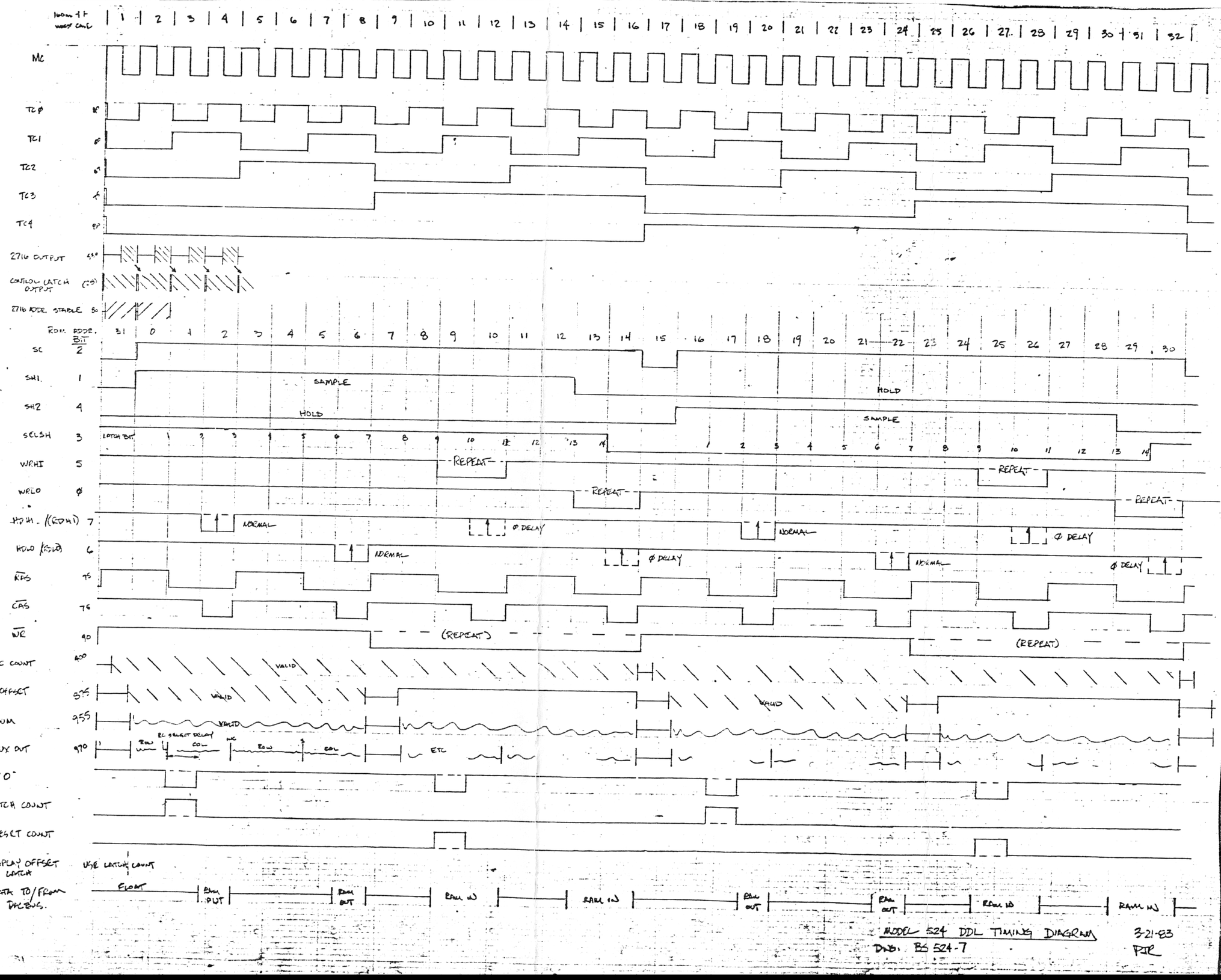
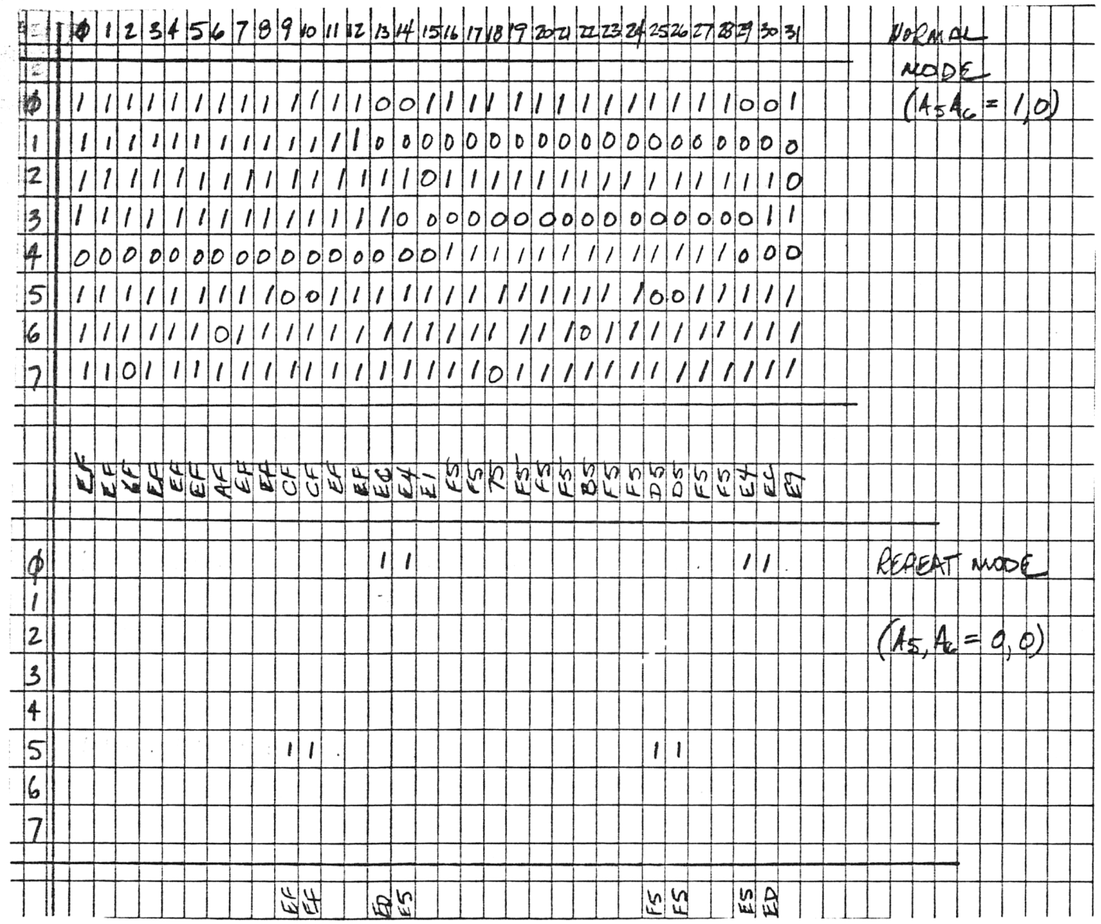


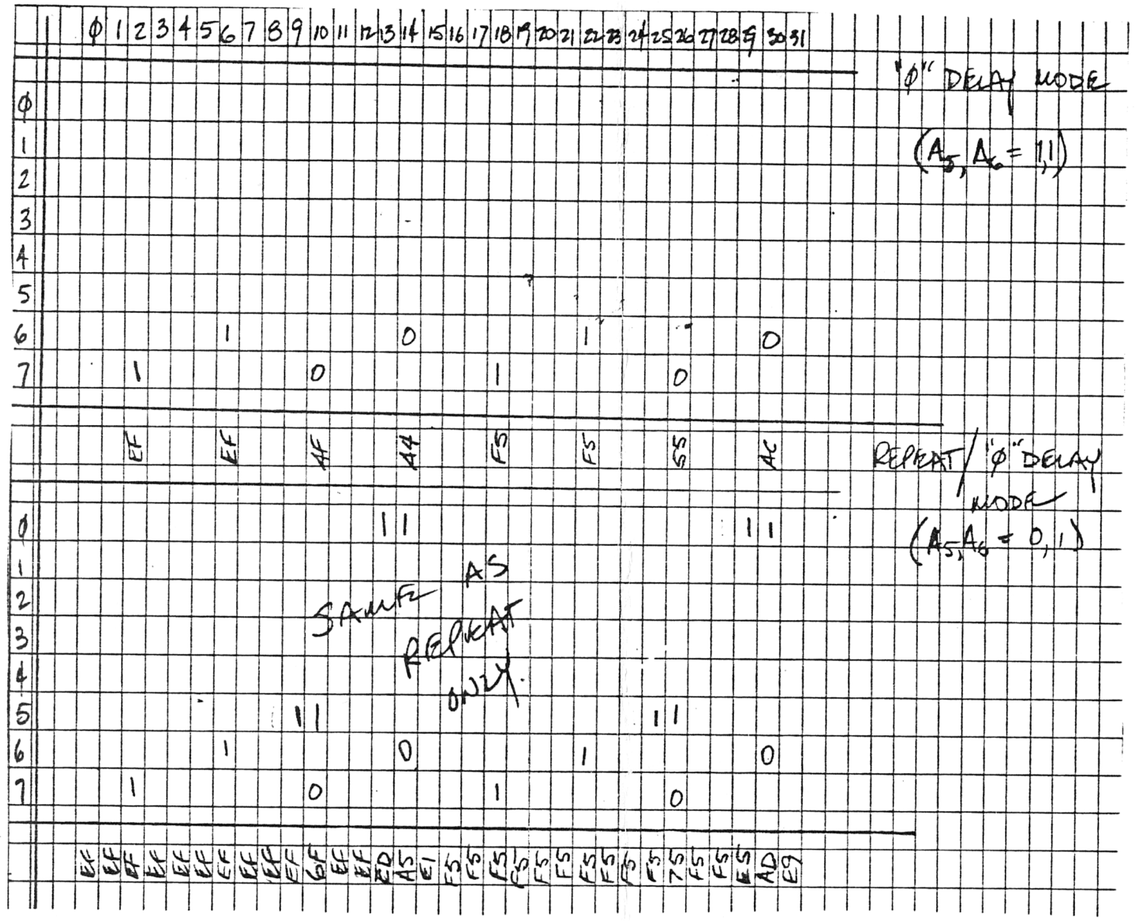
MODEL 524 DDL TIMING DIAGRAM

DWG: BS 524-7

3-21-83

PJR





EPROM LISTING

DDL.3.Ø.Ø

ADDRESS																
ØØH	EF	EF	6F	EF	EF	EF	AF	EF	EF	EF	EF	EF	EF	ED	E5	E1
1ØH	F5	F5	75	F5	F5	F5	B5	F5	F5	F5	F5	F5	F5	E5	ED	E9
2ØH	EF	EF	6F	EF	EF	EF	AF	EF	EF	CF	CF	EF	EF	EC	E4	E1
3ØH	F5	F5	75	F5	F5	F5	B5	F5	F5	D5	D5	F5	F5	E4	EC	E9
4ØH	EF	EF	EF	EF	EF	EF	EF	EF	EF	EF	6F	EF	EF	ED	A5	E1
5ØH	F5	F5	F5	F5	F5	F5	F5	F5	F5	F5	75	F5	F5	E5	AD	E9
6ØH	EF	EF	EF	EF	EF	EF	EF	EF	EF	CF	4F	EF	EF	EC	A4	E1
7ØH	F5	F5	F5	F5	F5	F5	F5	F5	F5	D5	55	F5	F5	E4	AC	E9
8ØH	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
9ØH	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
↓																
7FFH																

REPEAT MODE (A6A5 = ØØ)

NORMAL MODE (A6A5 = Ø1)

REPEAT & Ø DELAY MODE (A6A5 = 1Ø)

Ø DELAY MODE (A6A5 = 11)

NOT USED

MODEL 524 DDL DIGITAL TIMING

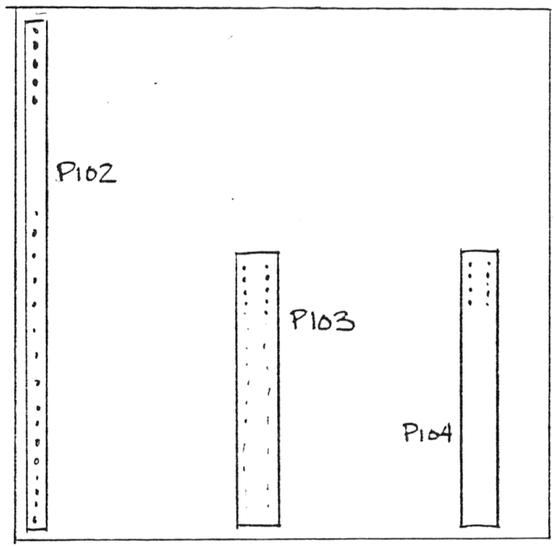
ROM MAP

3-23-83 AIR

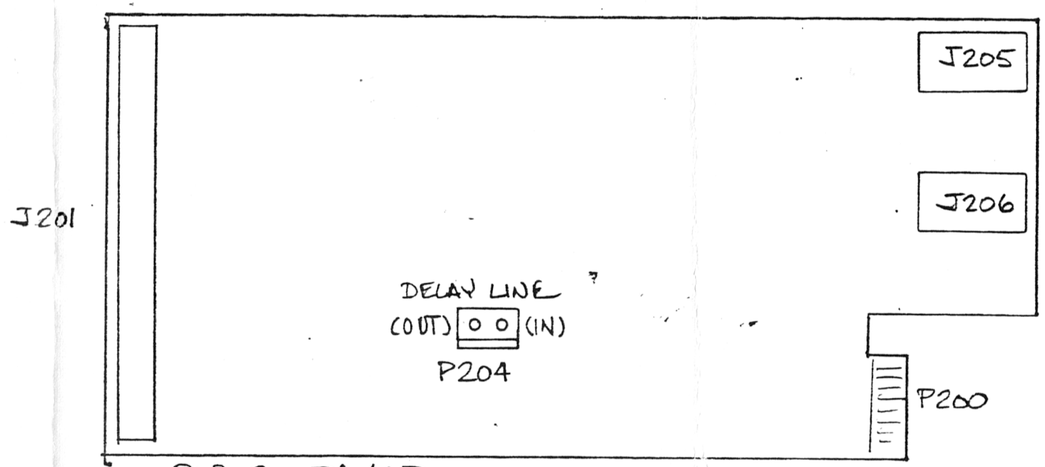
BS 524-8

MODEL 524 DDL BOARD INTERCONNECT DIAGRAM

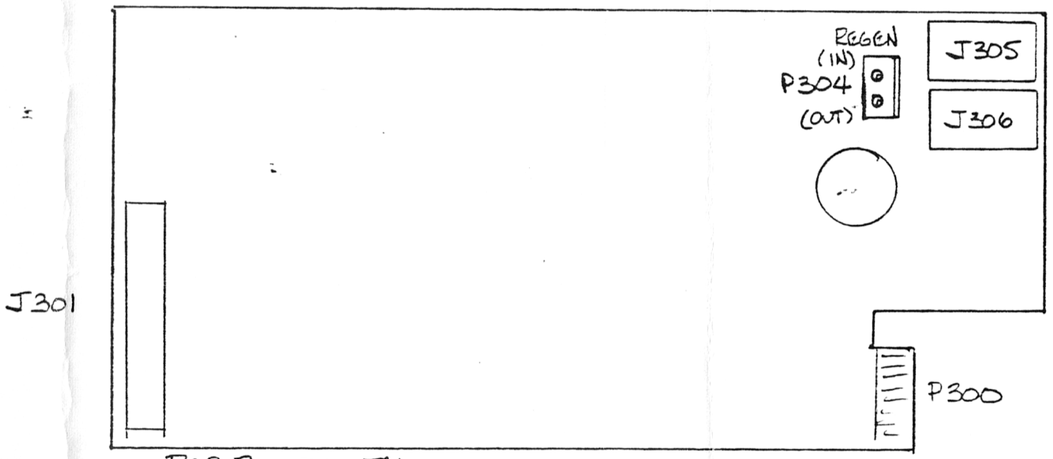
3-7-83
RSR
BS524-10



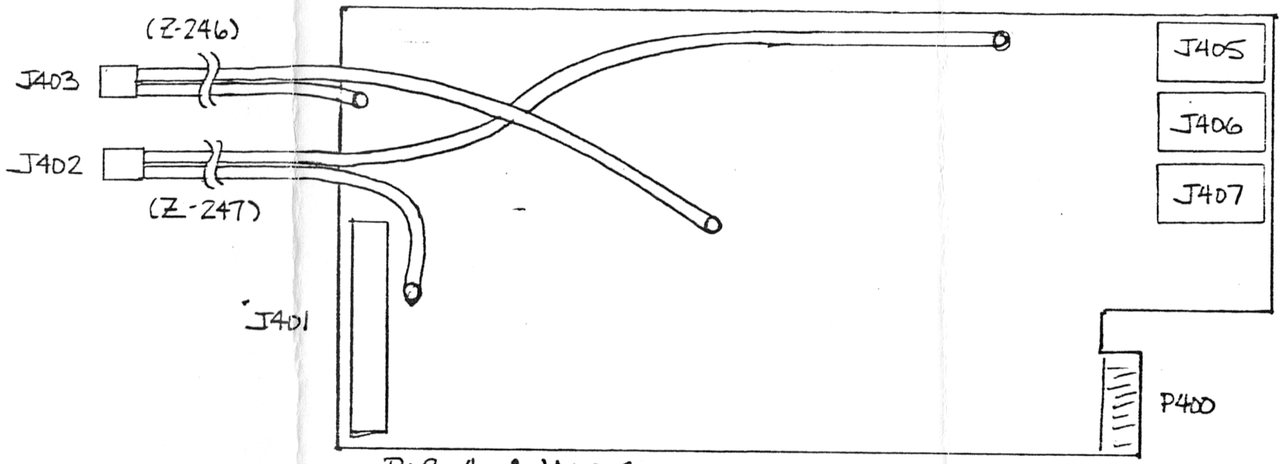
PCB 1
(BACK VIEW)



PCB 2 - DA/AD



PCB 3 - DIGITAL



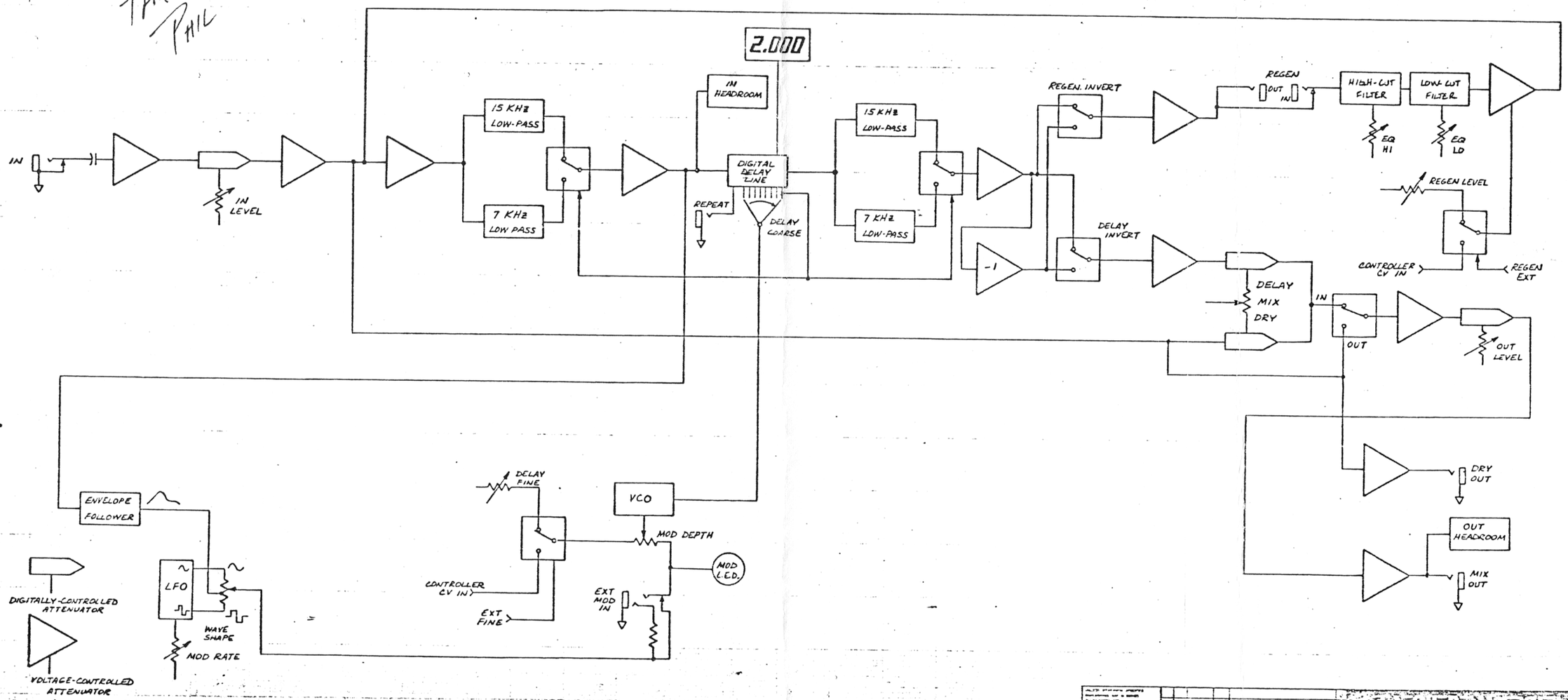
PCB 4 - ANALOG

STEVE!

THIS ONE DOES HAVE A FEW NEW MODS, BUT THESE ARE NOT AVAILABLE TO ME AT THIS TIME. I'LL SEND YOU AN ECO AS SOON AS I GET ONE —

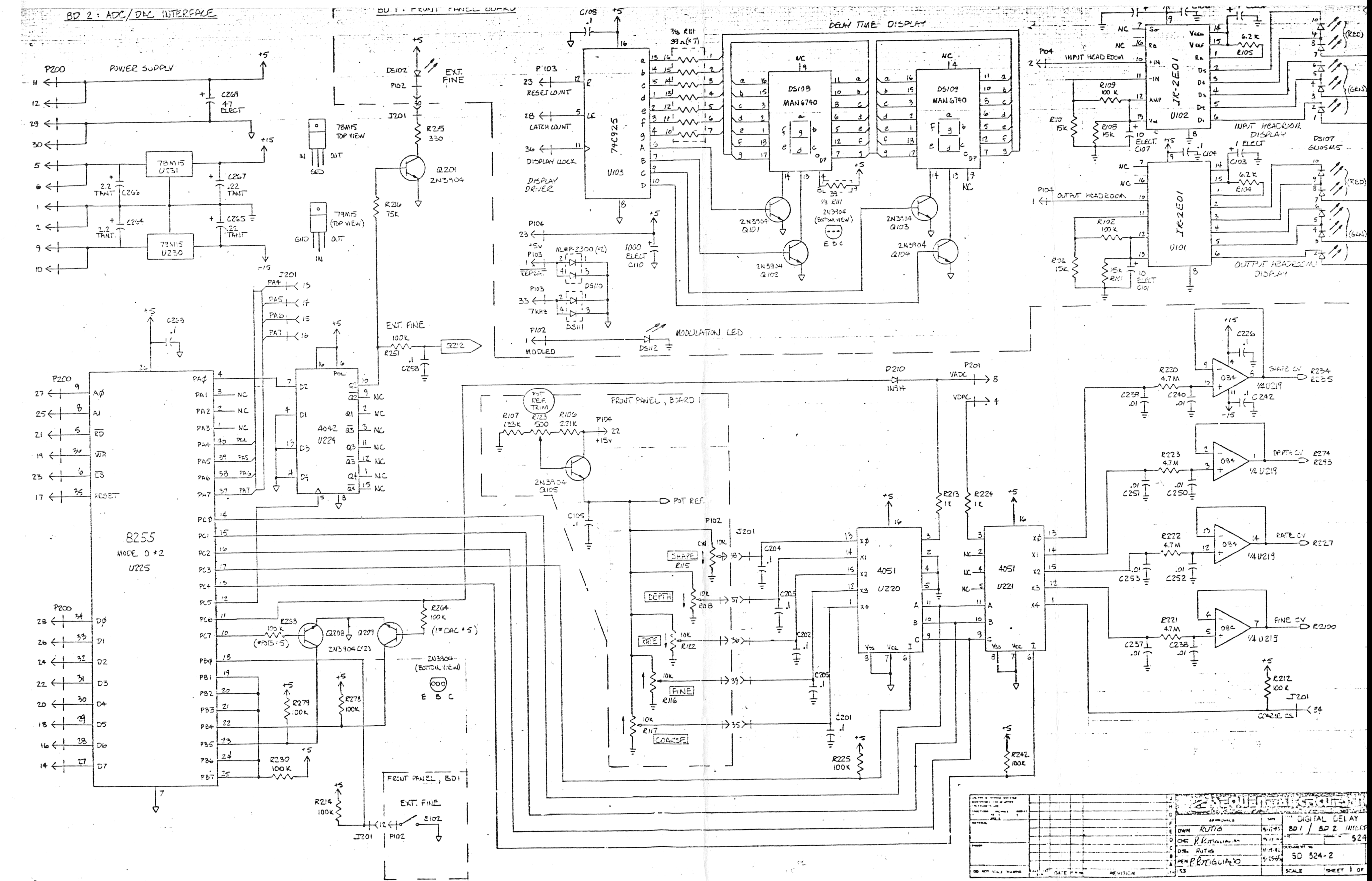
TAKE CARE

PHIL



DRN M. FARWIG	8/29/83	BLOCK DIAGRAM	
CHK		SIZE D	SCALE 528
DSN P. PUTILIANO	9/9/83	DOCUMENT NO BS 524-2	REV A
APP			
ISS		SCALE	SHEET 1 OF 1

DO NOT SCALE DRAWING



BD 2 : ADC/DAC INTERFACE
BD 1 : FRONT PANEL BOARD
POWER SUPPLY
DELAY TIME DISPLAY
INPUT HEADROOM DISPLAY
OUTPUT HEADROOM DISPLAY
DISPLAY DRIVER
MODULATION LED
FRONT PANEL, BOARD 1
FRONT PANEL, BD1
EXT. FINE
8255
MODE 0 *2
U225
4042
U224
74C925
U103
DS108
MAN 6740
DS109
MAN 6740
IR-2E01
U102
U101
4051
U220
U221
78M15
U231
79M15
U230
084
1/4 U219
SHAPE CV
DEPTH CV
RATE CV
FINE CV
COARSE CV
POT REF.
SHAPE
DEPTH
RATE
FINE
COARSE
2N3904
RESET COUNT
LATCH COUNT
DISPLAY CLOCK
DIGITAL DELAY
BD 1 / BD 2 INTERF
SD 524-2

LFO

SHAPE CONTROL

SHAPE MIX VCA'S

WAVEFORM MIXER

"EXT MOD INPUT" (OUTPUT)

DEPTH VCA'S

EXT CV SELECT

CLOCK CV MIXER / BUFFER

ADC / RAM BUFFER

ENVELOPE FOLLOWER

SAMPLE AND HOLD #1

SAMPLE AND HOLD #2

PCM 51 ADC DAC U209

PCM 51 OUTPUT DAC U207

14 BIT SAR

ADC COMPARATOR

DAC OUTPUT LATCH

2N3904 2N4250 BOTTOM VIEW

DRAWN	RUTIG	5-17-85	DIGITAL DELAY BD. 2 - ADC/DAC
CHK	P.CUTLAND	5-17-85	SIZE A
DSN	RUTIG	5-17-85	DOCUMENT NO. SD 524-2 REV A
MEN	P.CUTLAND	5-24-85	SCALE SHEET 2 OF 2

DO NOT SCALE DRAWING

CLOCK CV T.P.

MC T.P.

CLOCK DIVIDER

CONTROL COUNTER

CONTROL SEQUENCER

DISPLAY COUNTER CONTROL

DISPLAY COUNTER DIVIDER

RAM ADDRESS COUNTERS

ADDRESS OFFSET ADDERS

RAM ADDRESS MUX

4 kHz OSCILLATOR

4 kHz OSC TRIM

DISPLAY CLOCK

DISPLAY CLOCK T.P.

REPEAT

LATCH COUNT

RESET COUNT

RAM

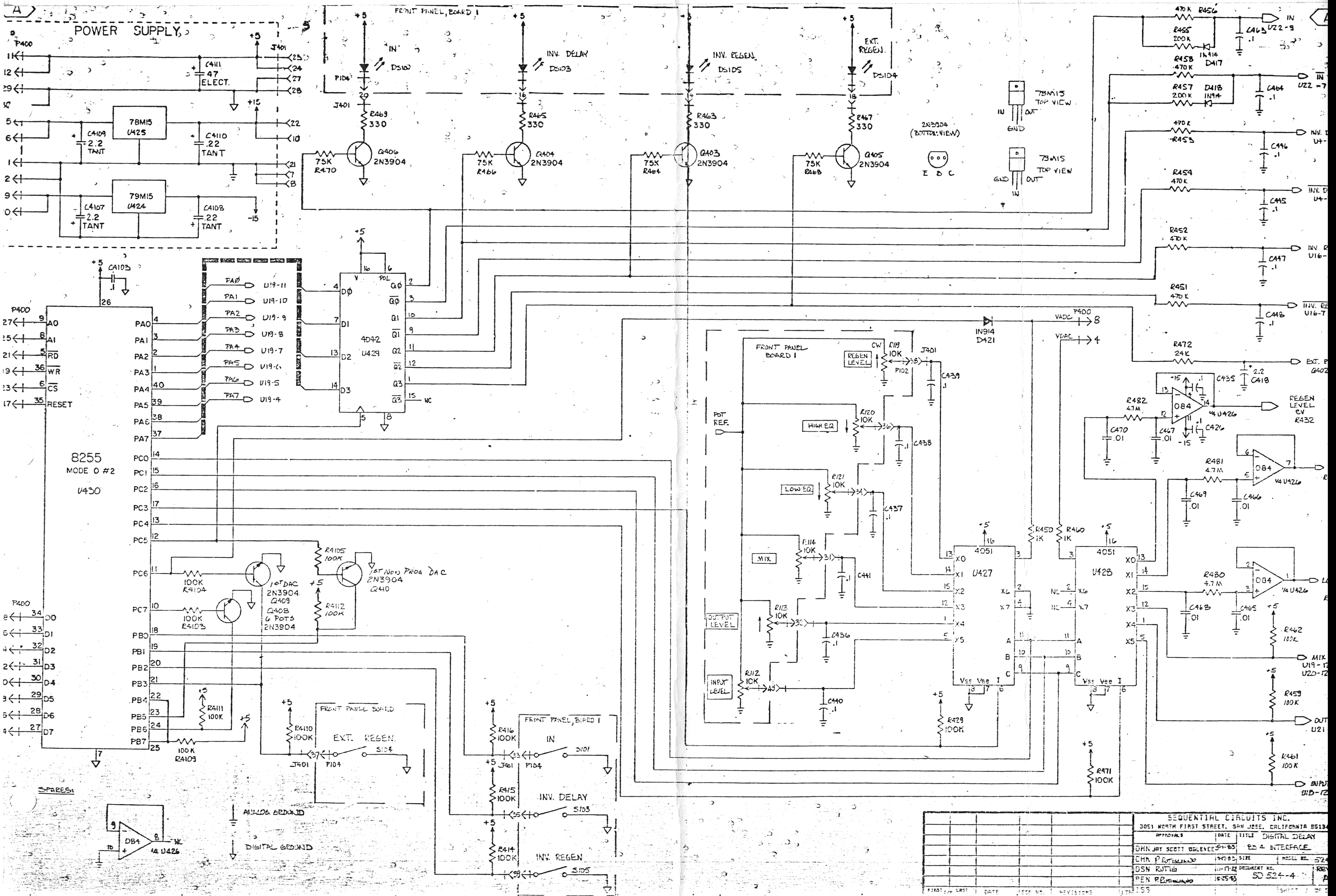
2N3904 (BOTTOM VIEW)

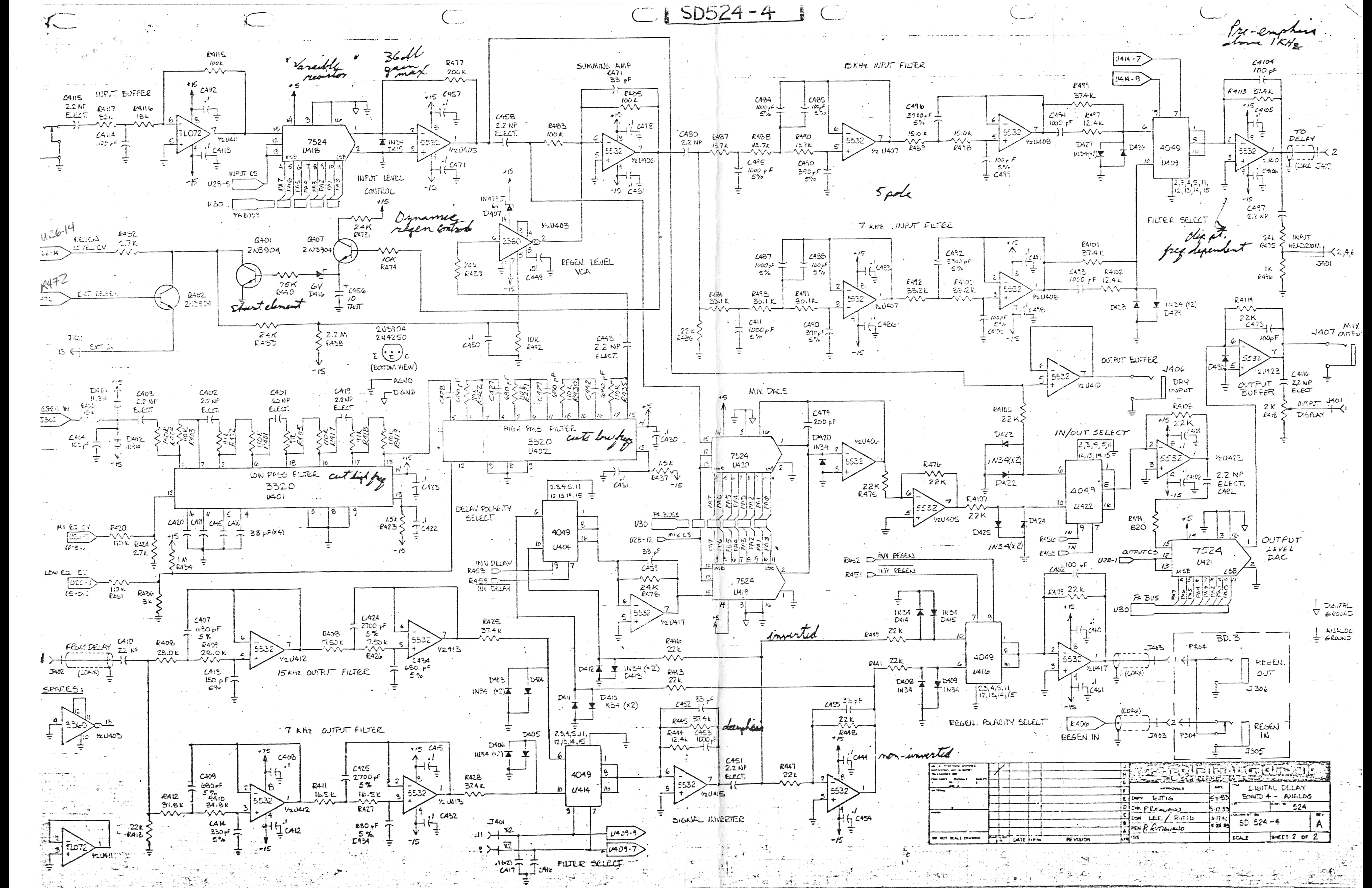
DIGITAL GROUND

ANALOG GROUND

NOT USED

DIGITAL DELAY
BD 5: DIGITAL
524
SD 524-3-
P. RUTIGLIANO


POWER SUPPLY
FRONT PANEL, BOARD 1
IN
INV. DELAY
INV. REGEN
EXT. REGEN.
78M15 U425
79M15 U424
78M15 TOP VIEW
79M15 TOP VIEW
2N3904 (BOTTOM VIEW)
E B C
8255
MODE 0 #2
U430
4042
U429
4051
U427
U428
084 ¼ U426
FRONT PANEL BOARD 1
REGEN LEVEL
HIGH EQ
LOW EQ
MIX
OUTPUT LEVEL
INPUT LEVEL
POT REF.
REGEN LEVEL CV
1st DAC 2N3904 Q409
Q408 6 POTS 2N3904
1st Non Prog DAC 2N3904 Q410
SPARES:
ANALOG GROUND
DIGITAL GROUND
SEQUENTIAL CIRCUITS INC.
3051 NORTH FIRST STREET, SAN JOSE, CALIFORNIA 95134
APPROVALS
DATE
TITLE DIGITAL DELAY
SD 4 INTERFACE
DWN JAY SCOTT OGLEVEE
CHK
DSN
PEN
SIZE
MODEL NO.
DOCUMENT NO.
SD 524-4
REV
SHEET



SD524-4
Pre-emphasis above 1KHz
INPUT BUFFER
TL072
7524
U418
"Variable resistor"
36dB gain max
SUMMING AMP
5532
15 KHz INPUT FILTER
5 pole
7 KHz INPUT FILTER
4049
U409
FILTER SELECT
clip pt. freq dependent
TO DELAY
INPUT HEADROOM
INPUT LEVEL CONTROL
Dynamic regen control
REGEN. LEVEL VCA
3360
Shunt element
REGEN LEVEL CV
EXT REGEN
2N3904
2N4250
(BOTTOM VIEW)
AGND
DGND
OUTPUT BUFFER
DRY INPUT
MIX OUTPUT
OUTPUT DISPLAY
HIGH PASS FILTER
3320
U402
cuts low freq
LOW PASS FILTER
U401
cut high freq
HI EQ CV
LOW EQ CV
DELAY POLARITY SELECT
U404
INV DELAY
MIX DACS
U420
U419
PF BUS
MIX CS
IN/OUT SELECT
U422
OUTPUT LEVEL DAC
U421
INV REGEN
FROM DELAY
15 KHz OUTPUT FILTER
7 KHz OUTPUT FILTER
inverted
non-inverted
deemphasis
SIGNAL INVERTER
REGEN. POLARITY SELECT
REGEN IN
REGEN. OUT
BD. 3
DIGITAL GROUND
ANALOG GROUND
SPARES:
FILTER SELECT
DIGITAL DELAY
BOARD 4 - ANALOG
SD 524-4
SHEET 2 OF 2
REVISION
DO NOT SCALE DRAWING