ISC LVEA Equipment Room Rack C1

42 U 42 41 1 U 40 D1700378 1 Ŭ 39 D1700378 38 1 U 37 D0902783 1 Ù 36 D0902783 35 1 U 34 D0902783 1 Ū 33 D0902783 32 1 U 31 D0902783 1 Ū 30 D0902783 1 U 28 D0902783 27 26 1 U 25 D0902783 24 23 22 7 32-Ch. ADC 21 20 1 16-Ch. DAC 4 U 19 18 17 1 U 16 1 U 15 D0902783 D0902783 14 1 U 13 D0902783 1 Ù 12 D0902783 1 U 10 D0902783 1 U D0902783 6 5 4 32-Ch. ADC 4 U 1 32-Ch. DAC

ADC Channel Concentrator 2 ADC Channel Concentrator 1

Anti-Aliasing Chassis (ASC ADC0) Anti-Aliasing Chassis (ASC ADC1)

Anti-Aliasing Chassis (ASC ADC2) Anti-Aliasing Chassis (ASC ADC3)

Anti-Aliasing Chassis (ASC ADC4) Anti-Aliasing Chassis (ASC ADC5)

Anti-Aliasing Chassis (ASC ADC6)

Anti-Image Chassis (ASC DAC0)

ASC I/O Expansion Chassis

Anti-Aliasing Chassis (LSC ADC0) Anti-Aliasing Chassis (LSC ADC1)

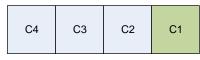
Anti-Aliasing Chassis (LSC ADC2) Anti-Aliasing Chassis (LSC ADC3)

Anti-Aliasing Chassis (LSC ADC4)

Anti-Image Chassis (LSC DAC0)

LSC I/O Expansion Chassis

Rack Orientation In LLO CER



Front of Rack

Rack Orientation In LHO CER



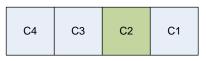
Front of Rack

**Color Key** 



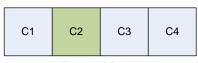
Status as of 6 Oct 2017

#### Rack Orientation In LLO CER



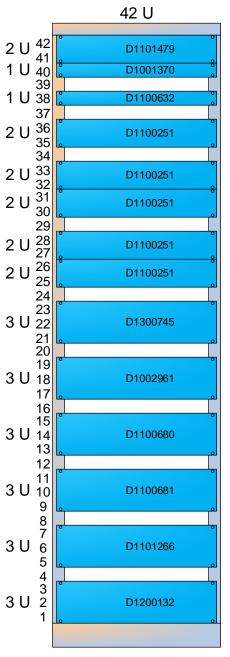
Front of Rack

Rack Orientation In LHO CER



Front of Rack

## ISC LVEA Equipment Room Rack C2



RF Patch Panel 39 (SQZ)

Timing Comparator/Frequency Counter

Serial Concentrator for Timing

384 Ch. Binary Out 4 (SQZ Whitening)

384 Ch. Binary Out 1 (R1&R2 Whitening)

384 Ch. Binary Out 2 (R2&R4 Whitening)

384 Ch. Binary Out 3 (R5&R3 Whitening)

384 Ch. Binary Out 4 (R3&R4 Whitening)

Beckhoff EtherCAT 6 (PLL, VCO)

Beckhoff EtherCAT 1 (CM Servo, VCO, Delay Line)

Beckhoff EtherCAT 2 (Picomotor, Serial Ports, Modbus)

Beckhoff EtherCAT 3 (LSC Demod, VCO, Delay Line, RF Amps)

Beckhoff EtherCAT 4 (ASC Demod)

Beckhoff EtherCAT 5 (Beam Diverters, Shutters, Aux channels

Not even started building

## ISC LVEA Equipment Room Rack C3

42 U

D1101479

D1101479

D1101479

D080702

D1000124

D080702

D1000124

D080702

D1000124

D1002182

D1000124

D1100974

D1000124

D1100262

D1100262

D1100262

D1100262

D1001370

D080534

D1600498

D1000124

D1700008

D1000124

D1002182

D1000124

D1600499

D1000124

42 2 U

41

37 36 2 U

33

32 31 2 U

29 2 U

28 1 U 27

26 25 2 U

24

17

16 1.5 U <sup>15</sup>

14

13

11

10

9 Ŭ

8 7

6

5

4 3

2

1 U 23

1 Ü 22

1 Ū 21

1 U 20

1 U 19

1.5 U <sup>18</sup>

1.5 U

1.5 U

1 U 1 U 12

Ŭ

1Ŭ

1 U

1Ŭ

1 U 30

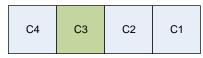
2 U

2 U

2 U

## Rack Orientation In LLO CER

C1



Front of Rack

Rack Orientation In LHO CER

Front of Rack

C3

C4

C2

#### RF Patch Panel 7 D1101479

RF Patch Panel 8 D1101479 39 38

RF Patch Panel 9 (TCS)

RF Patch Panel 32 (SQZ)

RF Patch Panel 33 (SQZ)

21.5 MHz RF Source

21.5 MHz Distribution Amplifier

35.5 MHz RF Source

35.5 MHz Distribution Amplifier

## 80 MHz RF Source

80 MHz Distribution Amplifier

40 MHz Frequency Divider 40 MHz Distribution Amplifier

10 MHz Frequency Divider 10 MHz Distribution Amplifier

RF Amp Concentrator 1

RF Amp Concentrator 2

RF Amp Concentrator 3

RF Amp Concentrator 4

Timing Comparator/Frequency Counter

Timing Fanout Module

RF Multiply-By-5 (200 MHz) 200 MHz Distribution Amplifier RF Divide-By-32 (6.25 MHz)

6.25 MHz Distribution Amplifier

RF Divide-By-2 (3.125 MHz) 3.125 MHz Distribution Amplifier

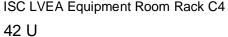
RF Frequency Difference (42.375 MHz) 42.375 MHz Distribution Amplifier

# Color Key



Status as of 6 Oct 2017

ISC LVEA Equipment Room Rack C4





 $2~U~^{40}_{39}$ RF Patch Panel 2 D1101479

2 U  $\frac{38}{37}$ RF Patch Panel 3 D1101479

D1101479

D1101479

D1101479

T1400516

D080702

D1000124

T1000384

D1002735 D1000124

D1000124 D1000124

D1000124

D1000124

D1000124

D080702

D1000124

D080702

D1000124

D1002178

D1000124

D1700475

D1000124

2 U  $^{36}_{35}$ 

2 U  $^{34}_{33}$ 

 $2 U \frac{32}{31}$ 

 $2 U_{29}^{30}$ 

 $2~U~^{28}_{27}$ 

1 U 26

1 U <sub>24</sub>

1 U 23 1 U 22

1 U 21 1 U 20

1 U 19

1 U 18

1 U 17

1 U 12

2 U 11

10

9 8 7

6

5

4 3

2

1

25

RF Patch Panel 4

RF Patch Panel 5

RF Patch Panel 6

Aeroflex 2023A Diagnostics

9.1 MHz RF Source

9.1 MHz Distribution Amplifier

9.1 MHz Harmonic Generator
9.1 MHz Harmonic Power Supply
18 MHz Distribution Amplifier
27 MHz Distribution Amplifier
36 MHz Distribution Amplifier
45 MHz Distribution Amplifier
90 MHz Distribution Amplifier
135 MHz Distribution Amplifier

24.078 MHz RF Source

24.078 MHz Distribution Amplifier

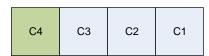
71 MHz RF Source

71 MHz Distribution Amplifier



RF Doubler (72.8 MHz) 72.8 MHz Distribution Amplifier Fixed Ratio Frequency Source (118.3 MHz) 118.3 MHz Distribution Amplifier

### Rack Orientation In LLO CER



Front of Rack

#### Rack Orientation In LHO CER



Front of Rack