CAD, CENTRAL MUX, BNL 2/16/01 2:49 PM CENTRALMUXBLOCK.dwg

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

NOTE: INPUT SIGNALS HAVE TO BE SLOW. I USED A 2 MS PERIOD SQUARE WAVE

64 ANALOG INPUT SIGNALS

A/D MANCHESTER ENCODER CHASSIS
4 CHANNELS PER BOARD
(D36-E148 MANCHESTER ENCODER BOARD (SLOW))
UP TO 16 CARDS IN CHASSIS A

CHASSIS A RACK 4530
BLDG 911B

OUTPUT CHANNELS ON FLAT CABLE
J65 CHANNELS 1-16
J67 CHANNELS 17-32
J69 CHANNELS 33-48
J71 CHANNELS 49-64

64 ANALOG INPUT SIGNALS

A/D MANCHESTER ENCODER CHASSIS
4 CHANNELS PER BOARD
(D36-E148 MANCHESTER ENCODER BOARD (SLOW))
UP TO 16 CARDS IN CHASSIS B

CHASSIS B RACK 4530
BLDG 911B

OUTPUT CHANNELS ON FLAT CABLE
J65 CHANNELS 1-16
J67 CHANNELS 17-32
J69 CHANNELS 33-48
J71 CHANNELS 49-64

CLICK ON TO SEE SYSTEM BLOCK DIAGRAM

REF D36-E1125 F/O CABLES

6 TWINAX CABLES

BXB.930A_PS_(1-6) RK 4961
6 4X16 ANALOG MUX

F/O RECEIVER TRANSMITTER BLDG 930A RK 4932

TO BLDG 914

TO BLDG 930A

TO BLDG 930UEB

F/O RECEIVER
SLOT 3
SLOT 4
SLOT 5
SLOT 6
SLOT 7
SLOT 8
SLOT 9

14 TWINAX CABLES

PATCH PANEL IN RACK 4536

FLAT RIBBON CABLES

ANALOG BUFFER CHASSIS RK 4961

TO 930A POWER SUPPLY READBACKS
SEE VIEWMUX BXB.930A_PS_(1-6)

DIGITAL CENTRAL MUX CHASSIS

J1 J2 J3 J4 J5 J6 J7 J8 J9 J10 J11 J12 J13 J14 J15 J16

NOT USED 4 INPUT CABLES

NOT USED 4 INPUT CABLES

ECL/TTL RECEIVER BD
32 INPUT CHANNELS SLOT 1
SCHEMATIC D36-E70

ECL/TTL RECEIVER BD
32 INPUT CHANNELS SLOT 2
SCHEMATIC D36-E70

ECL/TTL RECEIVER BD
32 INPUT CHANNELS SLOT 3
SCHEMATIC D36-E70

ECL/TTL RECEIVER BD
32 INPUT CHANNELS SLOT 4
SCHEMATIC D36-E70

ECL/TTL RECEIVER BD
32 INPUT CHANNELS SLOT 5
SCHEMATIC D36-E70

ECL/TTL RECEIVER BD
32 INPUT CHANNELS SLOT 6
SCHEMATIC D36-E70

ECL/TTL RECEIVER BD
32 INPUT CHANNELS SLOT 7
SCHEMATIC D36-E70

ECL/TTL RECEIVER BD
32 INPUT CHANNELS SLOT 8
SCHEMATIC D36-E70

DIGITAL MULTIPLEXER
128 INPUT 4X8=32
OUTPUT D36-E121

U1 U2 U3 U4

INPUT 32 DIGITAL DATA LINES U1 THRU U4 TOTAL 128 DATA LINES

OUTPUT 32 DIGITAL DATA LINES

INPUT 32 DIGITAL DATA LINES

DIGITAL MULTIPLEXER
128 INPUT 4X8=32
OUTPUT D36-E121

U1 U2 U3 U4

NOT INSTALLED

ADDRESSING SWITCHES 1 2 3 4 5 6 OPEN

4 OF 32 DIGITAL DATA LINES

BOOSTER DECODER 4 CHANNEL
BOARD SLOT 11
CONSOLE 1A,1B,1C,1D
SCHEMATIC D36-E124

BOOSTER DECODER 4 CHANNEL
BOARD SLOT 12
CONSOLE 1E,1F,3A,3B
SCHEMATIC D36-E124

BOOSTER DECODER 4 CHANNEL
BOARD SLOT 13
CONSOLE 3C,3D,3E,3F
SCHEMATIC D36-E124

BOOSTER DECODER 4 CHANNEL
BOARD SLOT 14
CONSOLE 4A,4B,4C,4D
SCHEMATIC D36-E124

BOOSTER DECODER 4 CHANNEL
BOARD SLOT 15
CONSOLE 4E,4F,5A,5B
SCHEMATIC D36-E124

BOOSTER DECODER 4 CHANNEL
BOARD SLOT 16
CONSOLE 5C,5D,5E,5F
SCHEMATIC D36-E124

BOOSTER DECODER 4 CHANNEL
BOARD SLOT 17
CONSOLE 6A,6B,6C,6D
SCHEMATIC D36-E124

BOOSTER DECODER 4 CHANNEL
BOARD SLOT 18
CONSOLE 6E,6F,SPARE,SPARE
SCHEMATIC D36-E124

J17 J18 J19 J20 J21 J22 J23 J24 J25 J26 J27 J28 J29 J30 J31 J32 J33 J34 J35 J36 J37 J38 J39 J40 J41 J42 J43 J44 J45 J46 J47 J48

6ea. RG58U CABLES

CYTEC MUX CHASSIS

J22 J21 J20 J19 J18 J17

J34 J33 J32 J31 J30 J29

J40 J39 J38 J37 J36 J35

J46 J45 J44 J43 J42 J41

12 INPUTS

8 OUTPUTS

12ea. RG58U CABLES

TWISTED PAIR CABLE TO CYTEC SWITCH SELECT CHASSIS

8 RIBBON CABLES

RS232C SERIAL PORT J49

CYTEC SWITCH SELECT CHASSIS

BLDG 911B RACK 5322

CST.911B.VME

TO GPIB BOARD PORT A

TCS ELECTRONICS CORP
488 FANOUT PANEL
A
J1 J2 J3 J4 J5 J6 J7 J8

488 CABLE

CDC.ANA_MUX_CENTRAL
RACK 4528 BLDG 911B
RS232C SERIAL PORT OUTPUT

488 CABLE

-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO.,BNL NO.
QTY REQD						

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES .X ± .XX ± .XXX ± ANGULAR TOLERANCE ±

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY		DATE
DRAWN BY	Warren Jappe	2/14/01
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL		
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

DIGITAL CENTRAL MUX SYSTEM

BLDG 911B, RACK 4529

SIZE REV. DRAWING NUMBER

MATERIAL: SCALE: WEIGHT: SHEET 2 of 5

*AUTOCAD