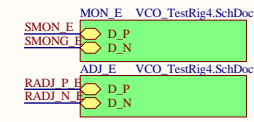
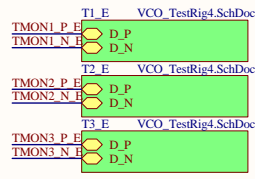
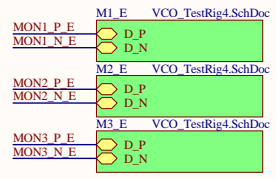
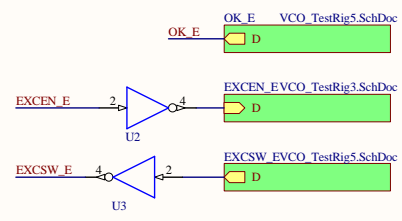


H1 Handle, 3"	E1 BNC lock washer	E17 BNC nut	PN2 Front Panel
H2 Handle, 3"	E2 BNC lock washer	E18 BNC nut	LIGO
Mouser 534-9109	E3 BNC lock washer	E19 BNC nut	D1100571-v1
H3 Ferrule	E4 BNC lock washer	E20 BNC nut	PN3 Rear Panel
H4 Ferrule	E5 BNC lock washer	E21 BNC nut	LIGO
H5 Ferrule	E6 BNC lock washer	E22 BNC nut	D1100572-v1
H6 Ferrule	E7 BNC lock washer	E23 BNC nut	PN4 DB25cable
Mouser 534-9121	E8 BNC lock washer	E24 BNC nut	Newark 05M6817
M1 #6-32 3/8" flat	E9 BNC lock washer	E25 BNC nut	PN5 IDC header
M2 #6-32 3/8" flat	E10 BNC lock washer	E26 BNC nut	PN6 IDC header
M3 #6-32 3/8" flat	E11 BNC lock washer	E27 BNC nut	Newark 73K6217
M4 #6-32 3/8" flat	E12 BNC lock washer	E28 BNC nut	PN7 Jack screw
McMaster-Carr 91099A215	E13 BNC lock washer	E29 BNC nut	PN8 Jack screw
H7 Standoff M-F	E14 BNC lock washer	E30 BNC nut	Newark 80K5431
H8 Standoff M-F	E15 BNC lock washer	E31 BNC nut	PN10 Banana jack
H9 Standoff M-F	E16 BNC lock washer	E32 BNC nut	Newark 39F1575
H10 Standoff M-F	Newark 78M7215	Newark 78M7214	PN9 Banana jack
H11 Standoff M-F			Newark 39F1574
H12 Standoff M-F			
H13 Standoff M-F	H19 Standoff F-F	M5 M4-8mm, flat	M11 M4-8mm, flat
H14 Standoff M-F	H20 Standoff F-F	M6 M4-8mm, flat	M12 M4-8mm, flat
H15 Standoff M-F	H21 Standoff F-F	M7 M4-8mm, flat	M13 M4-8mm, flat
H16 Standoff M-F	H22 Standoff F-F	M8 M4-8mm, flat	M14 M4-8mm, flat
H17 Standoff M-F	H23 Standoff F-F	M9 M4-8mm, flat	M15 M4-8mm, flat
H18 Standoff M-F	H24 Standoff F-F	M10 M4-8mm, flat	M16 M4-8mm, flat
Newark 56K3066	Newark 56K3039		McMaster-Carr 91420A218



Low Noise VCO Signals (EtherCAT signals end in _E, example MON1_P_E[1])

MON1_P[1]: Measures the RF power of the reference frequency (mixer LO input)
 MON2_P[2]: Measures the RF power of the output (after output amplifier)
 MON3_P[3]: Measures the RF power of the divider frequency (mixer RF input)

TMON1_P[4]: Measures the temperature inside RF detector M1
 TMON2_P[5]: Measures the temperature inside RF detector M2
 TMON3_P[6]: Measures the temperature inside RF detector M3

OK[7]: Status bit (TTL) indicating that the input voltage is within range, low indicates fault
 SW[9]: Readback of the excitation enable (TTL, low is on)
 SMON[10]: VCO tune voltage monitor
 RADJ[11]: Manual frequency tuning input
 EXCEN[8]: Enables the excitation input by pulling low (TTL)

Title EtherCAT Low Noise VCO Test Rig		
Size B	Number D1100545	Revision 1
Date:	4/7/2011	Sheet 1 of 5
File:	C:\Users\...\VCO_TestRig1.SchDoc	Drawn By: F. Clara

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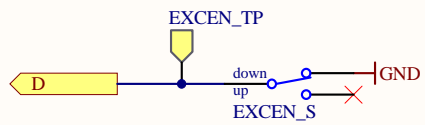
B

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C

D

D



Title			EtherCAT Low Noise VCO Test Rig		
Size	Number	Revision			
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Date:	4/7/2011	Sheet 2 of 5			
File:	C:\Users\...\VCO_TestRig2.SchDoc	Drawn By:		F. Clara	

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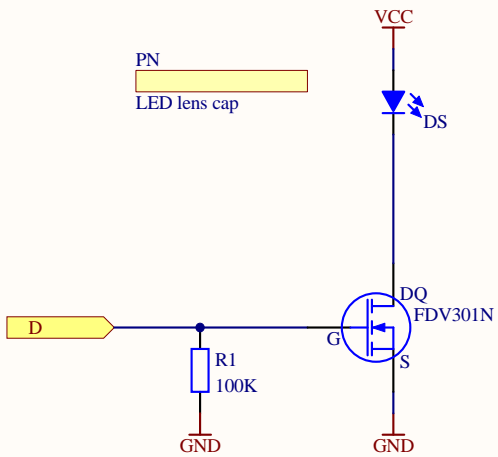
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Title			EtherCAT Low Noise VCO Test Rig		
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Date:	4/7/2011	Sheet 3 of	5		
File:	C:\Users\...\VCO_TestRig3.SchDoc	Drawn By:	F. Clara		

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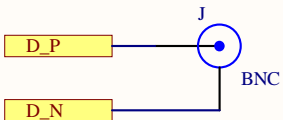
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Title			
EtherCAT Low Noise VCO Test Rig			
Size	Number	Revision	
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Date:	4/7/2011	Sheet 4 of 5	
File:	C:\Users\...\VCO_TestRig4.SchDoc	Drawn By: F. Clara	

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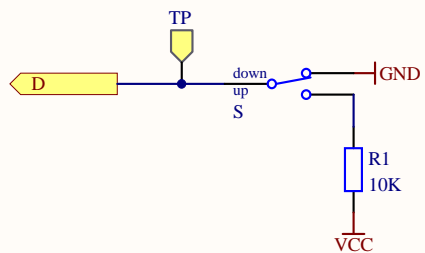
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Title			EtherCAT Low Noise VCO Test Rig		
Size	Number	Revision			
A	D1100545	1			
Date:	4/7/2011	Sheet 5 of 5			
File:	C:\Users\...\VCO_TestRig5.SchDoc	Drawn By:		F. Clara	

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