

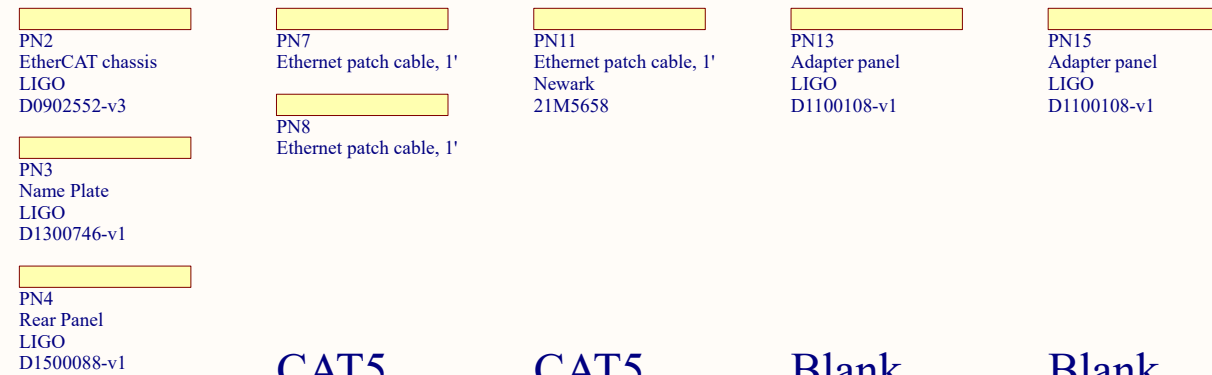
Mount the terminal block on spare DIN rail space.
Use the terminal block to distribute the 24V supply.

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 front panel output to the output of the second coupler (middle rail).

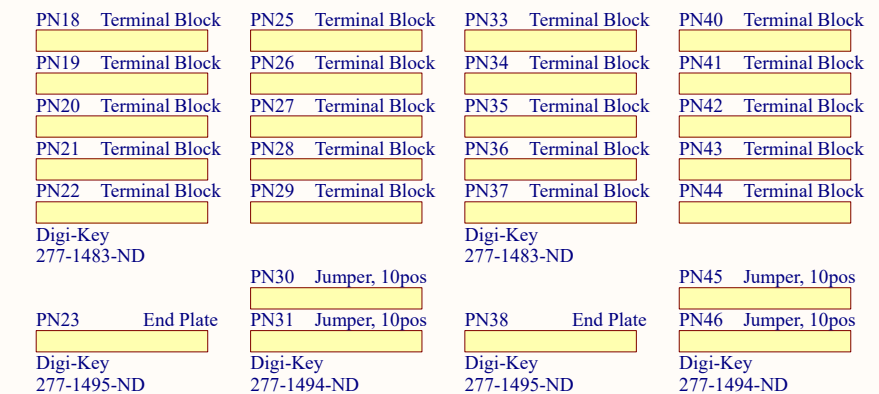
Ports

IN OUT 1A 2A



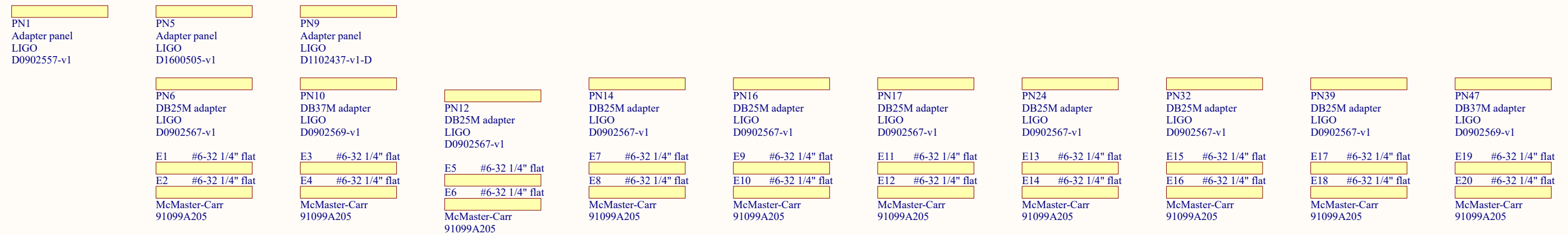
CAT5 Corner CAT5 Corner Blank Blank

TBLOCK



Slots

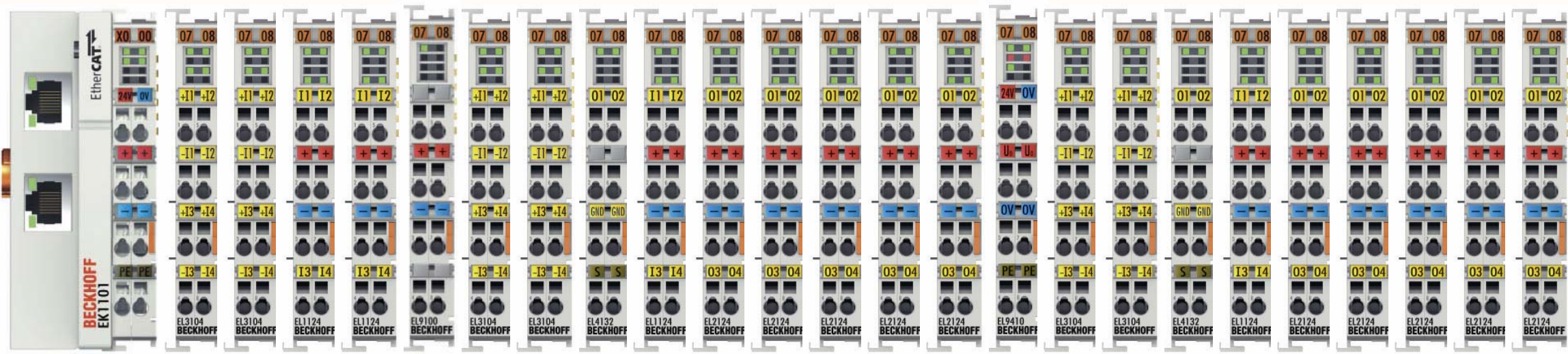
1 2 3 4 5 6 7 8 9 10 11



Blank Frequency Difference Mixer RF Amp 4 EOM Driver A EOM Driver B Fast Shutter HAM6 VCO PLL A VCO A VCO PLL B VCO B RF Amp 3

Title			EtherCAT Corner 6		
Size	Number	Revision			
B	D1300745	4			
Date:	1/21/2017	Sheet 1 of 4			
File:	C:\Users\...\EtherCATCornerF1.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 EL1124 4-channel digital input terminals, 5V
- B7 EL9190 Feed terminal, arbitrary voltage
- B8 EL3104 4-channel analog input terminals, differential, 16 bits
- B9 EL3104 4-channel analog input terminals, differential, 16 bits
- B10 EL4132 2-channel analog output terminals, differential, 16 bits
- B11 EL1124 4-channel digital input terminals, 5V
- B12 EL2124 4-channel digital output terminals, 5V
- 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 EL9410 Power supply terminals for E-bus, diagnostics
- B18 EL3104 4-channel analog input terminals, differential, 16 bits
- B19 EL3104 4-channel analog input terminals, differential, 16 bits
- B20 EL4132 2-channel analog output terminals, differential, 16 bits
- B21 EL1124 4-channel digital input terminals, 5V
- B22 EL2124 4-channel digital output terminals, 5V
- B23 EL2124 4-channel digital output terminals, 5V
- B24 EL2124 4-channel digital output terminals, 5V
- B25 EL2124 4-channel digital output terminals, 5V
- B26 EL2124 4-channel digital output terminals, 5V
- B27 EL9011 End cap
- B28 5V/0.6A isolated DC-DC converter, Omron S82S-7305
- B29 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 —
 Power contacts 5V 5V

24V
 5V
 Low Noise VCO w/ PLL
 B
 Low Noise VCO w/ PLL
 A
 DC_1
 RF Amps C
 DC_2
 DC_3

Power budget:
 EL3104: 0.130 A (4x)
 EL4134: 0.265 A (1x)
 EL1124: 0.090 A (3x)
 EL2124: 0.130 A (5x)

 1.705 A

Power budget:
 EL3104: 0.130 A (2x)
 EL4134: 0.265 A (1x)
 EL1124: 0.090 A (1x)
 EL2124: 0.130 A (5x)

 1.265 A

Title EtherCAT Corner 6: Left Rail		
Size B	Number D1300745	Revision 4
Date: 1/21/2017	Sheet 2 of 4	
File: C:\Users\...\EtherCATCornerF2.SchDoc	Drawn By: Daniel Sigg	

B30
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B31
EK1100
Beckhoff EtherCAT coupler

B32
EL1098
8-channel digital input terminals, 24V

B33
EL2004
4-channel digital output terminals, 24V

B34
EL9190
Feed terminal, arbitrary voltage

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

B36
EL1124
4-channel digital input terminals, 5V

B37
EL2124
4-channel digital output terminals, 5V

B38
EL2124
4-channel digital output terminals, 5V

B39
EL2124
4-channel digital output terminals, 5V

B40
EL9190
Feed terminal, arbitrary voltage

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

B42
EL1124
4-channel digital input terminals, 5V

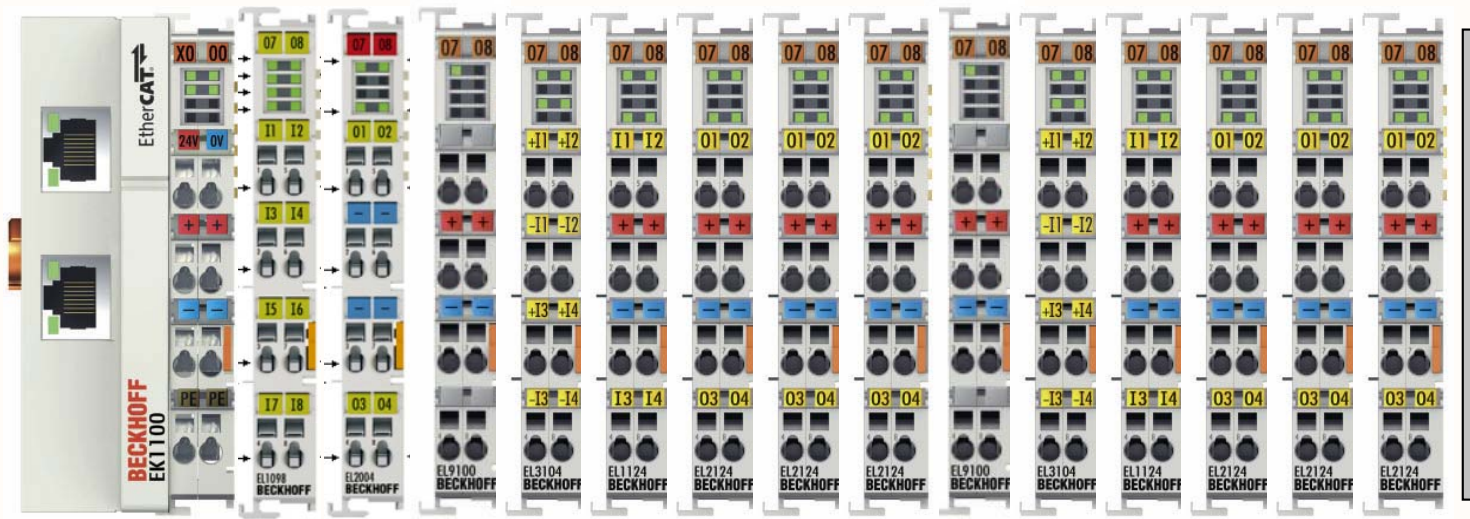
B43
EL2124
4-channel digital output terminals, 5V

B44
EL2124
4-channel digital output terminals, 5V

B45
EL2124
4-channel digital output terminals, 5V

B46
EL9011
End cap

B47
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

Ebus 24V
Power contacts 5V

DC_4 Fast Shutter EOM Driver B EOM Driver A DC_5

Power budget:
 EL1908: 0.090 A (1x)
 EL2004: 0.100 A (1x)
 EL3104: 0.130 A (2x)
 EL1124: 0.090 A (2x)
 EL2124: 0.130 A (6x)

 1.410 A

Title EtherCAT Corner 6: Middle Rail		
Size B	Number D1300745	Revision 4
Date: 1/21/2017	Sheet 3 of 4	
File: C:\Users\...\EtherCATCornerF3.SchDoc	Drawn By: Daniel Sigg	

B48
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B49
EK1100
Beckhoff EtherCAT coupler

B50
EL3104
4-channel analog input terminals, differential, 16 bits

B51
EL3104
4-channel analog input terminals, differential, 16 bits

B52
EL3104
4-channel analog input terminals, differential, 16 bits

B53
EL1124
4-channel digital input terminals, 5V

B54
EL1124
4-channel digital input terminals, 5V

B55
EL1124
4-channel digital input terminals, 5V

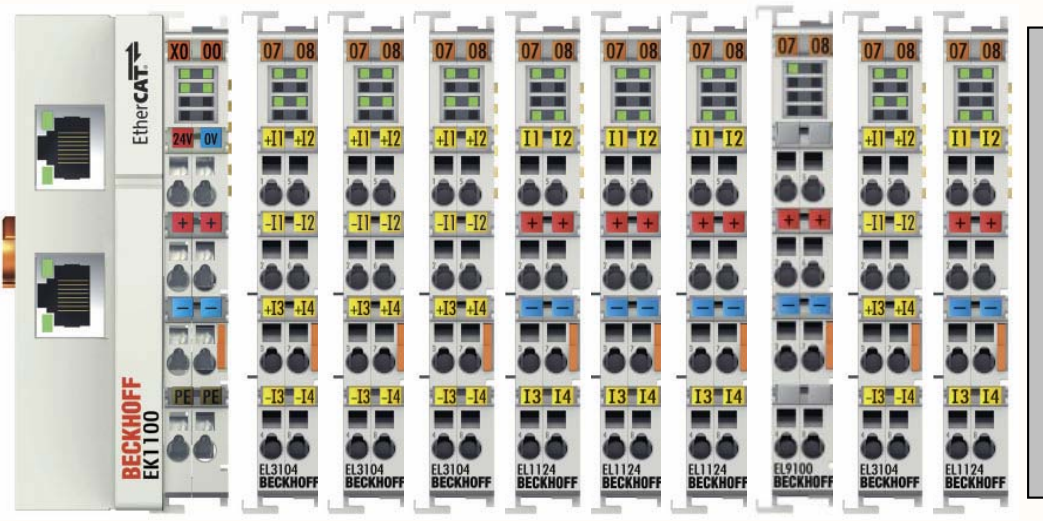
B56
EL9190
Feed terminal, arbitrary voltage

B57
EL3104
4-channel analog input terminals, differential, 16 bits

B58
EL1124
4-channel digital input terminals, 5V

B59
EL9011
End cap

B7
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
Power contacts 5V

24V
5V

DC_6 RF Amps D

RF Frequency
Difference Mixer

DC_7

Power budget:
EL1124: 0.090 A (4x)
EL3104: 0.130 A (4x)

0.880 A

Title			EtherCAT Corner 5: Right Rail		
Size	Number	Revision			
B	D1300745	4			
Date:	1/21/2017	Sheet 4 of 4			
File:	C:\Users\...\EtherCATCornerF4.SchDoc	Drawn By: Daniel Sigg			