

Count of Column	Column Labels
Chassis Type	Quantity
10.0 MHz Frequency Divider	1
158.8 MHz Frequency Doubler	2
21.5 MHz RF Source (2U)	1
24.078 / 22.993 MHz RF Source (2U)	1
24.4 MHz RF Source (2U)	2
2-Ch Phase Frequency Discriminator	3
2-Channel RF Demodulator	4
35.5 MHz RF Source (2U)	1
384 Ch Binary Output	6
39.7 MHz Frequency Divider	3
4 CH Coil Driver	5
71 MHz RF Source (2U)	3
79.4 MHz VCO	5
80.0 MHz RF Source (2U)	1
9.099/8.684 MHz Harmonic Generator	1
9.099/8.684 MHz Harmonic Power Supply	1
9.099/8.684 MHz RF Source (2U)	1
AA	15
Aeroflex 2023A Diagnostics	3
AI	5
ALS Laser Distribution	1
ASC Demod Concentrator	5
Aux Signals Conc. 4	1
Aux Signals Concentrator 2	2
Aux Signals Concentrator 5	2
Auxiliary Signals Concentrator 1	4
Auxiliary Signals Concentrator 3	1
Beckhoff EtherCAT 2 (3U)	1
Beckhoff EtherCAT 3 (3U)	1
Beckhoff EtherCAT 4 (3U)	1
Beckhoff EtherCAT 5 (3U)	1
Beckhoff EtherCAT 6 (3U)	1
SPARE	1
Beckhoff EtherCAT 1 (3U)	3
Beckhoff EtherCAT 2 (3U)	2
CM Summing Chassis	1
Common Mode Servo	6
Demodulator RF Patch Panel	3
Distribution Amplifier	24
Dual Delay Line Phase Shifter	4
Dual D-Sub Breakout Panel	2
Dual QPD Transimpedance Amplifier	10
IO Ext Chassis (4U)	4
ISC 8 Channel Whitening Filter Chassis	27
LSC Demod Concentrator	6
LSC Demodulator Patch Panel	3
LSC Quad I&Q RF Demodulator	4
LSC RFPD Interface	3
OMC Piezo Driver Chassis	1
Quad Differential to Single Ended Receiver	3
RF Amp Comparator/Freq Counter 1 & 2 (1.5 U each)	1
RF Amp Concentrator 3 (actually 1.5 U)	2
RF Patch Panel	24
RF Preamplifier	2
Serial Concentrator for Timing	1
SUS Sat Amp	3
Timing Comparator/Freq Counter	1
Timing Fanout Module	1
WFS Demodulator Patch Panel	7
WFS Quad I&Q RF Demodulator	11
WFS RFPD Interface	3

RFPDs	Quantity
In-air Single Channel WFS RFPD (24.078 MHz)	2
In-air LSC Style In-air RFPD (24.078 MHz)	1
In-air LSC RFPD (9 MHz and 45 MHz)	3
In-air WFS RFPD (9 MHz and 45 MHz)	2
In-air WFS RFPD (36 MHz and 45 MHz)	2
In-air PSL Style RFPD (21.5 MHz)	1
In-vac LSC RFPD (9 MHz and 45 MHz)	2
In-vac WFS RFPD (9 MHz and 45 MHz)	2
In-vac WFS RFPD (36 MHz and 45 MHz)	2

ISC RACK	Chassis Type	D#	S#	NOTES
S1201186 L1-				
42				
41				
40				
39				
38				
37	AA	D0902783	S1102773	ASC (ADC_0)
36	AA	D0902783	S1102772	ASC (ADC_1)
35				
34	AA	D0902783	S1102767	ASC (ADC_2)
33	AA	D0902783	S1102769	ASC (ADC_3)
32				
31	AA	D0902783	S1102775	ASC (ADC_4)
30	AA	D0902783	S1102771	ASC (ADC_5)
29				
28	AA	D0902783	S1102708	ASC (ADC_6)
27	AA	D0902783	S1102780	ASC (ADC_7)
26				
25	4 CH Coil Driver	D1100687	S1200615	Tip/Tilt REFL HAM1
24	4 CH Coil Driver	D1100687	S1200616	Tip/Tilt REFL HAM1
23				
22	4 CH Coil Driver	D1100687	S1200604	Tip/Tilt OMC
21	4 CH Coil Driver	D1100687	S1106047	Tip/Tilt OMC
20				
19	4 CH Coil Driver	D1100687	S1200603	Tip/Tilt OMC
18	AI	D070081	S1102757	ASC (DAC_0)
17				
16	AI	D070081	S1102756	ASC (DAC_1)
15				
14	IO Ext Chassis (4U)	D1001715	S1106300	ASC
13				
12				
11				
10				
9	AA	D0902783	S1102768	LCS (ADC_0)
8	AA	D0902783	S1102779	LCS (ADC_1)
7				
6	AA	D0902783		
5	AI	D070081		LCS (DAC_0)
4	IO Ext Chassis (4U)	D1001715	S1106342	LCS
3				
2				
1				

Row Labels	Count of Chassis Type
4 CH Coil Driver	5
AA	11
AI	3
IO Ext Chassis (4U)	2
Grand Total	21

ISC RACK S1201187 L1-ISC-C2					NOTES		Count of Chassis Type
	Chassis Type	D#	S#			Row Labels	
42						384 Ch Binary Output	4
41						Beckhoff EtherCAT 2 (3U)	1
40						Beckhoff EtherCAT 3 (3U)	1
39						Beckhoff EtherCAT 4 (3U)	1
38						Beckhoff EtherCAT 5 (3U)	1
37						Beckhoff EtherCAT 6 (3U)	1
36						Beckhoff EtherCAT 1 (3U)	1
35	Serial Concentrator for Timing	D1100632	S1103476			Serial Concentrator for Timing	1
34						Grand Total	11
33	384 Ch Binary Output	D1100251	S1201215	R1 & R2 Whitening (BO1)			
32							
31	384 Ch Binary Output	D1100251	S1201216	R2 & R4 Whitening (BO2)			
30							
29							
28	384 Ch Binary Output	D1100251	S1201217	R3 & R5 Whitening (BO3)			
27							
26	384 Ch Binary Output	D1100251	S1203281	R5 Whitening (BO4)			
25							
24							
23	Beckhoff EtherCAT 6 (3U)			SPARE			
22	SPARE						
21							
20							
19	Beckhoff EtherCAT 1 (3U)	D1002961	S1102617	CM Servo, VCO, Delay Line			
18							
17							
16							
15	Beckhoff EtherCAT 2 (3U)	D1100680	S1107446	Picomotor, serial Ports, Modbus			
14							
13							
12							
11	Beckhoff EtherCAT 3 (3U)	D1100681	S1107449	LSC Demod, VCO, Delay Line, RF Amps			
10							
9							
8							
7	Beckhoff EtherCAT 4 (3U)	D1101266	S1107452	ASC Demod			
6							
5							
4							
3	Beckhoff EtherCAT 5 (3U)	D1200132	S1200506	Beam diverters, Shutters, Aux channels			
2				The S number was S1200506			
1							

ISC RACK S1201188		<u>Chassis Type</u>	<u>D#</u>	<u>S#</u>	<u>NOTES</u>	<u>Row Labels</u>	<u>Count of Chassis Type</u>
L1-ISC-C3							
42						10.0 MHz Frequency Divider	1
41	RF Patch Panel	D1101479			Installed and cabled	21.5 MHz RF Source (2U)	1
40						35.5 MHz RF Source (2U)	1
39	RF Patch Panel	D1101479			Installed and cabled	39.7 MHz Frequency Divider	1
38						80.0 MHz RF Source (2U)	1
37	RF Patch Panel	D1101479			TCS	Distribution Amplifier	5
36						RF Amp Comparator/Freq	1
35						RF Patch Panel	3
34						Timing Comparator/Freq	
33						Counter	1
32						Timing Fanout Module	1
31	21.5 MHz RF Source (2U)	D080702	S1000546			Grand Total	16
30	Distribution Amplifier	D1000124	S1000674				
29	35.5 MHz RF Source (2U)	D080702	S1000551				
28	Distribution Amplifier	D1000124	S1000672				
27							
26							
25	80.0 MHz RF Source (2U)	D080702	S1000567				
24	Distribution Amplifier	D1000124	S1000654				
23	39.7 MHz Frequency Divider	D1002182	S1000751				
22	Distribution Amplifier	D1000124	S1000655				
21	10.0 MHz Frequency Divider	D1100974	S1103488				
20	Distribution Amplifier	D1000124	S1000671				
19							
18	RF Amp Comparator/Freq Counter	D1100262x 2	S1103461				
17	1 & 2 (1.5 U each)		S1103460				
16							
15							
14							
13							
12	Timing Comparator/Freq Counter	D1001370	S1202500				
11	Timing Fanout Module	D080534	S1201221				
10							
9							
8							
7							
6							
5							
4							
3							
2							
1							

ISC RACK							
S1201189 L1-							
ISC-C4		Chassis Type	D#	S#	NOTES	Row Labels	Count of Chassis Type
42		RF Patch Panel	D1101479		Installed and cabled	24.078 / 22.993 MHz RF Source (2U)	1
41		RF Patch Panel	D1101479		Installed and cabled	71 MHz RF Source (2U)	1
40		RF Patch Panel	D1101479		Installed and cabled	9.099/8.684 MHz Harmonic Generator	1
39		RF Patch Panel	D1101479		Installed and cabled	9.099/8.684 MHz Harmonic Power Supply	1
38		RF Patch Panel	D1101479		Installed and cabled	9.099/8.684 MHz RF Source (2U)	1
37		RF Patch Panel	D1101479		Installed and cabled	Aeroflex 2023A Diagnostics	1
36		RF Patch Panel	D1101479		Installed and cabled	Distribution Amplifier	9
35		RF Patch Panel	D1101479		Installed and cabled	RF Patch Panel	6
34		RF Patch Panel	D1101479		Installed and cabled	Grand Total	21
33		RF Patch Panel	D1101479		Installed and cabled		
32		RF Patch Panel	D1101479		Installed and cabled		
31		Aeroflex 2023A Diagnostics					
30		9.099/8.684 MHz RF Source (2U)	D080702				
29		Distribution Amplifier	D1000124	S1000657			
28		9.099/8.684 MHz Harmonic Generator		S1000799			
27		9.099/8.684 MHz Harmonic Power Supply	D1002735	S1000795	SPARE		
26		Distribution Amplifier	D1000124	S1000660			
25		Distribution Amplifier	D1000124	S1000661			
24		Distribution Amplifier	D1000124	S1000662			
23		Distribution Amplifier	D1000124	S1000664			
22		Distribution Amplifier	D1000124	S1000667			
21		Distribution Amplifier	D1000124	S1000668			
20		Distribution Amplifier	D1000124	S1000651			
19		Distribution Amplifier	D1000124	S1000656			
18		Distribution Amplifier	D1000124	S1000651			
17		Distribution Amplifier	D1000124	S1000651			
16							
15							
14		24.078 / 22.993 MHz RF Source (2U)	D080702	S1000572			
13		Distribution Amplifier	D1000124	S1000656			
12		71 MHz RF Source (2U)	D080702	S1000560			
11		Distribution Amplifier	D1000124	S1000651			
10							
9							
8							
7							
6							
5							
4							
3							
2							
1							

ISC RACK						
S1201192 L1-						
ISC-R1	Chassis Type	D#	S#	NOTES	Row Labels	Count of Chassis Type
42	RF Patch Panel	D1101479	NA		158.8 MHz Frequency Doubler	2
41					158.8/79.4 MHz 2-Ch PF Discriminator	1
40	RF Patch Panel	D1101479	NA		24.078 MHz 2-Ch Demodulator	1
39					24.078 MHz Dual Delay Line	1
38	RF Patch Panel	D1101479		Not installed	79.4 MHz VCO	3
37					ASC Demod Concentrator	1
36					Demodulator RF Patch Panel	2
35	Distribution Amplifier	D1000124	S1000673		Distribution Amplifier	1
34					Dual D-Sub Breakout Panel	1
33	79.4 MHz VCO	D0900605	S1200576	(ALS) to Beckhoff in C2	ISC 8 Channel Whitening Filter Chassis	2
32					LSC Demod Concentrator	1
31	Dual D-Sub Breakout Pane	D1201450	NA		LSC RFPD Interface	1
30	158.8 MHz Frequency Doubler	D1002178	S1000740		Mode Cleaner Servo	1
29	2-Ch Phase Frequency Discriminator	D1002476	S1000766		Quad Differential to Single Ended Reciever	1
28	Demodulator RF Patch Panel	D1201470		Do I Have it? needs installed	RF Patch Panel	3
27	79.4 MHz VCO	D0900605	S1200575	(ALS) to Beckhoff in C2	WFS Interface	1
26					WFS Quad I&Q RF Demodulator	2
25					Grand Total	25
24	79.4 MHz VCO	D0900605	S1200580	(PSL) to Beckhoff in C2		
23						
22	158.8 MHz Frequency Doubler	D1002178	S1000739			
21	Dual Delay Line Phase Shifter	D0900128	S1103423			
20	2-Channel RF Demodulator	D1000181	S1000788	S1000783 needs repair! Spare used		
19						
18	Common Mode Servo	D0901781	S1102629			
17						
16	LSC Demod Concentrator	D1100691	S1004005			
15	ASC Demod Concentrator	D1100696	S1103984	No S# on front panel		
14	LSC RFPD Interface	D1102079	S1200449			
13	WFS RFPD Interface	D1101906	S1200429			
12						
11	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101612	ASC IMC WFS A 24MHz		
10						
9	WFS Quad I&Q RF Demodulator	D0902796	S1000991	ASC IMC WFS A 24MHz		
8	WFS Demodulator Patch Panel	D1100905				
7	WFS Quad I&Q RF Demodulator	D0902796	S1001024	ASC IMC WFS B 24MHz		
6						
5	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101571	ASC IMC WFS B 24MHz		
4						
3	Quad Differential to Single Ended Reciever	D1100482	S1202844			
2						
1						

ISC RACK						Count of Chassis Type
S1201193 L1-						
ISC-R2	Chassis Type	D#	S#	NOTES	Row Labels	
42						
41	RF Patch Panel	D1101479			9.099/8.684 MHz 2-Ch Demodulator	1
40					9.099/8.684 MHz Dual Delay Line	1
39	RF Patch Panel	D1101479			Distribution Amplifier	2
38	Distribution Amplifier	D1000124	S1000665		ISC 8 Channel Whitening Filter Chassis	9
37	Distribution Amplifier	D1000124	S1000658		LSC Demodulator Patch Panel	2
36	Dual Delay Line Phase Shifter	D0900128	S1103416		LSC Quad I&Q RF Demodulator	3
35					RF Patch Panel	2
34	2-Channel RF Demodulator	D1000181	S1000784	REFLAIR A 9	WFS Demodulator Patch Panel	3
33					WFS Quad I&Q RF Demodulator	4
32	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101620	(LSC POPAIR A 9&45, LSC REFLAIR A 45)	Grand Total	27
31						
30	LSC Quad I&Q RF Demodulator	D0902796	S1001004	LSC POPAIR A 9&45, LSC REFLAIR A 45		
29	LSC Demodulator Patch Pane	D1100956				
28	LSC Quad I&Q RF Demodulator	D0902796	S1001007	LSC POPAIR B 18&90, LSC REFLAIR B 27&135		
27						
26	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101624	LSC POPAIR B 18&90, LSC REFLAIR B 27&135		
25						
24	LSC Quad I&Q RF Demodulator	D0902796	S1001012	LSC POP A, LSC REFL A		
23	LSC Demodulator Patch Pane	D1100956				
22	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101625	LSC POP A, LSC REFL A		
21						
20	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101596	ASC REFLAIR A 9MHz		
19						
18	WFS Quad I&Q RF Demodulator	D0902796	S1001030	ASC REFLAIR A 9MHz		
17	WFS Demodulator Patch Panel	D1100905				
16	ISC 8 Channel Whitening Filter Chassis	D1002559	S1000986	ASC REFLAIR A 45MHz		
15						
14	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101167	ASC REFLAIR A 45MHz		
13						
12	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101621	ASC REFLAIR B 9MHz		
11						
10	WFS Quad I&Q RF Demodulator	D0902796	S1000987	ASC REFLAIR B 9MHz		
9	WFS Demodulator Patch Panel	D1100905				
8	WFS Quad I&Q RF Demodulator	D0902796	S1000990	ASC REFLAIR B 45MHz		
7						
6	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101609	ASC REFLAIR B 45MHz		
5						
4	WFS Quad I&Q RF Demodulator	D0902796	S1000973	Spare chain for air to vac leapfrog		
3	WFS Demodulator Patch Panel	D1100905				
2	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101597	Spare chain for air to vac leapfrog		
1						

ISC RACK S1201194 L1- ISC-R3		Chassis Type	D#	S#	NOTES	Row Labels	Count of Chassis Type
42			D1101479			Distribution Amplifier	3
41		RF Patch Panel				ISC 8 Channel Whitening Filter Chassis	6
40			D1101479			LSC Demodulator Patch Panel	1
39		RF Patch Panel				LSC Quad I&Q RF Demodulator	1
38						RF Patch Panel	2
37		Distribution Amplifier	D1000124	S1000659		WFS Demodulator Patch Panel	3
36						WFS Quad I&Q RF Demodulator	5
35		Distribution Amplifier	D1000124	S1000663		Grand Total	21
34							
33		Distribution Amplifier	D1000124	S1000666			
32							
31		ISC 8 Channel Whitening Filter Chassis	D1002559	S1101588	ASC ASAIR A 36MHz		
30							
29		WFS Quad I&Q RF Demodulator	D0902796	S1001033	ASC ASAIR A 36MHz		
28		WFS Demodulator Patch Panel	D1100905				
27		WFS Quad I&Q RF Demodulator	D0902796	S1001027	ASC ASAIR A 45MHz		
26							
25		ISC 8 Channel Whitening Filter Chassis	D1002559	S1101575	ASC ASAIR A 45MHz		
24							
23		ISC 8 Channel Whitening Filter Chassis	D1002559	S1101589			
22							
21		WFS Quad I&Q RF Demodulator	D0902796	S1000983	(Spare D0902796 Chain for air to vac leapfrog		
20		WFS Demodulator Patch Panel	D1100905		(Spare D0902796 Chain for air to vac leapfrog		
19							
18		ISC 8 Channel Whitening Filter Chassis	D1002559	S1101598	ASC ASAIR B 36MHz		
17							
16		WFS Quad I&Q RF Demodulator	D0902796	S1000988	ASC ASAIR B 36MHz		
15		WFS Demodulator Patch Panel	D1100905				
14		WFS Quad I&Q RF Demodulator	D0902796	S1001025	ASC ASAIR B 45MHz		
13							
12		ISC 8 Channel Whitening Filter Chassis	D1002559	S1101610	ASC ASAIR B 45MHz		
11							
10		ISC 8 Channel Whitening Filter Chassis	D1002559	S1101592	LSC ASAIR A 45MHz, LSC ASAIRB 19MHz, LSCASAIR B 90 MHz		
9							
8		LSC Quad I&Q RF Demodulator	D0902796	S1001001	LSC ASAIR A 45MHz, LSC ASAIRB 19MHz, LSCASAIR B 90 MHz		
7		LSC Demodulator Patch Panel	D1100956				
6							
5							
4							
3							
2							
1							

ISC RACK							
S1201195 L1-ISC-R4	Chassis Type	D#	S#	NOTES	Row Labels	Count of Chassis Type	
42	LSC Demod Concentrator	D1100691	S1104007		ALS Laser Distribution	1	
41	LSC Demod Concentrator	D1100691	S1104006		ASC Demod Concentrator	2	
40	ASC Demod Concentrator	D1100696	S1103987		Auxiliary Signals Concentrator 1	1	
39	ASC Demod Concentrator	D1100696	S1103985		Auxiliary Signals Concentrator 3	1	
38	LSC RFPD Interface	D1102079	S1200323		CM Servo	1	
37	WFS RFPD Interface	D1101906	S1200428		CM Summing Chassis	1	
36					Dual QPD Transimpedance Amplifier	3	
35					ISC 8 Channel Whitening Filter Chassis	3	
34	ALS Laser Distribution	D1200136	S1202531		LSC Demod Concentrator	2	
33					LSC RFPD Interface	1	
32	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101599	SM2 (IM4 TRANS)/ ISS QPD: (HAM2)	SUS Sat Amp	1	
31	Dual QPD Transimpedance Amplifier	D1002481	S1102824	SM2 (IM4 TRANS)/ ISS QPD: (HAM2)	WFS Interface	1	
30					Grand Total	18	
29	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101611	MC2 (HAM3)			
28	Dual QPD Transimpedance Amplifier	D1002481	S1102812	MC2 (HAM3)			
27							
26	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101586	ISC-ASC POP (HAM3)			
25	Dual QPD Transimpedance Amplifier	D1002481	S1102814	ISC-ASC POP (HAM3)			
24							
23	SUS Sat Amp	D1002818	S1200172	HAM 1 Tip/Tilt			
22							
21	Auxiliary Signals Concentrator 1	D1102065	S1200549				
20	Auxiliary Signals Concentrator 3	D1201345	S1300242				
19							
18							
17	CM Summing Chassis	D1200148					
16							
15	Common Mode Servo	D0901781	S1102623				
14							
13							
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1							

ISC RACK	Chassis Type	D#	S#	NOTES	Row Labels	Count of
42					aLIGO OMC Piezo Driver Chassis	1
41					ASC Demod Concentrator	2
40					Aux Signals Conc. 1	1
39					Aux Signals Conc. 4	1
38					Dual D-Sub Breakout Panel	1
37					Dual QPD Transimpedance Amplifier	3
36	LSC Demod Concentrator	D1100691	S1104008		ISC 8 Channel Whitening Filter Chassis	3
35	ASC Demod Concentrator	D1100696	S1103983	needs S# on front panel	LSC Demod Concentrator	1
34	ASC Demod Concentrator	D1100696	S1103986	needs S# on front panel	LSC RFPD Interface	1
33					SUS Sat Amp	2
32	LSC RFPD Interface	D1102079	S1200463		WFS RFPD Interface	1
31					Grand Total	17
30	WFS RFPD Interface	D1101906	S1200443			
29						
28	SUS Sat Amp	D1002818	S1105381	Tip/Tilt (OM1 & OM2)		
27						
26	SUS Sat Amp	D1002818	S1200168	Tip/Tilt (OM3)		
25						
24	Dual QPD Transimpedance Amplifier	D1002481	S1102830	ASC OMCR A&B		
23						
22	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101608	ASC OMCR A&B		
21						
20	Dual QPD Transimpedance Amplifier	D1002481	S1102834	ASC AS C		
19						
18	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101164	ASC AS C, OMC DCPD A&B		
17						
16	Auxiliary Signals Concentrator 1	D1102065	S1200550			
15	Aux Signals Conc. 4	D1201349	S1300245			
14						
13	OMC Piezo Driver Chassis	D1300485	S1301186	OMC HV/LV		
12	Dual D-Sub Breakout Panel	D1201450	N/A	Dual D-Sub Breakout Panel		
11						
10	Dual QPD Transimpedance Amplifier	D1002481	Steal on from ends	ASC OMC A & B		
9						
8	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101639	ASC OMC A & B		
7						
6						
5						
4						
3						
2						
1						

ISC RACK	Left Side				Right Side			
	Chassis Type	D#	S#	NOTES	Chassis Type	D#	S#	NOTES
4	Picomotor Interface x2 (L & R)	D1100323	S1107553	PMC #5 HAM2	Picomotor Interface x2 (L & R)	D1100323	S1107541	PMC #3
3				Mounted on top of				Mounted on top of
2								PMC #4
1	Shutter Controller	D1102312-V2	S1203622	Mounted on top of	Picomotor Interface x2 (L & R)	D1100323	S1107542	Mounted on top of

ISC RACK	Left Side				Right Side			
	Chassis Type	D#	S#	NOTES	Chassis Type	D#	S#	NOTES
4	Shutter Controller	D1102312	S1203627	Mounted on top of				
3								
2								
1	Shutter Controller	D1102312	S1203626	Mounted on top of				

ISC XEND Remote RACK S1202948 L1- ISC-XC1 D1201084					Count of Chassis Type	
	Chassis Type	D#	S#	NOTES	Row Labels	
42	RF Patch Panel	D1101479			24.4 MHZ RF Source (2U)	1
41					384 Ch Binary Output	1
40	RF Patch Panel	D1101479			71 MHZ RF Source (2U)	1
39					AA	2
38	71 MHZ RF Source (2U)	D080702	S1000561		Aeroflex 2023A Diagnostics	1
37					AI	1
36	Distribution Amplifier	D1000124	S1000652		Distribution Amplifier	2
35					IO Ext Chassis (4U)	1
34	24.4 MHZ RF Source (2U)	D080702	S1000583		RF Amp Concentrator 3 (actually 1.5 U)	1
33					RF Patch Panel	2
32	Distribution Amplifier	D1000124	S1000669		(blank)	
31					Beckhoff EtherCAT 1 (3U)	1
30	Aeroflex 2023A Diagnostics	IFR (Marconi)			Beckhoff EtherCAT 2 (3U)	1
29					Grand Total	15
28	RF Amp Concentrator 3 (actually 1.5 U)	D1100262	S1106463			
27						
26						
25						
24						
23						
22	384 Ch Binary Output	D1100251	S1203283			
21						
20						
19	Beckhoff EtherCAT 1 (3U)	D1002961	S1102618			
18						
17						
16						
15	Beckhoff EtherCAT 2 (3U)	D1100682				
14						
13						
12						
11	AA	D0902783				
10	AA	D0902783				
9	AI	D070081				
8						
7						
6						
5						
4	IO Ext Chassis (4U)	D1001715	S1000536			
3						
2						
1						

ISC XEND Field S1202951 RACK L1- ISC-XR1 D1201087						
	Chassis Type	D#	S#	NOTES	Row Labels	Count of Chassis Type
42	RF Patch Panel	D1101479			2 Ch. RFPD I/Q Demod (RC&ALS)	1
41					24.5 MHz Delay Line Phase Shifter	1
40	RF Patch Panel	D1101479			36.7 MHz 2 Ch. Phase/Freq Discriminator	1
39					39.7 MHz Frequency Divider	1
38	Dual Delay Line Phase Shifter	D0900128	S1103433		79.4 MHz VCO	1
37					Aux Signals Concentrator 1	1
36	2-Channel RF Demodulator	D1000181	S1000785		Aux Signals Concentrator 2	1
35	Demodulator RF Patch Panel	D1201470			Aux Signals Concentrator 5	1
34	79.4 MHz VCO	D0900605	S1200577		CM Servo (ALS)	2
33					Demodulator RF Patch Panel	1
32	39.7 MHz Frequency Divider	D1002182	S1000752		Differential To Single Ended Converter	1
31	RF Preamplifier	D1201294	S1203937		Dual QPD Transimpedance Amplifier	2
30	2-Ch Phase Frequency Discriminator	D1002476	S1000767		ISC 8 Channel Whitenning Filter Chassis	2
29					LSC Demod Concentrator	1
28	Common Mode Servo	D0901781	S1102643		RF Patch Panel	2
27					RF Preamplifier	1
26	Common Mode Servo	D0901781	S1102639		Grand Total	20
25						
24	LSC Demod Concentrator	D1100691	S1104009			
23						
22	Aux Signals Concentrator 2	D1102045	S1200534	Aux Signals Concentrator 2		
21	Auxiliary Signals Concentrator 1	D1102065	S1200551	Aux Signals Concentrator 1		
20	Aux Signals Concentrator 5	D1201352	S1300250	Aux Signals Concentrator 5		
19						
18						
17						
16						
15						
14						
13						
12						
11						
10						
9						
8						
7	Quad Differential to Single Ended Receiver	D1100482	S1203309			
6						
5	ISC 8 Channel Whitenning Filter Chassis	D1002559	S1101646			
4	Dual QPD Transimpedance Amplifier	D1002481	S1102826			
3	Dual QPD Transimpedance Amplifier	D1002481	S1102825			
2	ISC 8 Channel Whitenning Filter Chassis	D1002559	S1101168			
1						

ISC XEND Remote RACK S1202955 L1- ISC-YC1	Chassis Type	D#	S#	NOTES	Row Labels	Count of Chassis Type
42	RF Patch Panel	D1101479			24.4 MHZ RF Source (2U)	1
41					384 Ch Binary Output	1
40	RF Patch Panel	D1101479			71 MHZ RF Source (2U)	1
39					AA	2
38	71 MHZ RF Source (2U)	D080702	S1000562		Aeroflex 2023A Diagnostics	1
37					AI	1
36	Distribution Amplifier	D1000124	S1000653		Beckhoff EtherCAT (3U)	2
35					Distribution Amplifier	2
34	24.4 MHZ RF Source (2U)	D080702	S1000577		IO Ext Chassis (4U)	1
33					RF Amp Concentrator 3 (actually 1.5 U)	1
32	Distribution Amplifier	D1000124	S1000670		RF Patch Panel	2
31					Grand Total	15
30	Aeroflex 2023A Diagnostics	IFR (Marconi)				
29						
28	RF Amp Concentrator 3 (actually 1.5 U)	D1100262	S1103463			
27						
26						
25						
24						
23						
22	384 Ch Binary Output	D1100251	S1203282			
21						
20						
19	Beckhoff EtherCAT 1 (3U)	D1002961	S1102619			
18						
17						
16						
15	Beckhoff EtherCAT 2 (3U)	D1100682				
14						
13						
12						
11	AA	D0902783				
10	AA	D0902783				
9	AI	D070081				
8						
7						
6						
5						
4	IO Ext Chassis (4U)	D1001715	S1001145			
3						
2						
1						

ISC YEND Field RACK S1202958						Count of Chassis Type
L1-ISC-YR1	Chassis Type	D#	S#	NOTES	Row Labels	
42	RF Patch Panel	D1101479			2 Ch. RFPD I/Q Demod (RC&ALS)	1
41					24.5 MHz Delay Line Phase Shifter	1
40	RF Patch Panel	D1101479			36.7 MHz 2 Ch. Phase/Freq Discriminator	1
39					39.7 MHz Frequency Divider	1
38	Dual Delay Line Phase Shifter	D0900128	S1103430		79.4 MHz VCO	1
37					Aux Signals Concentrator 1	1
36	2-Channel RF Demodulator	D1000181	S1000786		Aux Signals Concentrator 2	1
35	Demodulator RF Patch Panel	D1201470			Aux Signals Concentrator 3	1
34	79.4 MHz VCO	D0900605	S1200578		CM Servo (ALS)	2
33					Demodulator RF Patch Panel	1
32	39.7 MHz Frequency Divider	D1002182	S1000753		Differential To Single Ended Converter	1
31	RF Preamplifier	D1201294	S1203938		Dual OPD Transimpedance Amplifier	2
30	2-Ch Phase Frequency Discriminator	D1002476			ISC 8 Channel Whitening Filter Chassis	2
29					LSC Demod Concentrator	1
28	Common Mode Servo	D0901781	S1102646		RF Patch Panel	2
27					RF Preamplifier	1
26	Common Mode Servo	D0901781	S1102647		Grand Total	20
25						
24	ISC Demod Concentrator	D1100691	S1104010			
23						
22	Aux Signals Concentrator 2	D1102045	S1200535	Aux Signals Concentrator 2		
21	Auxiliary Signals Concentrator 1	D1102065	S1200552	Aux Signals Concentrator 1		
20	Aux Signals Concentrator 5	D1201352	S1300251	Aux Signals Concentrator 5		
19						
18						
17						
16						
15						
14						
13						
12						
11						
10						
9						
8						
7	Quad Differential to Single Ended Receiver	D1100482	S1203308			
6						
5	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101629			
4	Dual OPD Transimpedance Amplifier	D1002481	S1102831			
3	Dual OPD Transimpedance Amplifier	D1002481	S1102816			
2	ISC 8 Channel Whitening Filter Chassis	D1002559	S1101169			
1						