

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

- PN2 EtherCAT chassis LIGO D0902552-v3
- PN3 Name Plate LIGO D1600506-v1
- PN4 Rear Panel LIGO D1700022-v2

OUT

- PN6 Ethernet patch cable, 1'
- PN7 Ethernet patch cable, 1'

A/B

- PN12 DB15/male
- PN13 DB15/male Digi-Key A32503-ND

- E9 Jack screw
- E10 Jack screw
- E11 Jack screw
- E12 Jack screw
- L-Com SDG450XS

CAT5 Squeezer

CAT5 Squeezer

PZT Driver

TBLOCK

- | | | | |
|----------------------|----------------------|----------------------|----------------------|
| PN19 Terminal Block | PN25 Terminal Block | PN33 Terminal Block | PN40 Terminal Block |
| PN20 Terminal Block | PN26 Terminal Block | PN34 Terminal Block | PN41 Terminal Block |
| PN21 Terminal Block | PN27 Terminal Block | PN35 Terminal Block | PN42 Terminal Block |
| PN22 Terminal Block | PN28 Terminal Block | PN36 Terminal Block | PN43 Terminal Block |
| PN23 Terminal Block | PN29 Terminal Block | PN37 Terminal Block | PN44 Terminal Block |
| Digi-Key 277-1483-ND | | Digi-Key 277-1483-ND | |
| | PN30 Jumper, 10pos | | PN45 Jumper, 10pos |
| PN24 End Plate | PN31 Jumper, 10pos | PN38 End Plate | PN46 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

10

11

12

- PN1 Adapter panel LIGO D0902557-v1

- PN5 TEC Driver LIGO D1201359-v1

- PN8 TEC Driver LIGO D1201359-v1

- PN11 DB25M adapter LIGO D0902567-v1

- PN14 DB37M adapter LIGO D0902569-v1

- PN15 DB37M adapter LIGO D0902569-v1

- PN16 DB25F adapter LIGO D0902568-v1

- PN17 DB37F adapter LIGO D0902568-v1

- PN18 DB25F adapter LIGO D0902569-v1

- PN32 DB37M adapter LIGO D0902569-v1

- PN39 DB25F adapter LIGO D0902568-v1

- PN47 DB25F adapter LIGO D0902568-v1

- E1 #6-32 1/4" flat McMaster-Carr 91099A205
- E2 #6-32 1/4" flat

- E3 #6-32 1/4" flat McMaster-Carr 91099A205
- E4 #6-32 1/4" flat

- E5 #6-32 1/4" flat McMaster-Carr 91099A205
- E6 #6-32 1/4" flat

- E7 #6-32 1/4" flat McMaster-Carr 91099A205
- E8 #6-32 1/4" flat

- E13 #6-32 1/4" flat McMaster-Carr 91099A205
- E14 #6-32 1/4" flat

- E15 #6-32 1/4" flat McMaster-Carr 91099A205
- E16 #6-32 1/4" flat

- E17 #6-32 1/4" flat McMaster-Carr 91099A205
- E18 #6-32 1/4" flat

- E19 #6-32 1/4" flat McMaster-Carr 91099A205
- E20 #6-32 1/4" flat

- E21 #6-32 1/4" flat McMaster-Carr 91099A205
- E22 #6-32 1/4" flat

- E23 #6-32 1/4" flat McMaster-Carr 91099A205
- E24 #6-32 1/4" flat

- E25 #6-32 1/4" flat McMaster-Carr 91099A205
- E26 #6-32 1/4" flat

Blank

OPO Oven

SHG Oven

VCXO

CM A/1

CM A/2

Delay A

Delay B

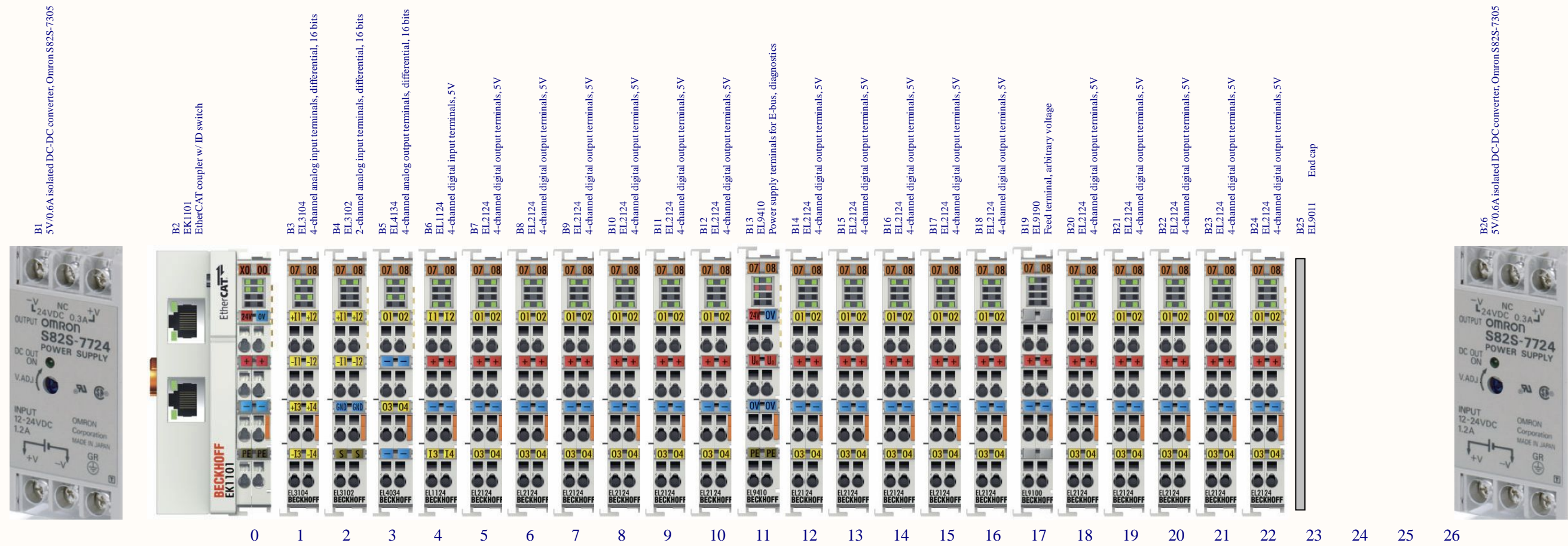
CM B/1

CM B/2

Delay C

Delay D

Title EtherCAT Squeezer 2		
Size B	Number D1600507	Revision 2
Date:	11/15/2023	Sheet 1 of 4
File:	C:\Users\...EtherCATSqueezerB1.SchDoc Drawn By: Daniel Sigg	



Ebus 24V
 Power contacts 5V

DC_1 Common mode servo B Delay line phase shifter C/D DC_2

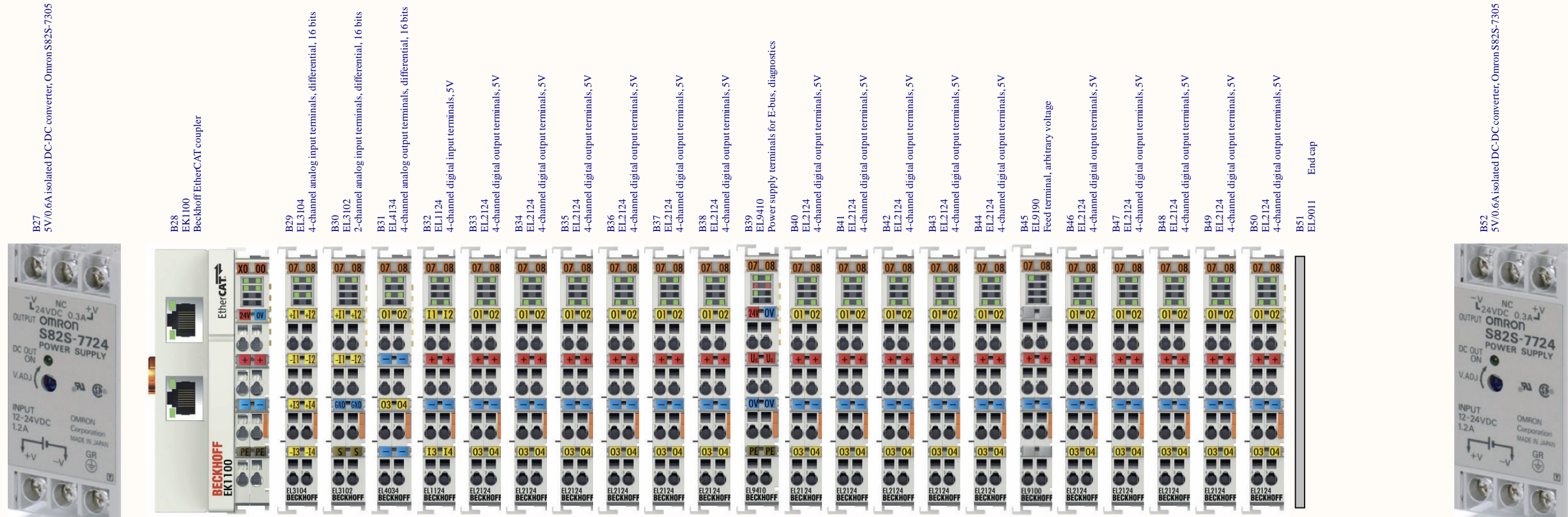
Power budget:
 EL3104: 0.130 A (2x)
 EL4234: 0.265 A (1x)
 EL1124: 0.090 A (1x)
 EL2124: 0.130 A (7x)

 1.395 A

Power budget:
 EL2124: 0.130 A (10x)

 1.300 A

Title EtherCAT Squeezer 2: Left Rail		
Size B	Number D1600507	Revision 2
Date:	11/15/2023	Sheet 2of 4
File:	C:\Users\...\\EtherCATSqueezerB2.SchDoc Drawn By:Daniel Sigg	



Ebus
Power contacts

24V
5V

24V
5V

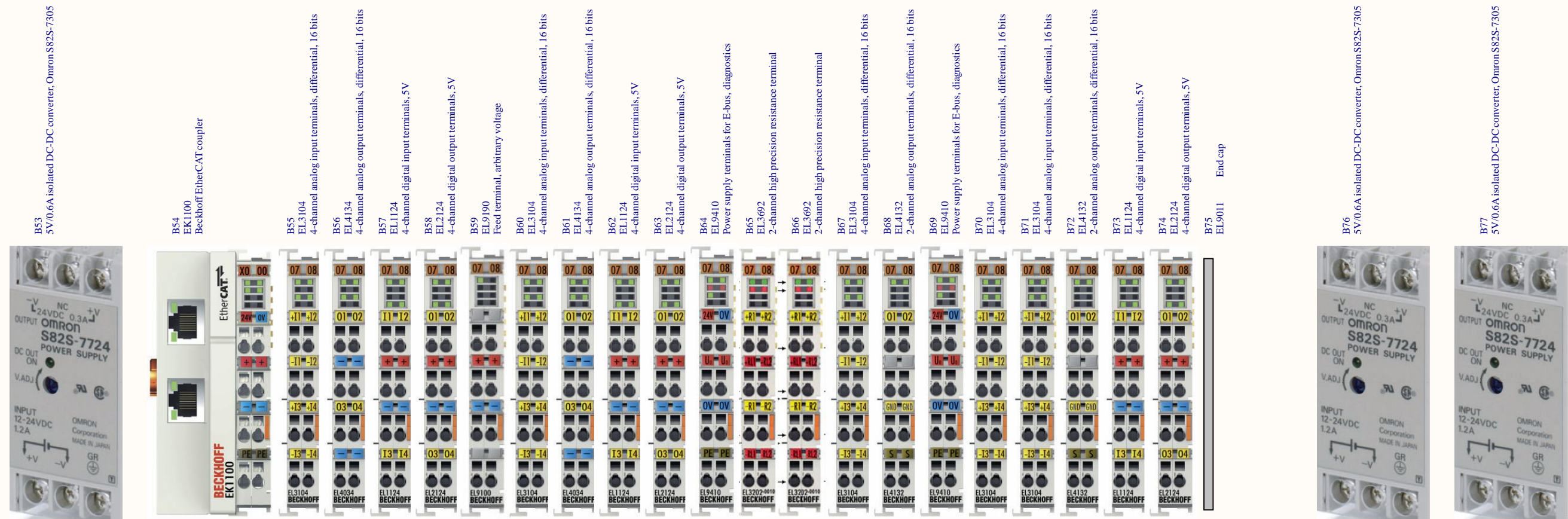
—
5V

DC_3 Common mode servo A Delay line phase shifter A/B DC_4

```
Power budget:
EL3104: 0.130 A (2x)
EL4234: 0.265 A (1x)
EL1124: 0.090 A (1x)
EL2124: 0.130 A (7x)
-----
1.395 A
```

```
Power budget:
EL2124: 0.130 A (10x)
-----
1.300 A
```

Title		
EtherCAT Squeezer 2: Middle Rail		
Size	Number	Revision
B	D1600507	2
Date:	11/15/2023	Sheet 3of 4
File:	C:\Users\...\EtherCATSqueezerB3.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	21	22
Ebus	24V					—					24V					24V							
Power contacts	5V					5V					24V					5V							
DC_5	PZT Driver A				PZT Driver B				SHG/OPO Oven				VCXO				DC_6	DC_7					

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

 1.230 A

Power budget:
 EL3104: 0.130 A (1x)
 EL3692: 0.220 A (2x)
 EL4132: 0.210 A (1x)

 0.780 A

Power budget:
 EL3104: 0.130 A (2x)
 EL4132: 0.210 A (1x)
 EL1124: 0.090 A (1x)
 EL2124: 0.130 A (1x)

 0.690 A

Title		
EtherCAT Squeezer 2: Right Rail		
Size	Number	Revision
B	D1600507	2
Date:	11/15/2023	Sheet 4 of 4
File:	C:\Users\daniel\Documents\EtherCATSqueezerB4.SchDoc Drawn By: Daniel Sigg	