7 11 TH 15 14 LAB 2 18

FD 1771	x 1
ROM 4K	x 1
74LS32	x 2
74LS04	x 2
74LS174	x 1
74LS367	x 1
74LS20	x 1
74F139	x 1
74LS74	x 1

= 0,47 µF 100V

= 0,1 µF 100V

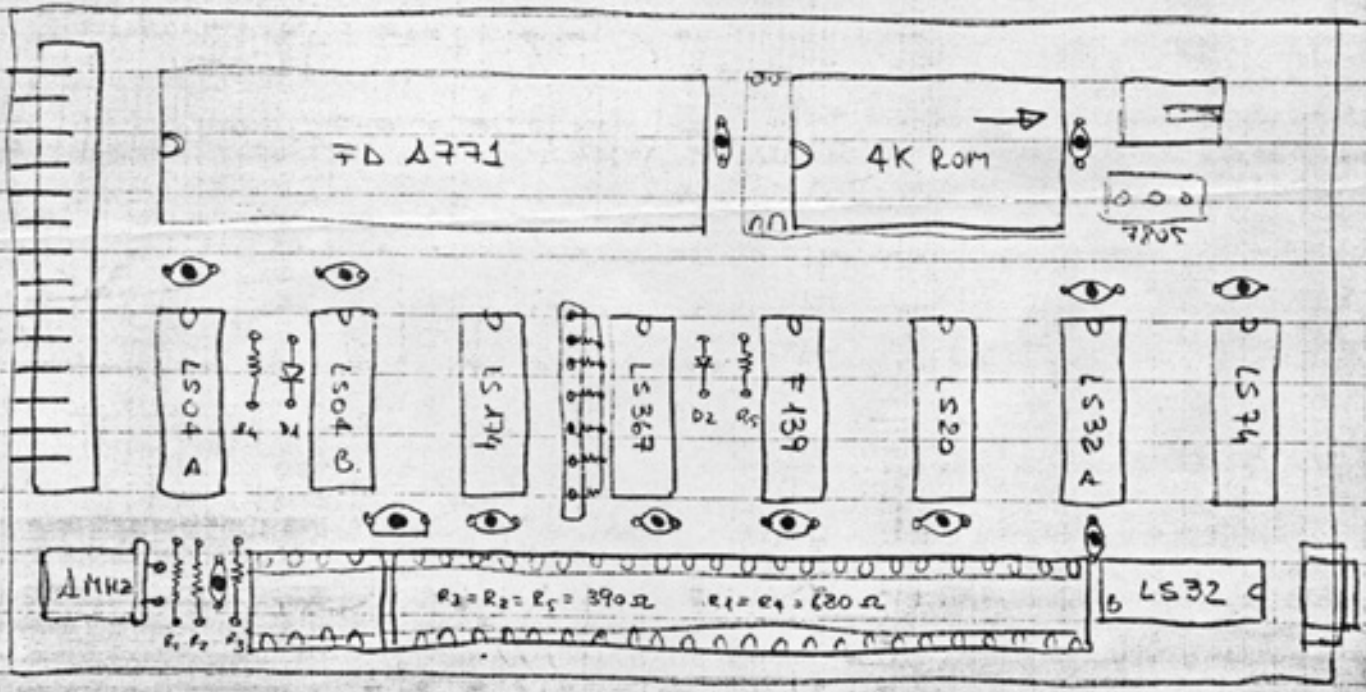
R PACK = 6 x 2.2

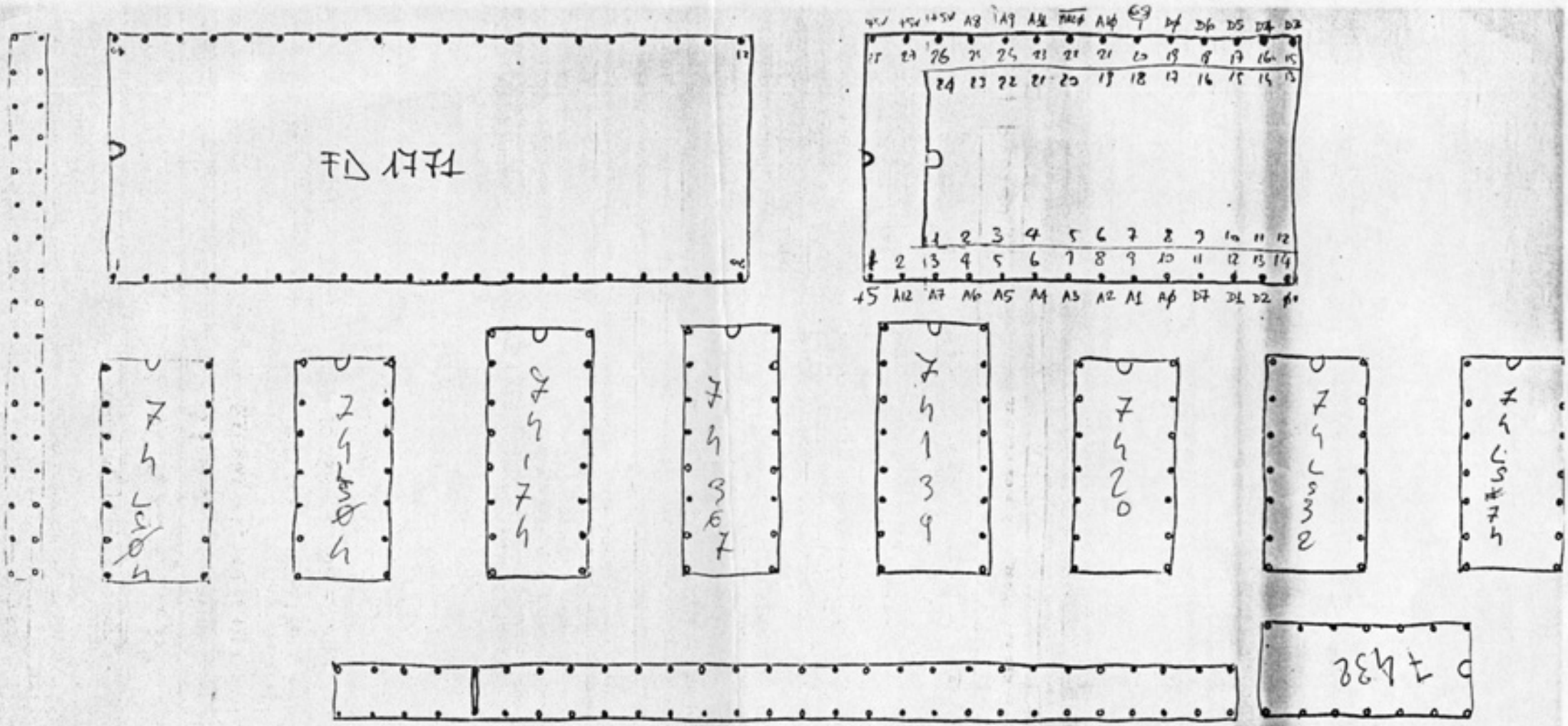
D1 = D2 = 1N4148

QUARZO 1 MHz

R1 = R4 = 680 Ω

R2 = R3 = R5 = 390 Ω

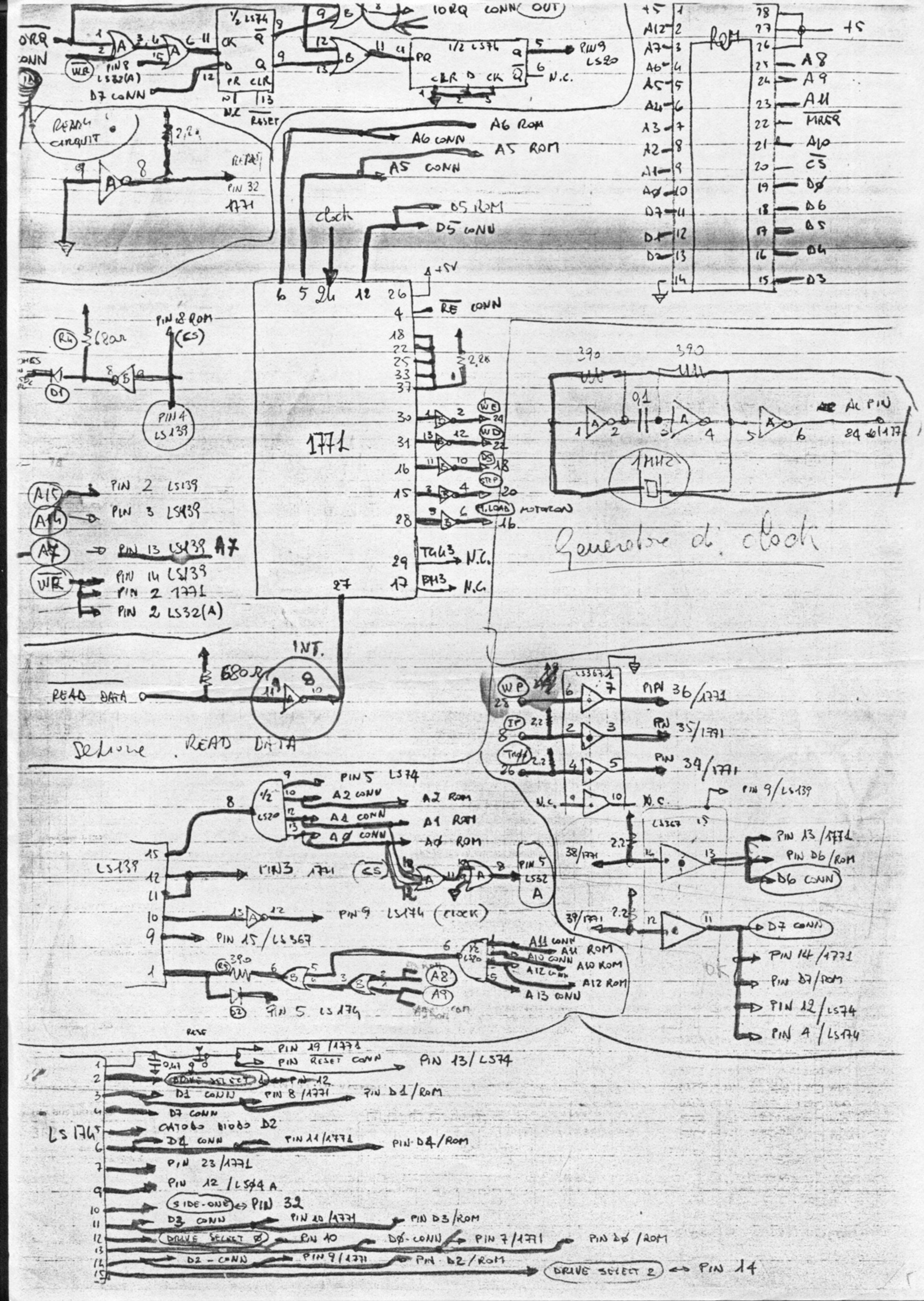




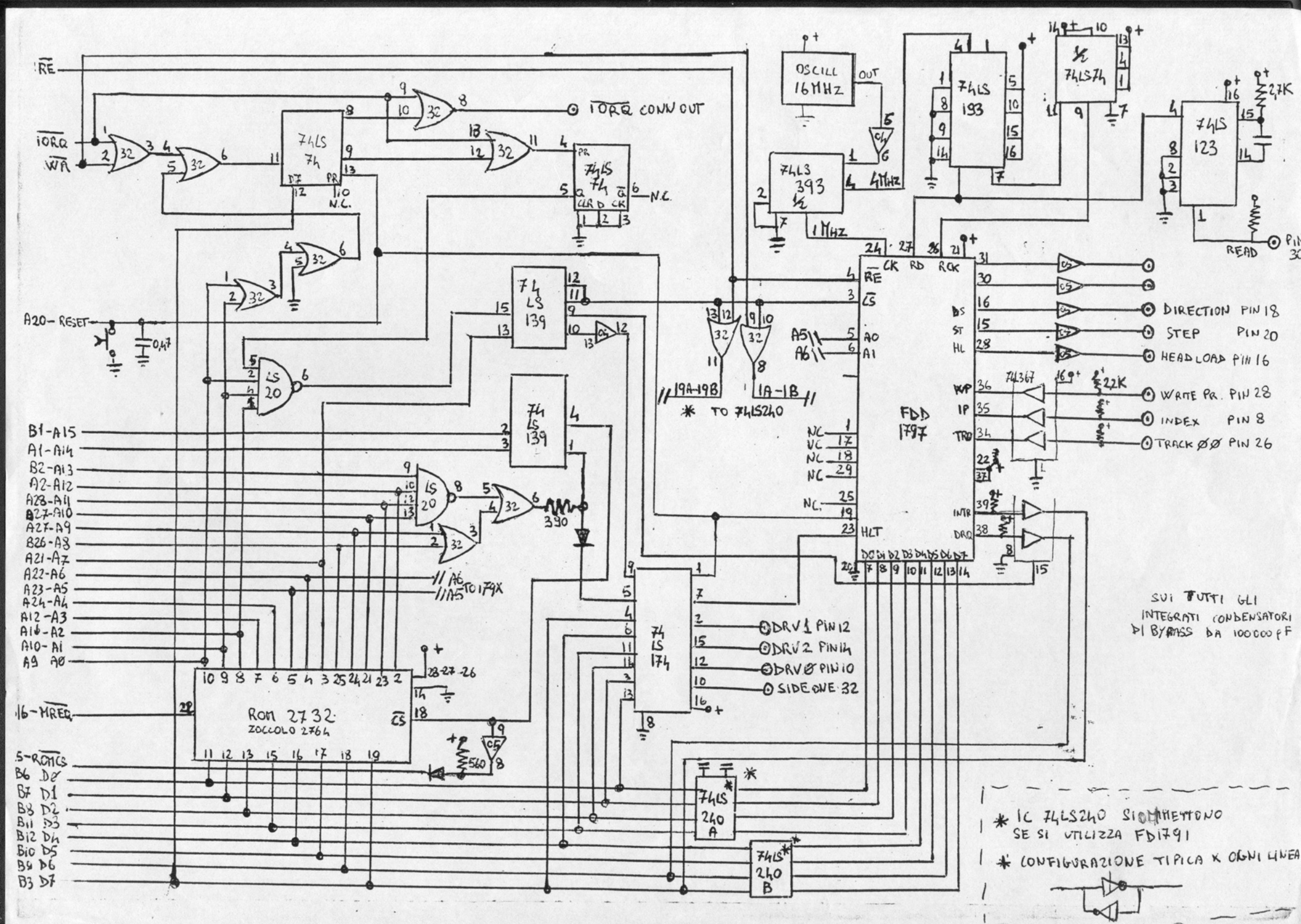
DO - D7 ok
WP ok

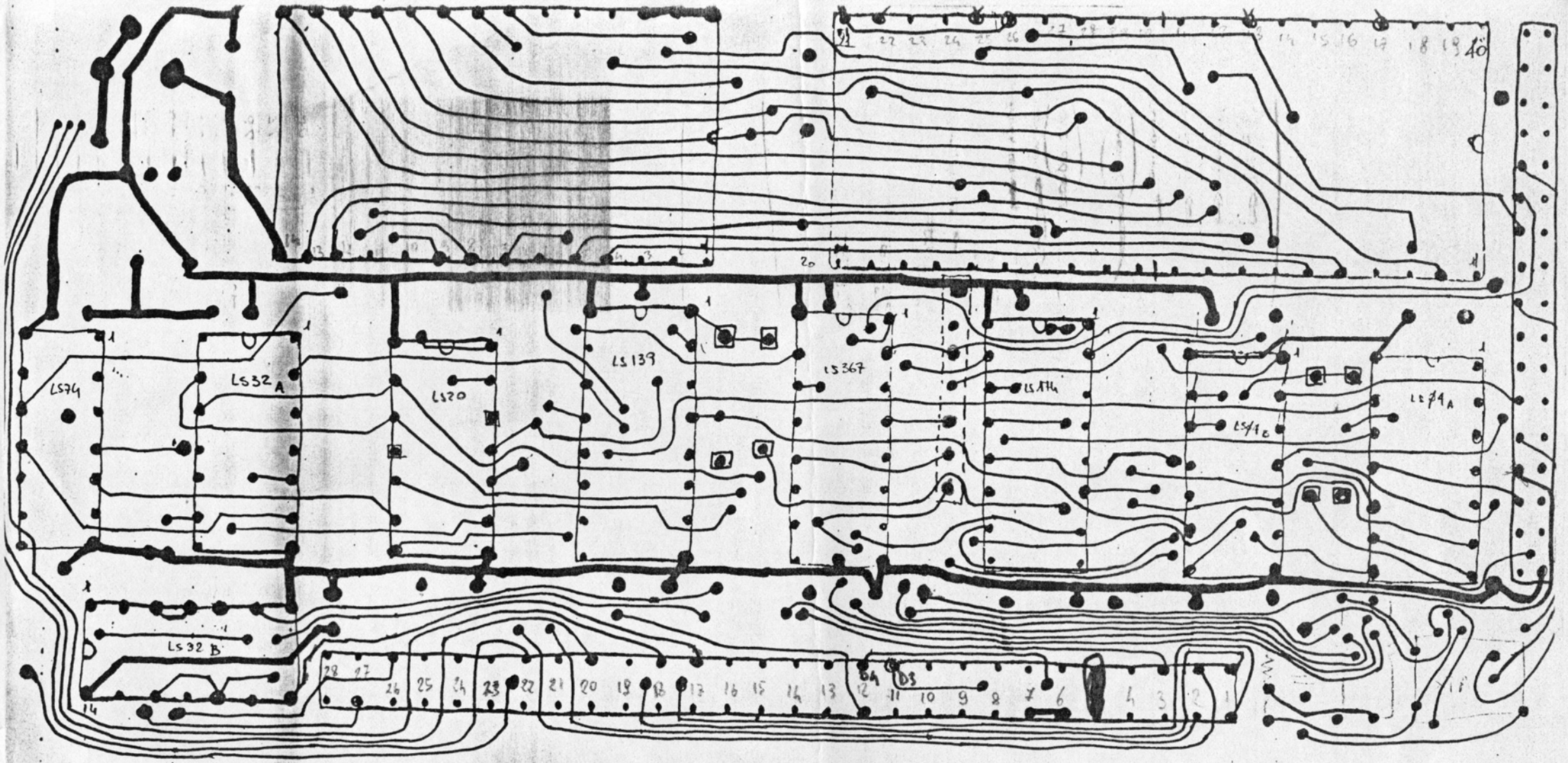
	0	1	2	3	4	5	6	7
CD	1	1	0	0	1	1	0	1
F	0	0	0	0	1	1	1	1
3E	1	0	0	0	1	1	1	0
	0	1						

LATO INTEGRATI e COMPONENTI



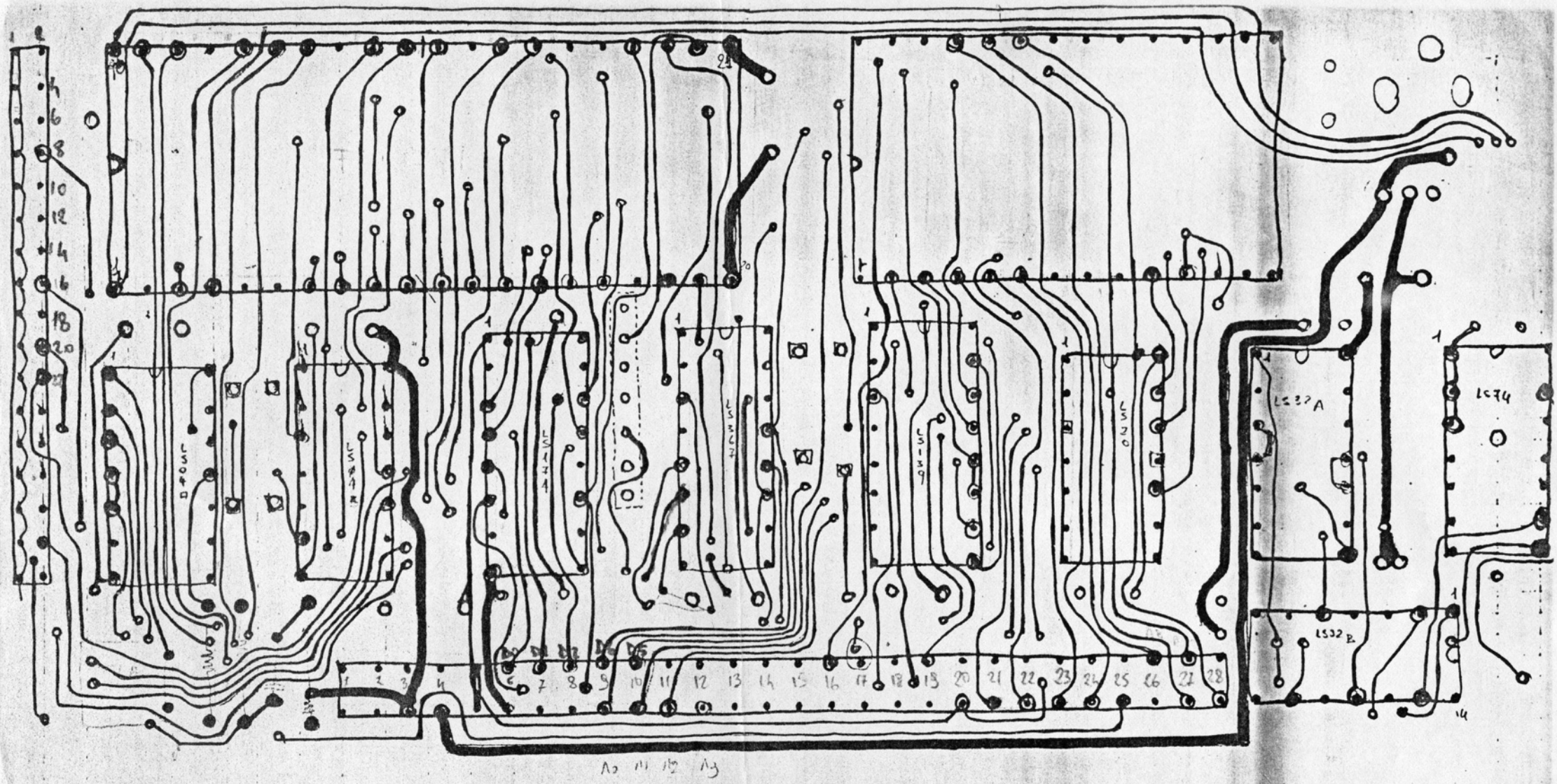
1/2 LS74
IORQ CONN OUT
1/2 LS74
PIN 9 LS20
N.C.
PIN 8 LS32(A)
D7 CONN
RESET
READ CIRCUIT
2,2K
PIN 32 1771
A6 ROM
A6 CONN
A5 ROM
A5 CONN
clock
D5 ROM
D5 CONN
+5V
RE CONN
ROM
+5
A12
A7
A6
A5
A4
A3
A2
A1
AØ
D7
D1
D2
A8
A9
A11
MREQ
A10
CS
DØ
D6
D5
D4
D3
PIN 8 ROM (CS)
680Ω
PIN 4 LS139
1771
WE
WD
DS
STEP
H.LOAD MOTOR ON
TG43 N.C.
DIRC N.C.
390
390
0,1
1MHZ
AL PIN 24 1771
Generatore di clock
A15 PIN 2 LS139
A14 PIN 3 LS139
A7 PIN 13 LS139 A7
PIN 14 LS139
WR PIN 2 1771
PIN 2 LS32(A)
INT.
READ DATA
680Ω
Sezione READ DATA
LS367
WP PIN 36/1771
IP PIN 35/1771
TR00 PIN 34/1771
N.C.
PIN 9/LS139
PIN 5 LS74
1/2 LS20
A2 CONN
A2 ROM
A1 CONN
A1 ROM
AØ CONN
AØ ROM
LS139
PIN 3 1771 (CS)
PIN 5 LS32 A
PIN 9 LS174 (CLOCK)
PIN 15/LS367
LS367
38/1771
PIN 13/1771
PIN D6/ROM
D6 CONN
39/1771
D7 CONN
PIN 14/1771
PIN D7/ROM
PIN 12/LS74
PIN 4/LS174
A11 CONN
A11 ROM
A10 CONN
A10 ROM
A12 CONN
A12 ROM
A13 CONN
PIN 5 LS174
A8
A9
RESET
0,47
PIN 19/1771
PIN RESET CONN
PIN 13/LS74
DRIVE SELECT 1 PIN 12
D1 CONN
PIN 8/1771
PIN D1/ROM
D7 CONN
CATODO DIODO D2
LS174
D4 CONN
PIN 11/1771
PIN D4/ROM
PIN 23/1771
PIN 12/LS74 A
SIDE-ONE PIN 32
D3 CONN
PIN 10/1771
PIN D3/ROM
DRIVE SELECT Ø PIN 10
DØ-CONN
PIN 7/1771
PIN DØ/ROM
D2-CONN
PIN 9/1771
PIN D2/ROM
DRIVE SELECT 2 PIN 14


RE
IORQ
WR
IORQ CONN OUT
OSCILL 16MHz
OUT
74LS 193
74LS74
74LS 123
2,7K
74LS 393
4MHz
1MHz
READ
A20-RESET
0,47
74 LS 139
LS 20
19A-19B
1A-1B
* TO 74LS240
FDI 1797
CK RD RCK
DIRECTION PIN 18
STEP PIN 20
HEAD LOAD PIN 16
74367
22K
WRITE PR. PIN 28
INDEX PIN 8
TRACK ØØ PIN 26
HLT
B1-A15
A1-A14
B2-A13
A2-A12
A28-A11
B27-A10
A27-A9
B26-A8
A21-A7
A22-A6
A23-A5
A24-A4
A12-A3
A14-A2
A10-A1
A9 A0
A6 TO 74X
A5 TO 74X
390
ROM 2732
ZOCCOLO 2764
16-MREQ
5-RDTCS
B6 D0
B7 D1
B8 D2
B11 D3
B12 D4
B10 D5
B4 D6
B3 D7
74 LS 174
DRV 1 PIN 12
DRV 2 PIN 14
DRV Ø PIN 10
SIDE ONE 32
560
74LS 240 A
74LS 240 B
SUI TUTTI GLI INTEGRATI CONDENSATORI DI BYPASS DA 100000 pF
* IC 74LS240 SI METTONO SE SI UTILIZZA FDI791
* CONFIGURAZIONE TIPICA X OGNI LINEA



OK NL

LATO SALDATURE



OK V1
OK N2
OK N3

LATO INTEGRATI e COMPONENTI

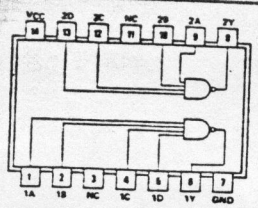
DUAL 4-INPUT POSITIVE-NAND GATES

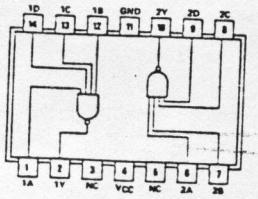
20

positive logic:

$Y = \overline{ABCD}$

See page 6-2





SN5420 (J)
SN54H20 (J)
SN54L20 (J)
SN54LS20 (J, W)
SN54S20 (J, W)

SN7420 (J, N)
SN74H20 (J, N)
SN74L20 (J, N)
SN74LS20 (J, N)
SN74S20 (J, N)

SN5420 (W)
SN54H20 (W)
SN54L20 (T)

NC—No internal connection

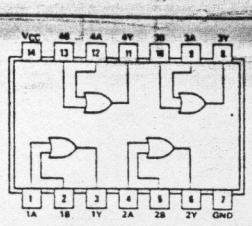
QUADRUPLE 2-INPUT POSITIVE-OR GATES

32

positive logic:

$Y = A+B$

See page 6-28



SN5432 (J, W)
SN54LS32 (J, W)
SN54S32 (J, W)

SN7432 (J, N)
SN74LS32 (J, N)
SN74S32 (J, N)

HEX INVERTERS

04

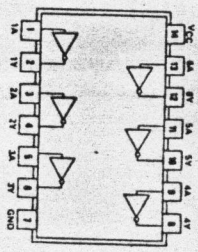
positive logic:

$Y = \overline{A}$

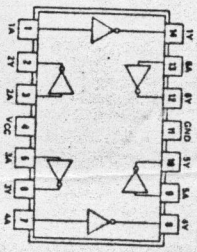
See page 6-2

SN5404 (J)
SN54H04 (J)
SN54L04 (J)
SN54LS04 (J, W)
SN54S04 (J, W)

SN7404 (J, N)
SN74H04 (J, N)
SN74L04 (J, N)
SN74LS04 (J, N)
SN74S04 (J, N)



SN5404 (W)
SN54H04 (W)
SN54L04 (T)



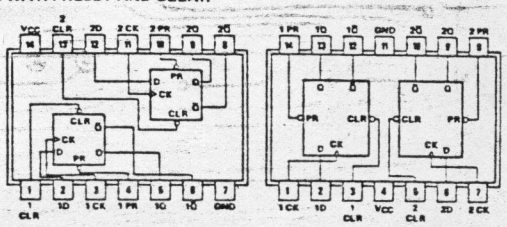
DUAL D-TYPE POSITIVE-EDGE-TRIGGERED FLIP-FLOPS WITH PRESET AND CLEAR

74

FUNCTION TABLE

INPUTS				OUTPUTS	
PRESET	CLEAR	CLOCK	D	Q	$\bar{Q}$
L	H	X	X	H	L
H	L	X	X	L	H
L	L	X	X	H*	H*
H	H	↑	H	H	L
H	H	↑	L	L	H
H	H	L	X	Q_0	$\bar{Q}_0$

See pages 6-46, 6-50, 6-54, and 6-58



SN5474 (J)
SN54H74 (J)
SN54L74 (J)
SN54LS74A (J, W)
SN54S74 (J, W)

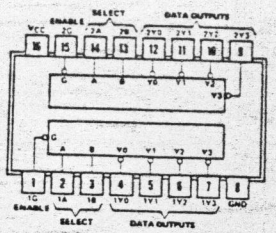
SN7474 (J, N)
SN74H74 (J, N)
SN74L74 (J, N)
SN74LS74A (J, N)
SN74S74 (J, N)

SN5474 (W)
SN54H74 (W)
SN54L74 (T)

DUAL 2-TO-4 LINE DECODERS/MULTIPLEXERS

139

See page 7-134



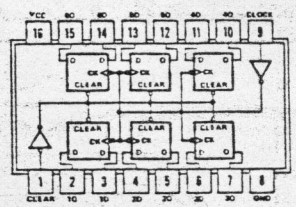
SN54LS139 (J, W)
SN54S 139 (J, W)

SN74LS139 (J, N)
SN74S139 (J, N)

HEX D-TYPE FLIP-FLOPS

174 SINGLE RAIL OUTPUTS
COMMON DIRECT CLEAR

See page 7-253



SN54174 (J, W)
SN54LS174 (J, W
SN54S174 (J, W)

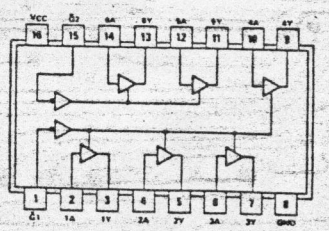
SN74174 (J, N)
SN74LS174 (J, N)
SN74S174 (J, N)

PIN ASSIGNMENTS (TOP VIEWS)

HEX BUS DRIVERS

367 NONINVERTED DATA OUTPUT
4-LINE AND 2-LINE ENABLE INPUTS
3-STATE OUTPUTS

See page 6-36



SN54367A (J, W)
SN54LS367A (J, W)

SN74367A (J, N)
SN74LS367A (J, N)