Middle Rail</b>		
Size	Number	Revision
B	<b>D1600509</b>	<b>3</b>
Date:	7/31/2019	Sheet 3 4 of
File:	C:\Users\...\EtherCATSqueezer3.SchDoc	Drawn By: Daniel Sigg

B53  
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B54  
EK1100  
Beckhoff EtherCAT coupler

B55  
EL3104  
4-channel analog input terminals, differential, 16 bits

B56  
EL4134  
4-channel analog output terminals, differential, 16 bits

B57  
EL1124  
4-channel digital input terminals, 5V

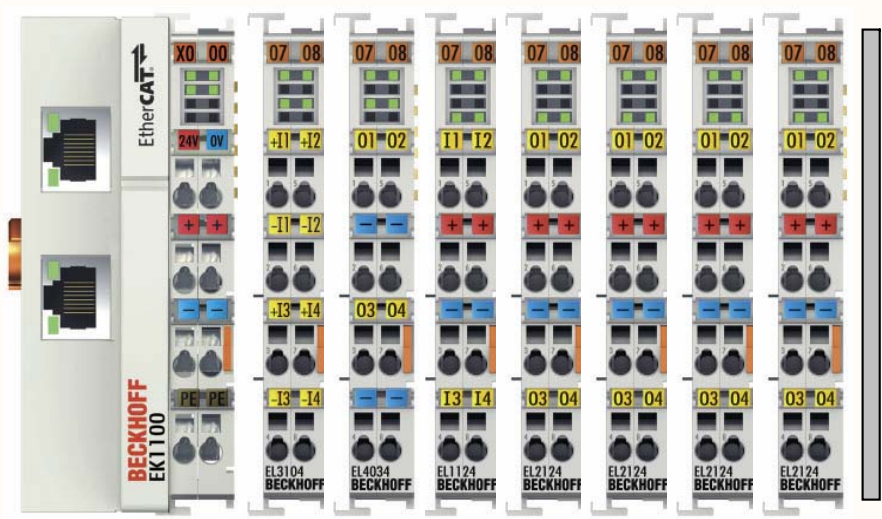
B58  
EL2124  
4-channel digital output terminals, 5V

B59  
EL2124  
4-channel digital output terminals, 5V

B60  
EL2124  
4-channel digital output terminals, 5V

B61  
EL2124  
4-channel digital output terminals, 5V

B62  
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

Ebus 24V  
Power contacts 5V

DC\_7 AM Mod. AOM Amp (IR)

Power budget:  
 EL3104: 0.130 A (1x)  
 EL4134: 0.265 A (1x)  
 EL1124: 0.090 A (1x)  
 EL2124: 0.130 A (4x)  
 -----  
 1.005 A

Title			<b>EtherCAT Squeezer 3: Right Rail</b>		
Size	Number			Revision	
B	D1600509			3	
Date:	7/31/2019	Sheet 4	4 of		
File:	C:\Users\...\EtherCATSqueezerC4.SchDoc	Drawn By: Daniel Sigg			