



- PN1
EtherCAT chassis
LIGO
D0902552-v1
- PN2
Ethernet patch cable
- PN3
Ethernet patch cable
- PN4
Name Plate
LIGO
D0902589-v1-C
- PN5
Ethernet patch cable
- PN6
Ethernet patch cable
Newark
21M5658
- PN7
Alternate rear panel
LIGO
D0902589-v1-C

- PN8 DB9 cable
Digi-Key
H7PXH-0906M-ND
- PN9 DB9 cable
Digi-Key
H7PXH-0906M-ND
- PN10 DB9 female
Digi-Key
HFM09H-ND
- PN11 DB9 female
Digi-Key
HFM09H-ND
- PN12 Retainer screw
L-Com
SDF1
- PN13 Retainer screw
L-Com
SDF1

Slots

A	B	1	2	3	4	5	6	7	8	9
PN14 DB Socket Saver L-Com DGB9MF	PN15 DB9 Socket Saver L-Com DGB9MF	PN16 Adapter panel LIGO D0902557-v1	PN17 Adapter panel LIGO D1101039-v1-A	PN18 Adapter panel LIGO D1101039-v1-B	PN19 Adapter panel LIGO D1101038-v1	PN20 Adapter panel LIGO D0902606-v1-A	PN21 Adapter panel LIGO D0902606-v1-A	PN22 Adapter panel LIGO D0902605-v1	PN23 Adapter panel LIGO D0902587-v1-A	PN24 Adapter panel LIGO D0902587-v1-B
PN25 Hex standoff L-Com SDHS	PN26 Hex standoff L-Com SDHS		PN27 DB25M adapter LIGO D0902567-v1	PN28 DB25M adapter LIGO D0902567-v1	PN29 DB37M adapter LIGO D0902569-v1	PN30 DB37M adapter LIGO D0902569-v1	PN31 DB37M adapter LIGO D0902569-v1	PN32 DB37M adapter LIGO D0902569-v1	PN33 DB25F adapter LIGO D0902568-v1	PN34 DB25F adapter LIGO D0902568-v1
PN35 Jack screw L-Com SDG450XS	PN36 Jack screw L-Com SDG450XS		E1 #6-32 1/4" flat E9 #6-32 1/4" flat McMaster-Carr 91099A205	E2 #6-32 1/4" flat E10 #6-32 1/4" flat McMaster-Carr 91099A205	E3 #6-32 1/4" flat E11 #6-32 1/4" flat McMaster-Carr 91099A205	E4 #6-32 1/4" flat E12 #6-32 1/4" flat McMaster-Carr 91099A205	E5 #6-32 1/4" flat E13 #6-32 1/4" flat McMaster-Carr 91099A205	E6 #6-32 1/4" flat E14 #6-32 1/4" flat McMaster-Carr 91099A205	E7 #6-32 1/4" flat E15 #6-32 1/4" flat McMaster-Carr 91099A205	E8 #6-32 1/4" flat E16 #6-32 1/4" flat McMaster-Carr 91099A205
RS232	RS233	Blank	WFS 1	WFS 2	Flipper	Auxiliary A	Auxiliary B	RF Amp PD Interface	Delay A	Delay B

Title		Control Chassis C	
Size	Number	Revision	
B	D0902580	2	
Date:	6/3/2011	Sheet 1 of 4	
File:	C:\Users\...\CtrlChassisC1.SchDoc	Drawn By:	Daniel Sigg

B2
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B1
EK1101
Beckhoff EtherCAT coupler w/ ID switch

B3
EL2124
4-channel digital output terminals, 5V

B4
EL2124
4-channel digital output terminals, 5V

B5
EL2124
4-channel digital output terminals, 5V

B6
EL2124
4-channel digital output terminals, 5V

B7
EL2124
4-channel digital output terminals, 5V

B8
EL9400
Power supply terminals for E-bus

B9
EL3102
2-channel analog input terminals, differential, 16 bits

B10
EL3102
2-channel analog input terminals, differential, 16 bits

B11
EL3102
2-channel analog input terminals, differential, 16 bits

B12
EL3102
2-channel analog input terminals, differential, 16 bits

B13
EL3102
2-channel analog input terminals, differential, 16 bits

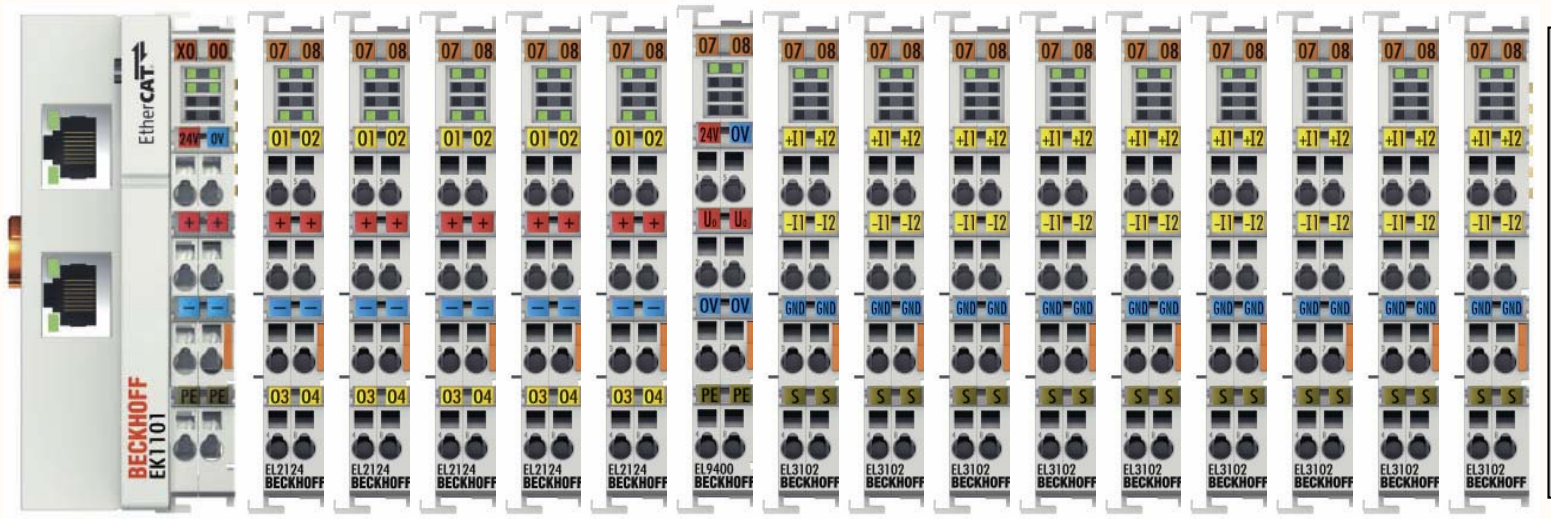
B14
EL3102
2-channel analog input terminals, differential, 16 bits

B15
EL3102
2-channel analog input terminals, differential, 16 bits

B16
EL3102
2-channel analog input terminals, differential, 16 bits

B17
EL3102
2-channel analog input terminals, differential, 16 bits

B18
EL9011
End cap



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Ebus 24V
Power contacts 5V

24V
24V

Delay line A/B

PD RF Amp

Power budget:
EL2124: 0.130 A (x5)

0.650 A

Power budget:
EL3102: 0.180 A (x9)

1.620 A

Title Control Chassis C: Left Rail		
Size B	Number D0902580	Revision 2
Date: 6/3/2011	Sheet 2 of 4	
File: C:\Users\...\CtrlChassisC2.SchDoc	Drawn By: Daniel Sigg	

B19
5V/0.6A isolated DC-DC converter, Omron S82S-7305

B20
EK1100
Beckhoff EtherCAT coupler

B21
EL4132
2-channel analog output terminals, differential, 16 bits

B22
EL4132
2-channel analog output terminals, differential, 16 bits

B23
EL4132
2-channel analog output terminals, differential, 16 bits

B24
EL4132
2-channel analog output terminals, differential, 16 bits

B25
EL3102
2-channel analog input terminals, differential, 16 bits

B26
EL3102
2-channel analog input terminals, differential, 16 bits

B27
EL3102
2-channel analog input terminals, differential, 16 bits

B28
EL3102
2-channel analog input terminals, differential, 16 bits

B29
EL3102
2-channel analog input terminals, differential, 16 bits

B30
EL3102
2-channel analog input terminals, differential, 16 bits

B31
EL9400
Power supply terminals for E-bus

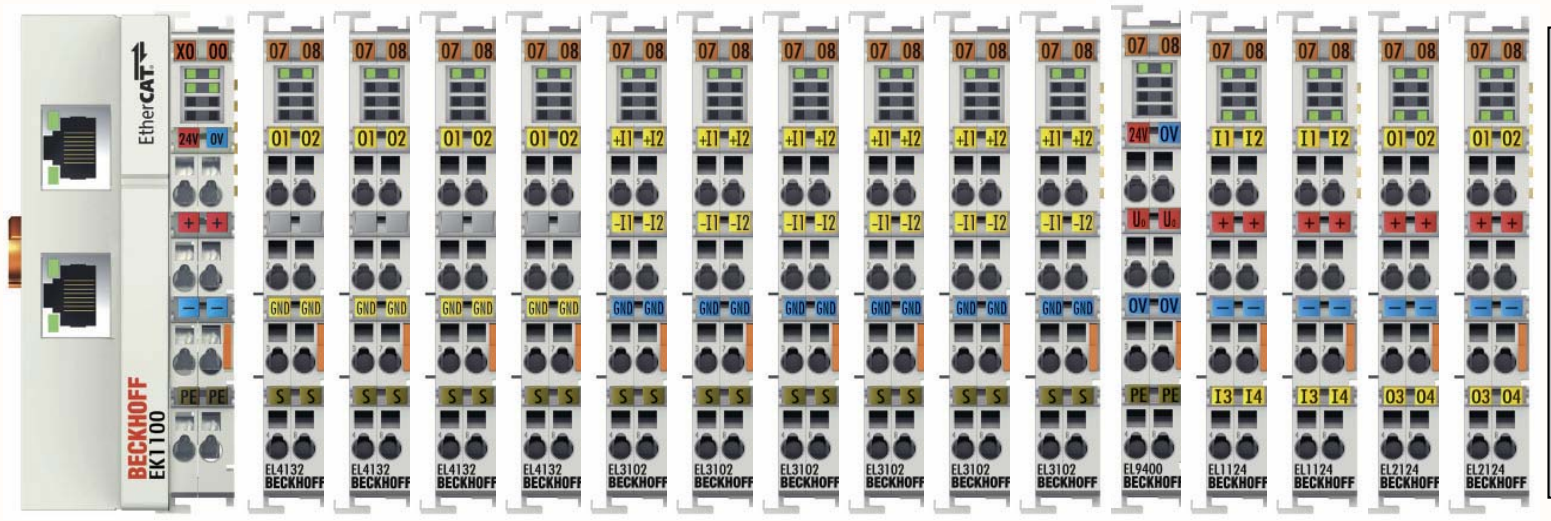
B32
EL1124
4-channel digital input terminals, 5V

B33
EL1124
4-channel digital input terminals, 5V

B34
EL2124
4-channel digital output terminals, 5V

B35
EL2124
4-channel digital output terminals, 5V

B36
EL9011
End cap



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Ebus 24V
Power contacts 24V

24V
5V

Auxiliary A/B

Power budget:
EL4102: 0.210 A (x4)
EL3102: 0.180 A (x6)

1.920 A

Power budget:
EL1124: 0.090 A (x2)
EL2124: 0.130 A (x2)

0.440 A

Title			Control Chassis C: Middle Rail		
Size	Number			Revision	
B	D0902580			2	
Date:	6/3/2011	Sheet 3 of 4			
File:	C:\Users\...\CtrlChassisC3.SchDoc	Drawn By: Daniel Sigg			

B37
5V/0.6A isolated DC-DC converter, Omron S82S-7305



B38
EK1100
Beckhoff EtherCAT coupler



B39
EL6002
Dual serial interface RS232



B40
EL1872
16-channel digital input terminals, 24V



B41
EL2872
16-channel digital output terminals, 24V



B42
EL9190
Feed terminal, arbitrary voltage



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



B44
EL3104
4-channel analog input terminals, differential, 16 bits



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



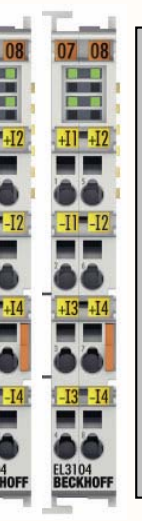
B46
EL9190
Feed terminal, arbitrary voltage



B47
EL3104
4-channel analog input terminals, differential, 16 bits



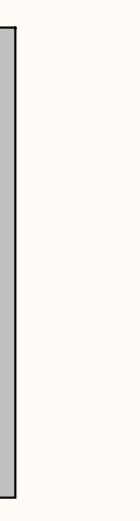
B48
EL3104
4-channel analog input terminals, differential, 16 bits



B49
EL3104
4-channel analog input terminals, differential, 16 bits



B50
EL9011
End cap



B51
24V/4.2A power supply, Sola HD SDP4-24



Ebus 24V
Power contacts 24V

Serial Flipper WFS 1 WFS 2

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Power budget:
EL6002: 0.170 A (x1)
EL1872: 0.130 A (x1)
EL2872: 0.130 A (x1)
EL3104: 0.180 A (x6)
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1.510 A
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Title		
Control Chassis C: Right Rail		
Size	Number	Revision
B	D0902580	2
Date:	6/3/2011	Sheet 4 of 4
File:	C:\Users\...\CtrlChassisC4.SchDoc	Drawn By: Daniel Sigg