REV.	DESCRIPTION	DRAWN	DATE
		APPD.	DATE

BP8S
BP8R
BP7S
BP7R
BP6S
BP6R
BP5S
BP5R
BP4S
BP4R
BP3S
BP3R
BP2S
BP2R
BP1S
BP1R

1x HKPL-2630

RAC (18-14)

-6V 38R 1N4002 -5V
+6V 42R 3A 1N5401 +5V
COM 43L,43R
FIR,19L,13R,18L COM

330pf 6.8K
UP (57-3)
47 96LS02 10µS
39 LS174
32 LS174
32 LS174
39 LS174
40 LS174
33 LS174
33 LS174
40 LS174

46 LS197

63 LS20 100 1000pf 56 LS32 57 FO5

56pf 6.2K 60 LS123 250ns .1µF
56pf 6.2K 60 LS123 250ns .1µF
54 LS09 54 LS04

41 LS193 LD QD QC QB QA
64 74154 D C B A
DECD CLR

48 FPLA 82S153
FFOR 63 LS541 FIFO DATA
FFIR (31-12)
FFOR FFE (31-13) (18-9)

LDCK IR OR TYPICAL LOCATIONS 34-38 LS224 16x9 FIFO OUT EN OR UNCK
FFOS (18-18)
RAC (18-14)
FF3S (55-9)

34 LS224
30 LS640
(18-12) RHB

44 LS193
45 LS193
42 LS193
43 LS193
37 LS224
38 LS224
35 LS224
36 LS224
DR LS640

DEO (46-9)
330pf 6.2K 52 96LS02 1µS
1MCLK (65-9)
59 RDD104 ±1K
1KCLK
CLEAR
.1µF 330K 52 96LS02 2ms
TCA (41-16)
49 LS14

HIGH LEVEL UPSTRM PERMIT
UPSTRM PERMIT
LOCAL PERMIT OUT
UP (34-19, 49-12)
AIP (41-12)
LP (31-18)
BP/AIP (To TSCC)
LOCAL ABORT
LOCAL PERMIT
+24V
ZN3906
ZN2905A HEATSINK
HLPO (31-14)
HIGH LEVEL PERMIT OUT
COM

CMIS (18-11)
WB WS W4 W3 W2 W1
5 ALS574
6 ALS576
LS540 LS541

BEAM GATE (61-8)
29 LS645 DIR
OPEN = TYPE 0
CLOSED = TYPE 1

DFO (4-22)
23 LS640

N
47 96LS02 30ms
FFOR (46-15)
FIG FB F4 F2 F1 A8 A4 A2 A1 E S2
4 PAL 20L10 PUC
DFO DF1 DF2 DF3 DF4 DF9O DF9E DF10 PCLR
DFO126 FPLA 82S153 18
RHB (30-19)
X Q
330pf 6.2K 55 96LS02 1µS
470pf 6.2K 55 96LS02 250ns
FFSO (34-38-16)
CLR RAC FFOE (34-38-1) CMIS (5+6-11) READ (9+15-19)

12 LM319S 1µF 1M 1K

RBUS (25+31)
1MCLK (59-5)

DECODED CLOCK EVENTS:
DEO = 40+41+49
DE1 = 41
DE2 = 40+41+49+46+49
DE3 = 48

IS8 IS7 IS6 IS5 IS4 IS3 IS2 IS1
128 TYP

TCLK INPUT (FRONT PANEL)
TCLK INPUT
COM
12pf 5M 3K 58 96502 70-75ns
65 TCLK DECODER
66 25L8 PROM
TCLK OUT (FRONT PANEL)
SH0

DE3
DE1 DE2
(4-21) DF1
DF6 (4-18)
(22-8) LP (57-3) UP (52-9) TCA
(49-12) HLPO (18-13) FFE (40-12) FFIR
(49-14) AIP (18-14) CLR
BEAM GATE (29-19)
31 LS640
25 LS640 DIR
RB R7 R4 R10
RBUS

DRAWING-40-832

PRINTED CIRCUIT BOARD	
TITLE	DWG NO
SCHEMATIC	ED-35631
ARTWORK	BD-35632
MASTER DWG	BD-35633
ASSEMBLY DWG	B
OUTLINE DWG	MD-34863
SOLDER MASK	B
SILKSCREEN	B
PARTS LIST	BP
FRONT PANEL	MC-35629

ITEM NO.	PART NO.	DESCRIPTION OR SIZE	QTY. REQ.
		PARTS LIST	

UNLESS OTHERWISE SPECIFIED			ORIGINATOR	R. DUCAR	2-15-83
FRACTIONS	DECIMALS	ANGLES	DRAWN		
±	±	±	CHECKED		
1. BREAK ALL SHARP EDGES 1/64 MAX.			APPROVED	RJ Ducar	5-17-83
2. DO NOT SCALE DWG.			USED ON		
3. DIMENSIONING IN ACCORD WITH ANSI Y14.5 STD'S.			MATERIAL-		
MAX. ALL MACHINED SURFACES					

FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

ACCELERATOR CONTROLS
CAMAC 200 MODULE - ABORT CONCENTRATOR
SCHEMATIC RF-104

SCALE	FILMED	DRAWING NUMBER	REV.
		0812-ED-35631	