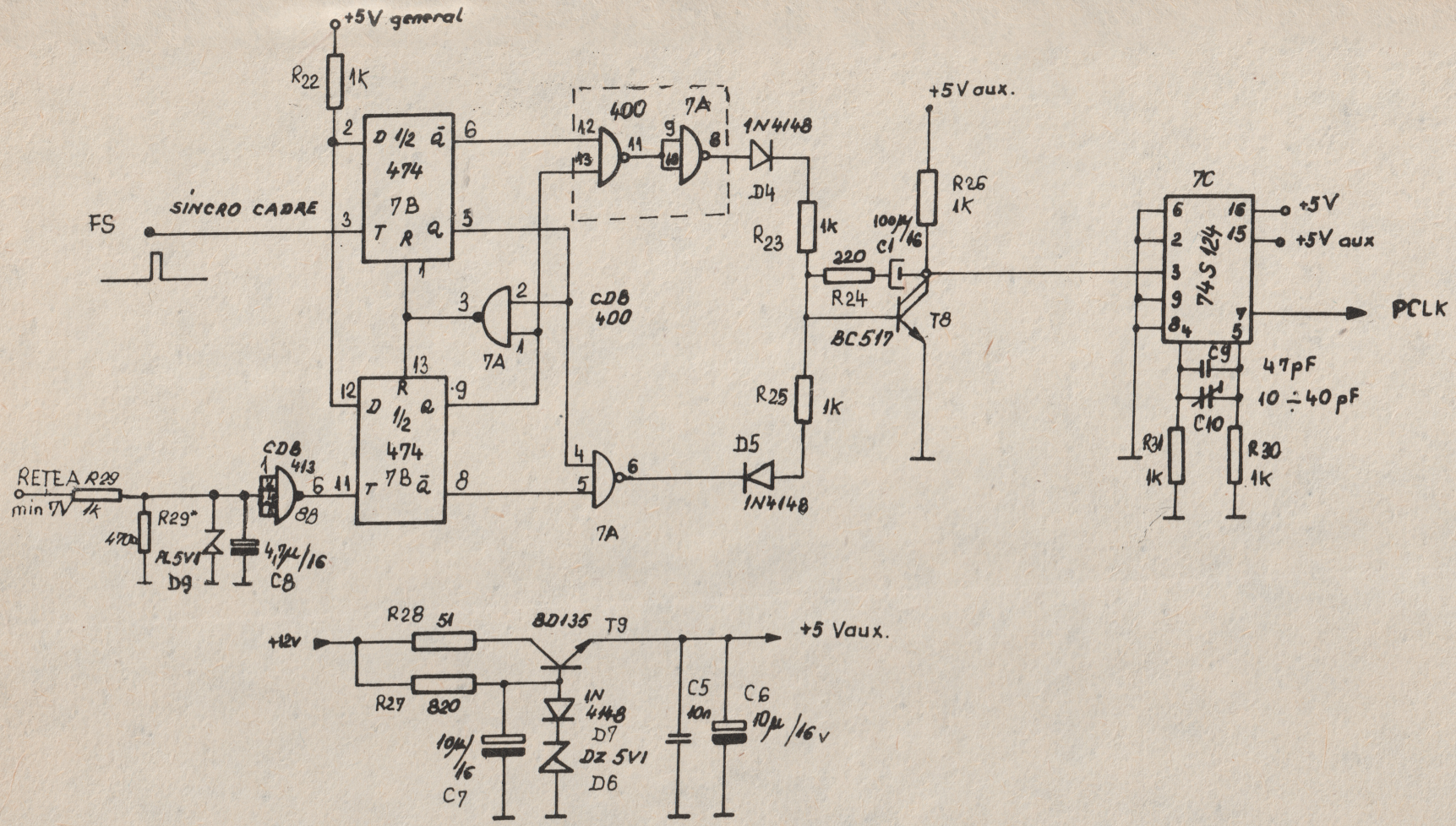
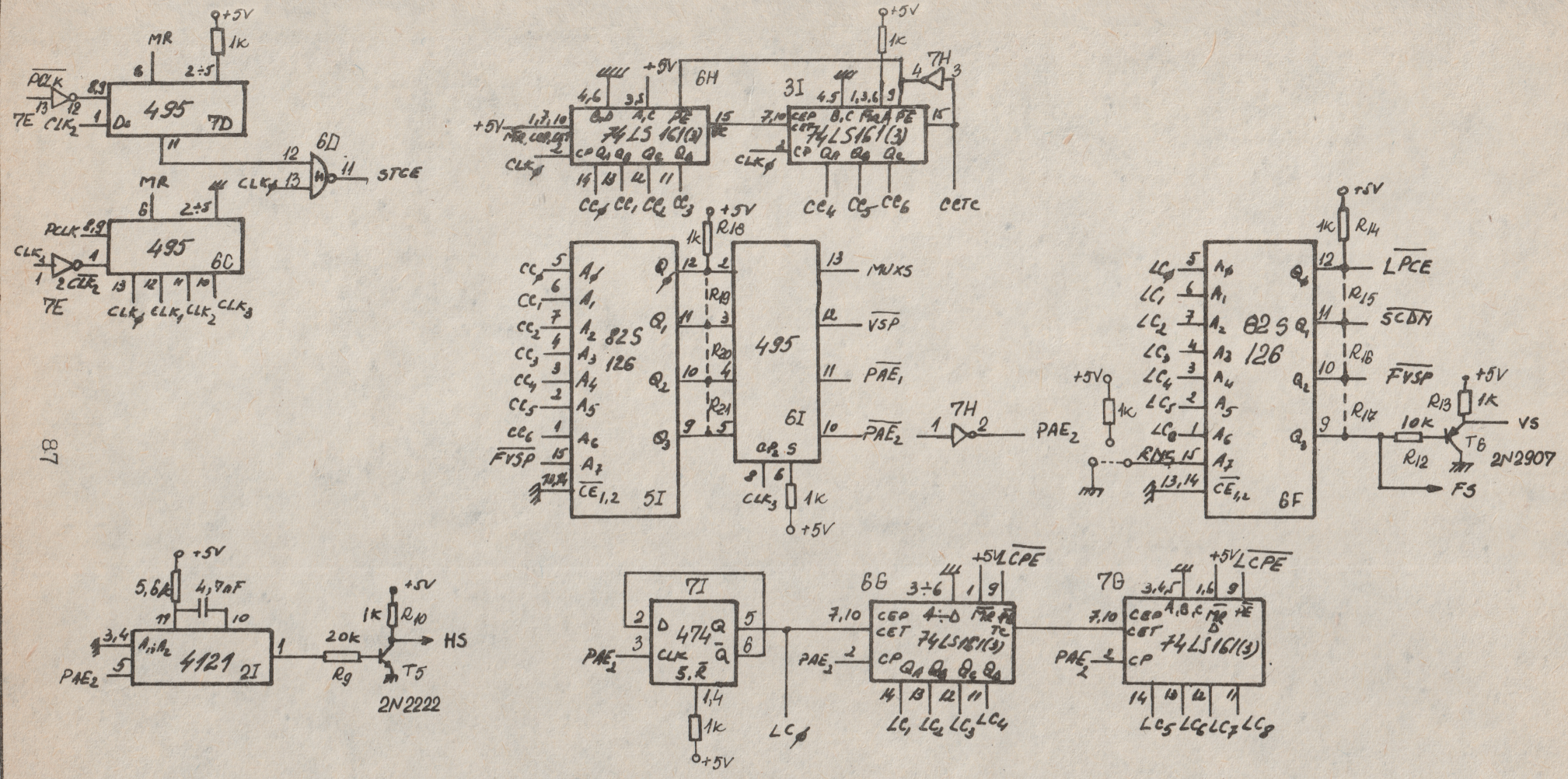
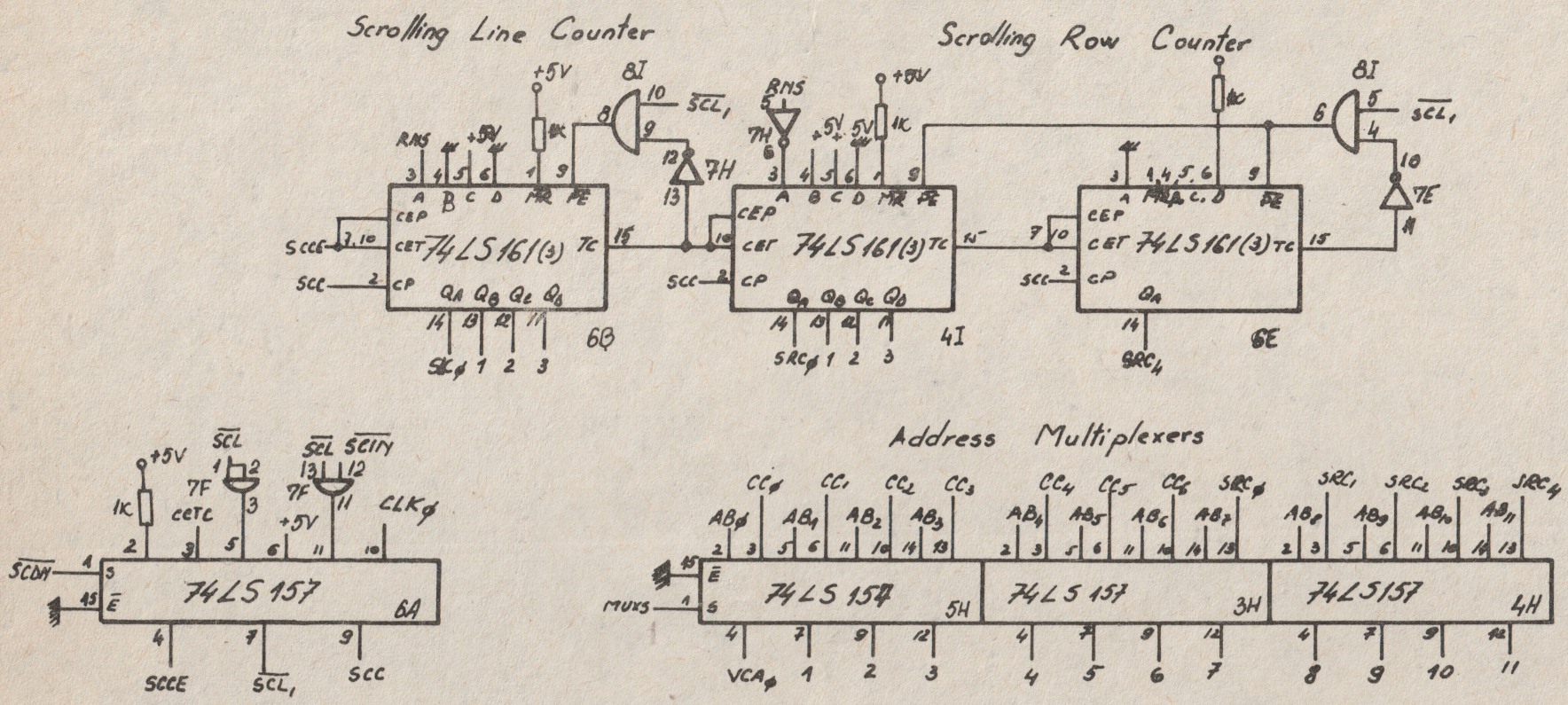
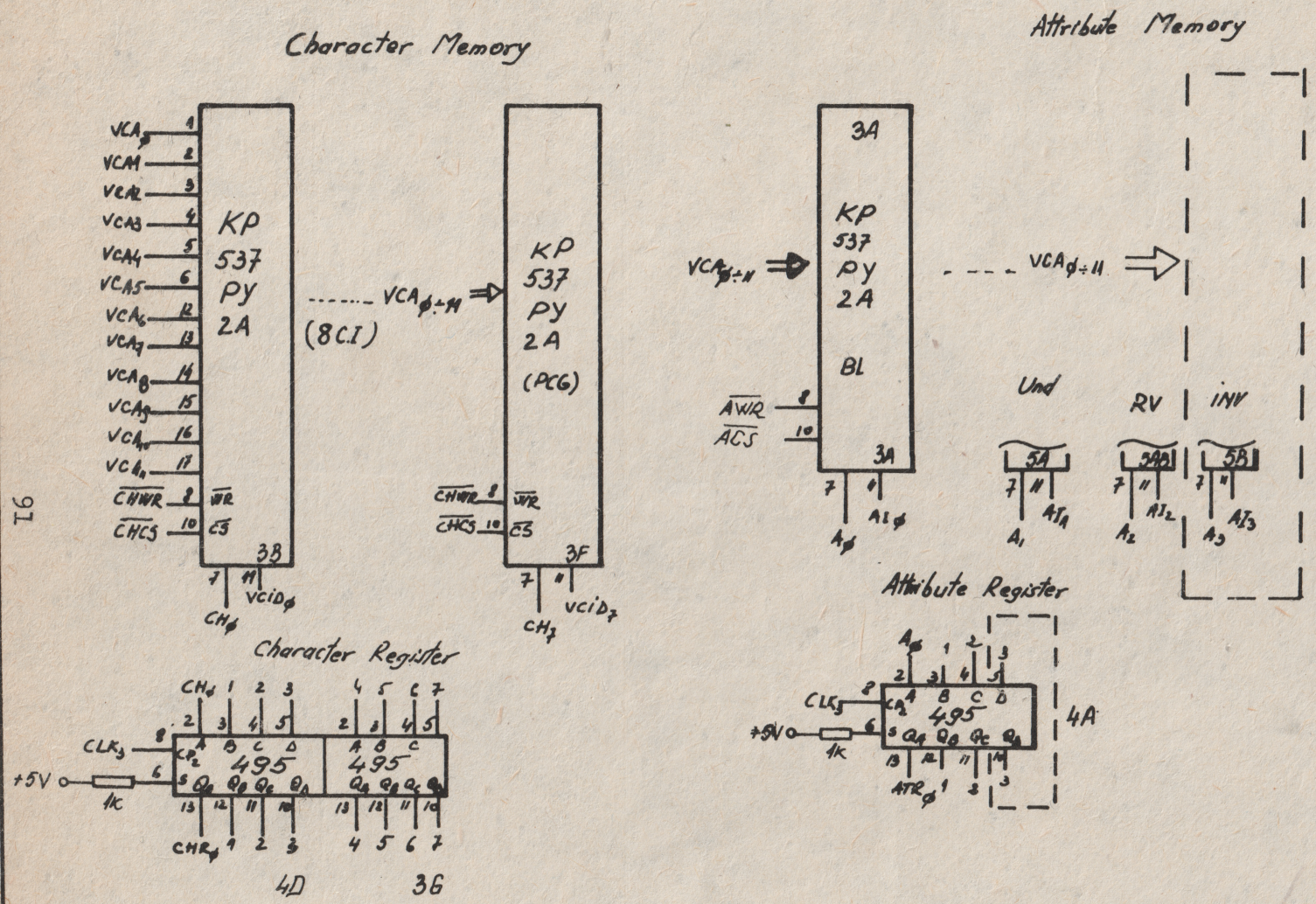


OSCILATOR SINCRON CU REȚEA

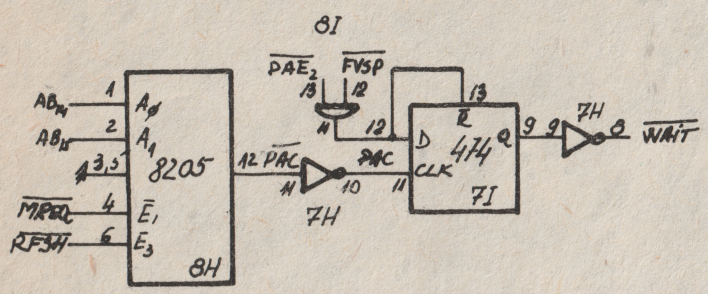

REFRESH COUNTERS
VIDEO CONTROLLER
MR
PCLK
CLK2
7E
7D
6D
6C
495
STCE
CLK1
CLK3
6H
3I
7H
74LS161(3)
CE4
CE5
CE6
CETC
MUXS
VSP
PAE1
PAE2
FVSP
5I
6I
825126
R18
R19
R20
R21
LPCE
SCDN
FVSP
VS
2N2907
6F
FS
HS
T5
2N2222
5,6k
4,7nF
4121
2I
20k
Rg
7I
474
6G
7G
LCPE
LC0
LC1
LC2
LC3
LC4
LC5
LC6
LC7
LC8
T6

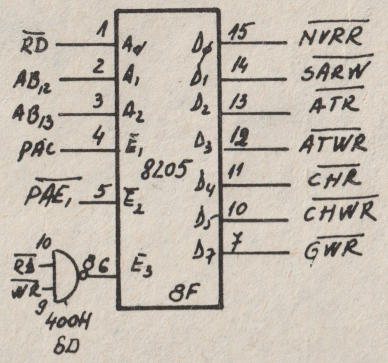


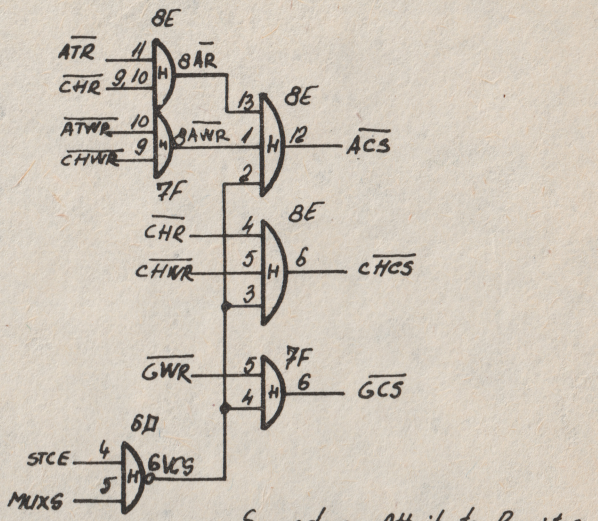
VIDEO CONTROLLER SCROLLING COUNTERS

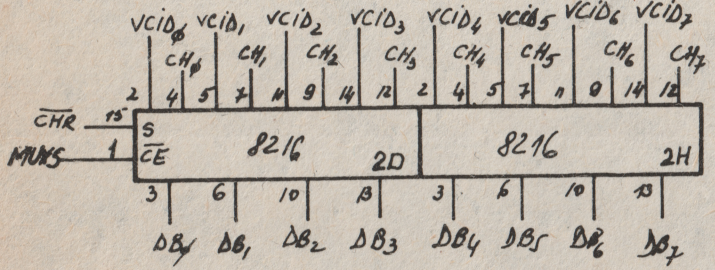


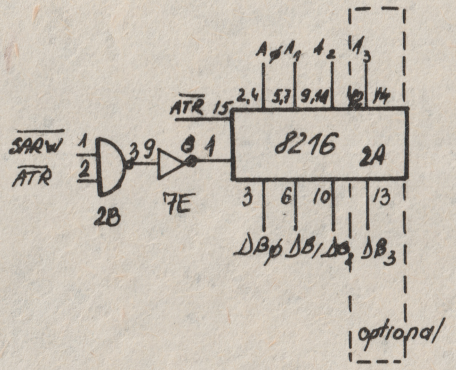
VIDEO CONTROLLER
REFRESH MEMORY



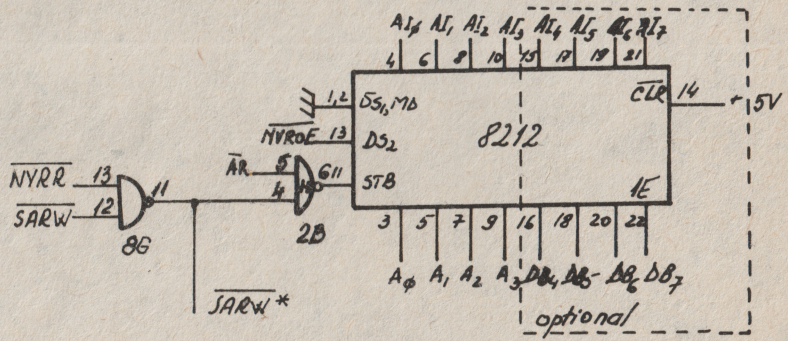






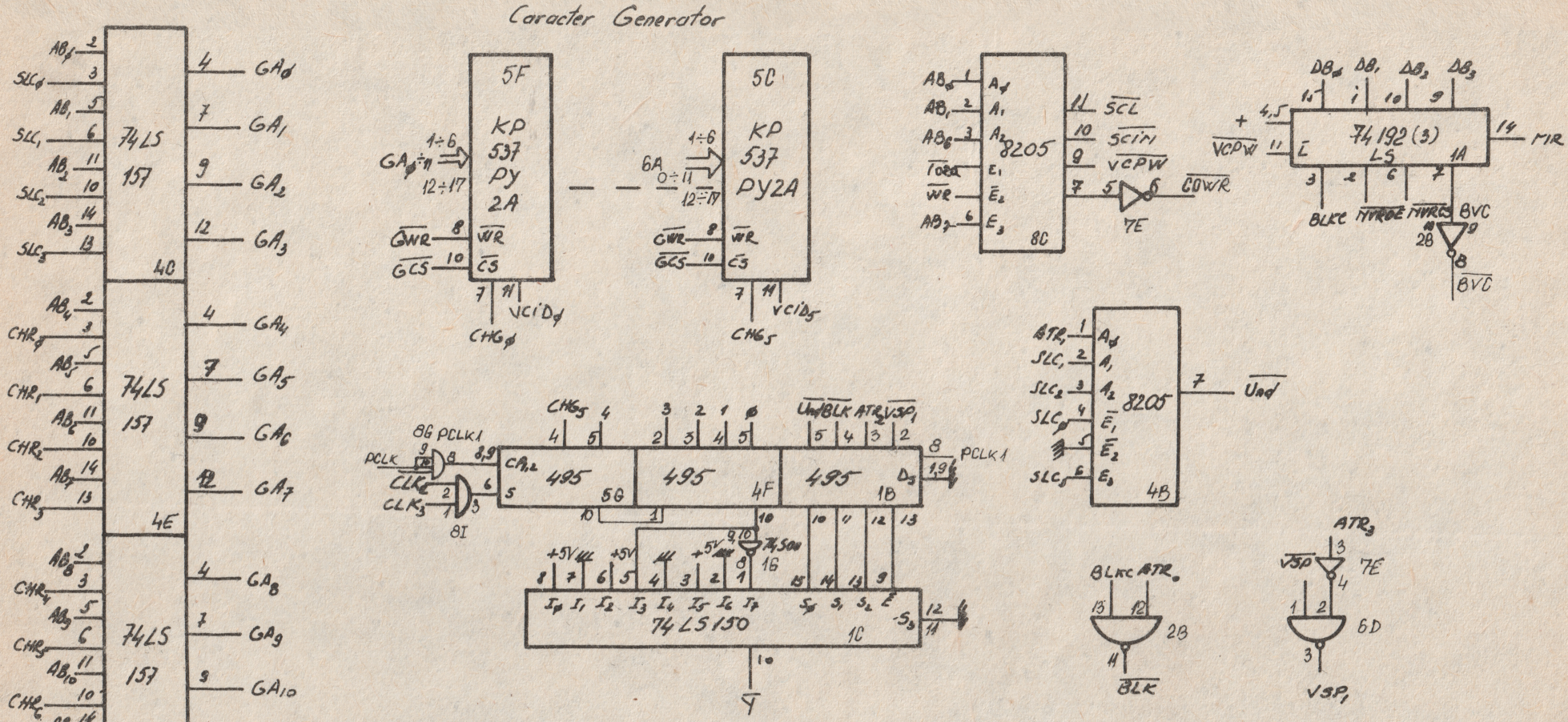


Secondary Attribute Register

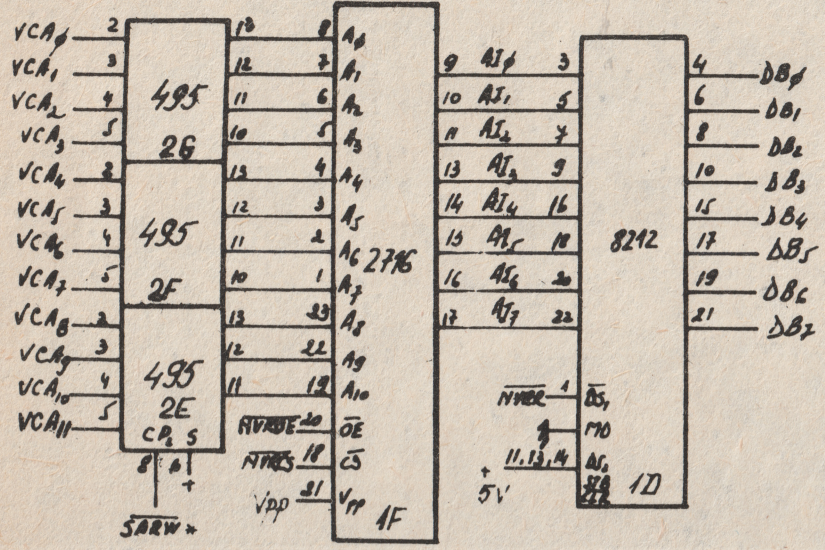


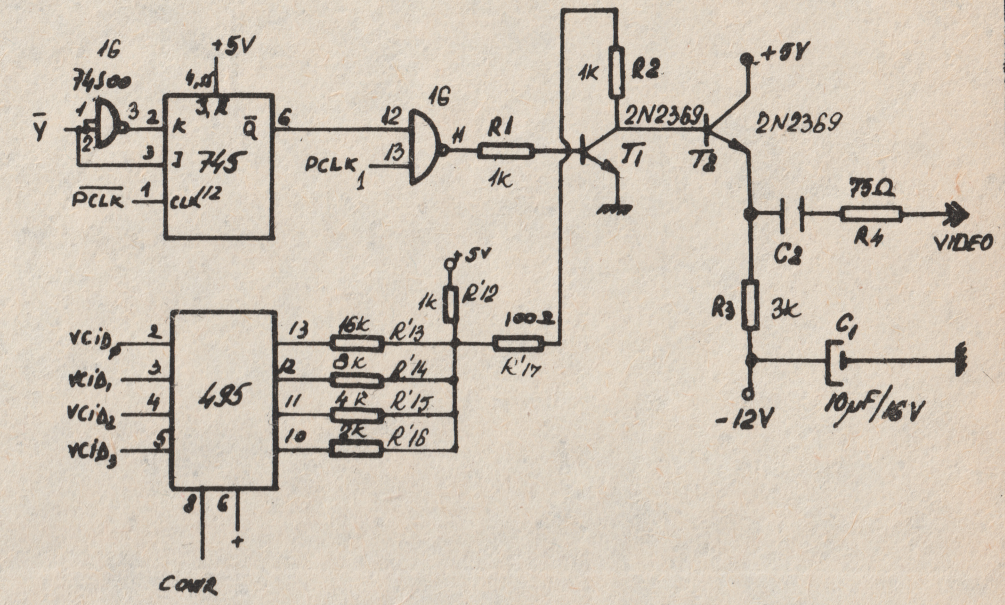
VIDEO CONTROLLER

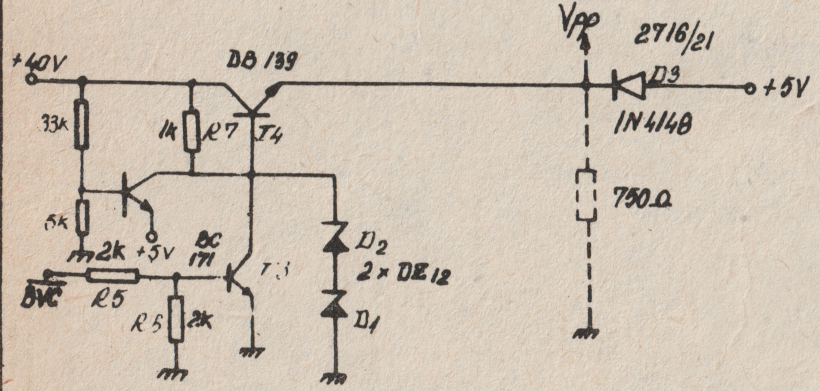
REFRESH MEMORY ARBITER



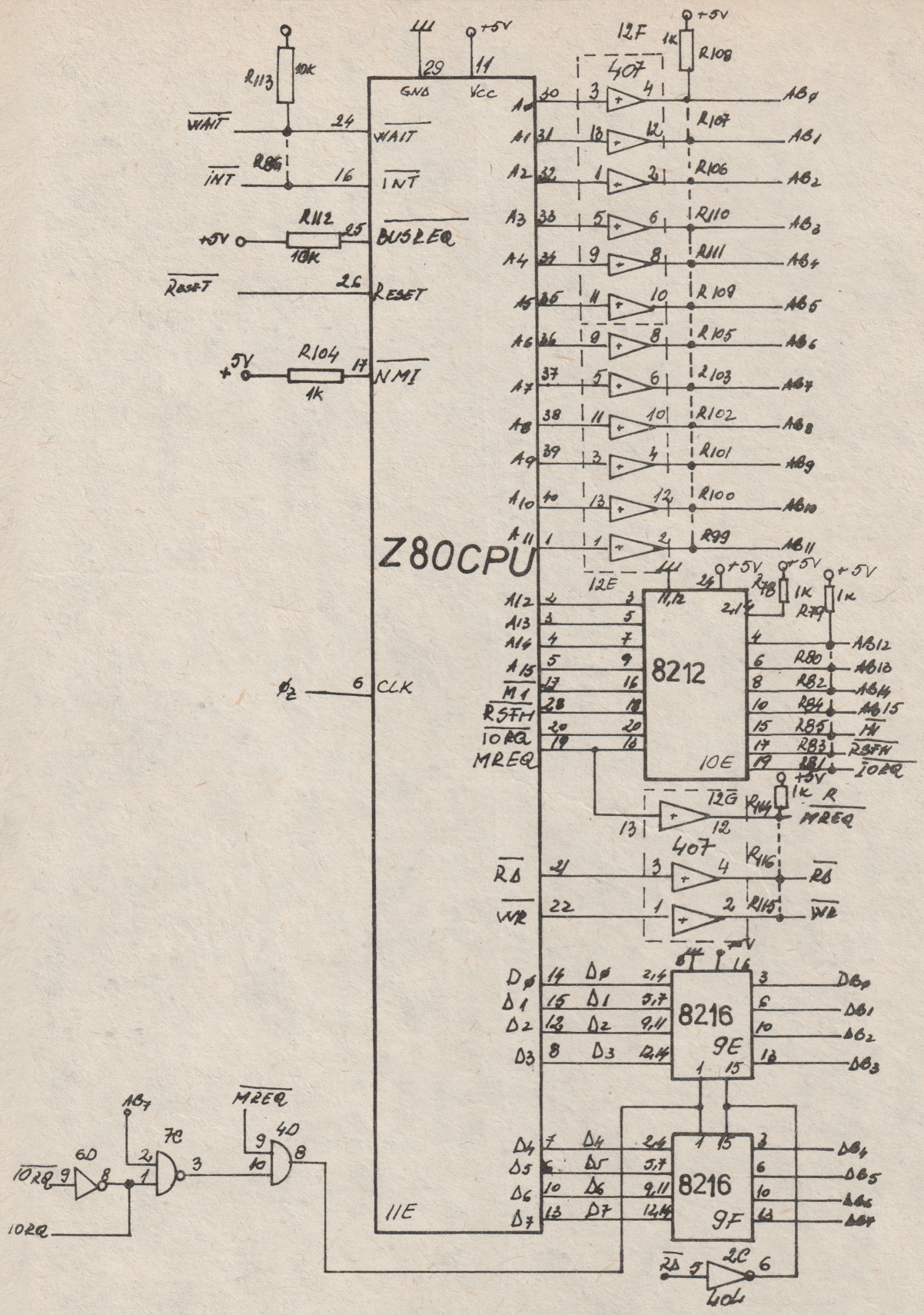
VIDEO CONTROLLER
CARACTER GENERATOR



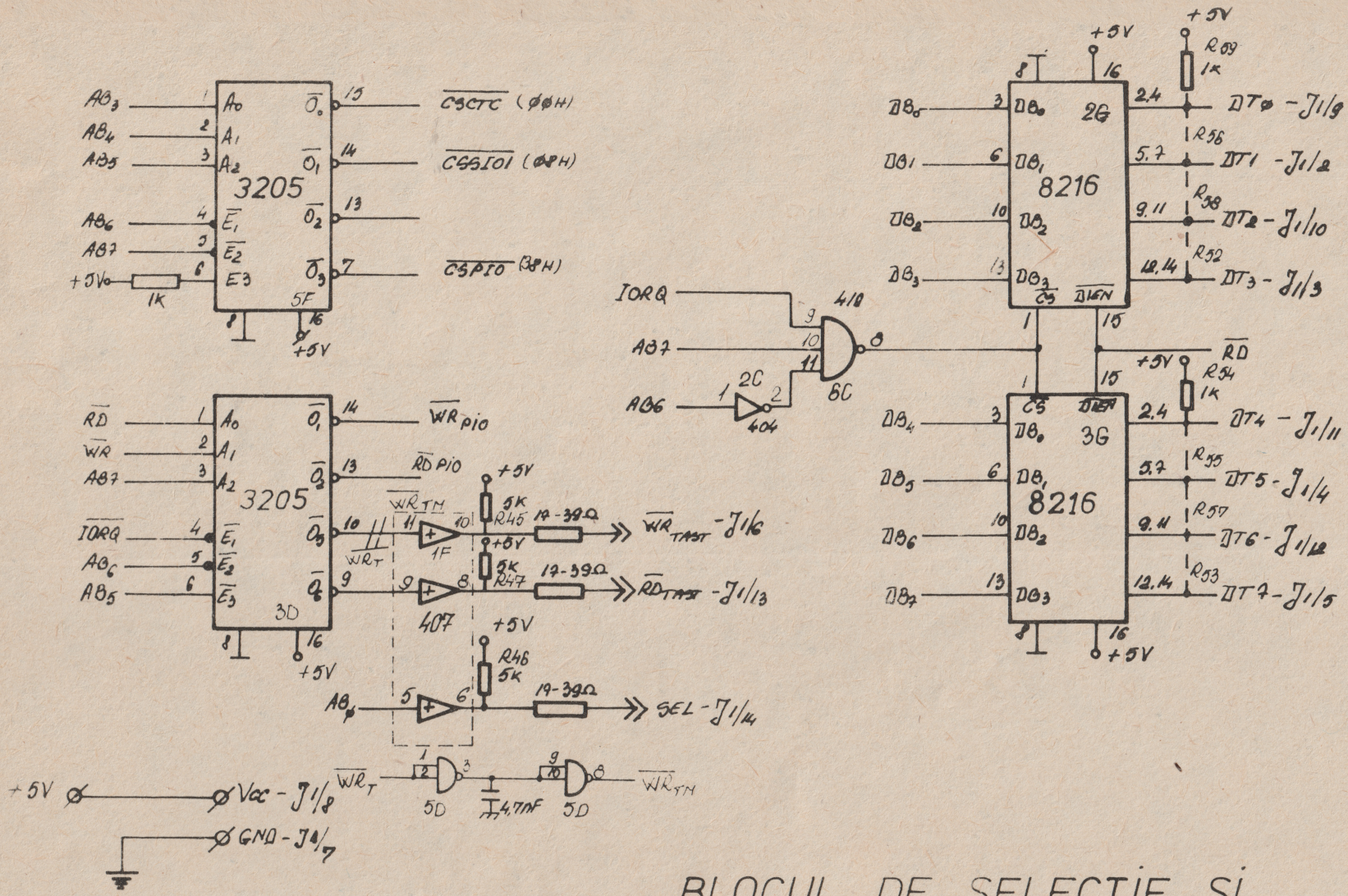




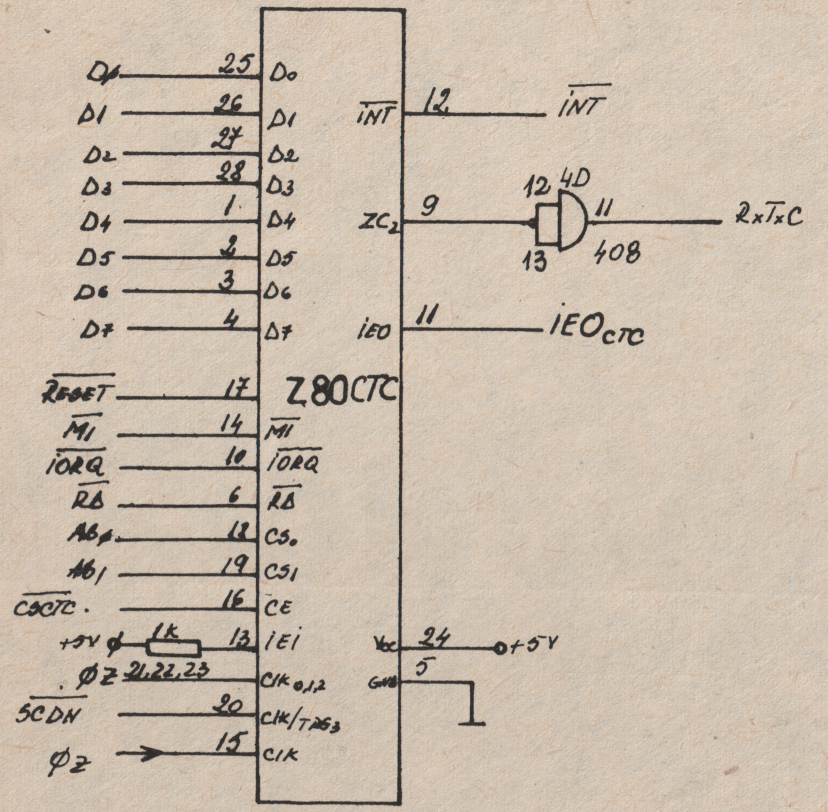
VIDEO OUTPUT
NON VOLATILE RAM
VIDEO CONTROLLER

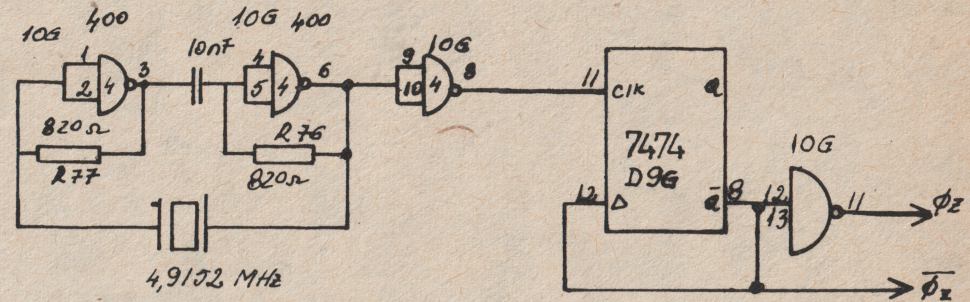


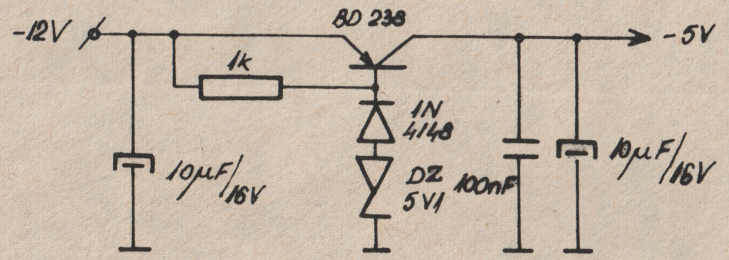
MICROPROCESORUL Z80

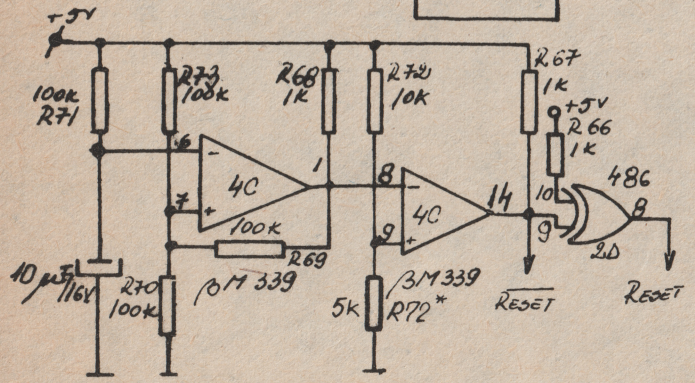


BLOCUL DE SELECȚIE ȘI INTERFAȚĂ PENTRU TASTATURĂ

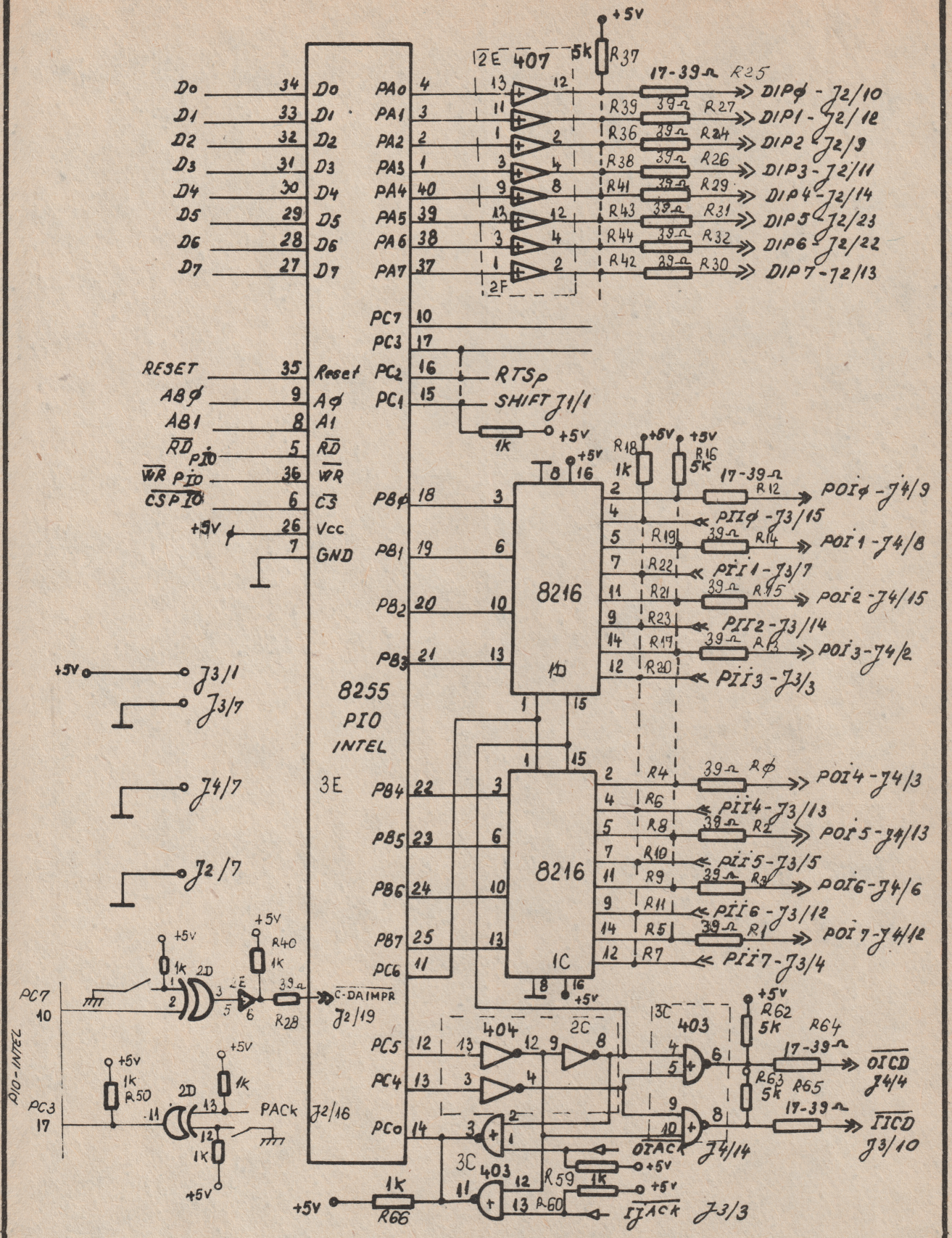




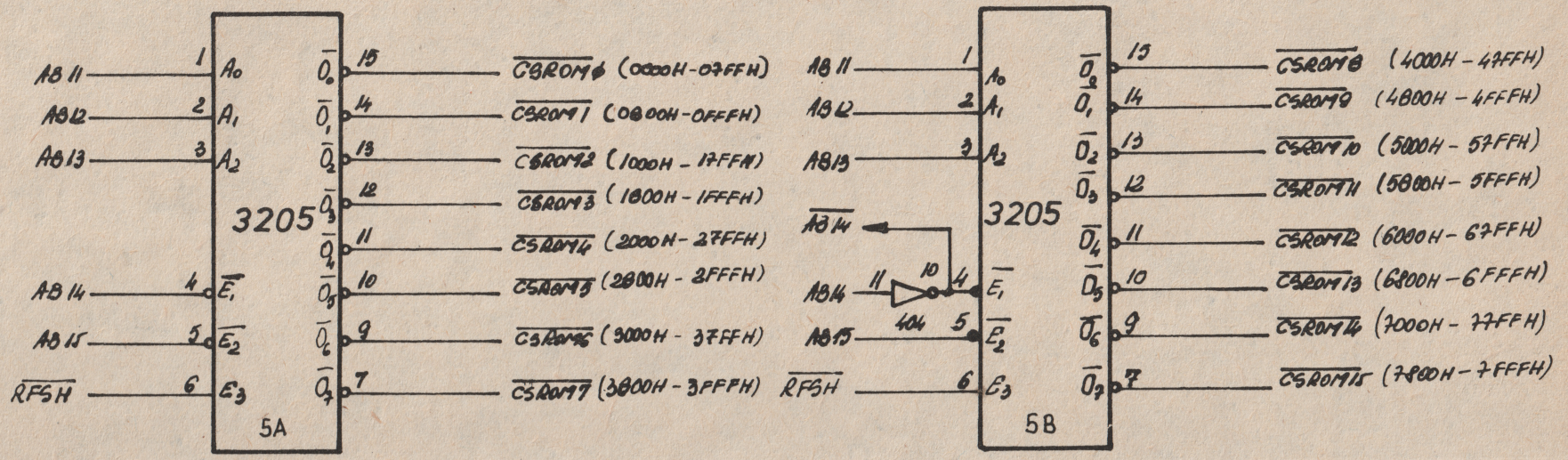




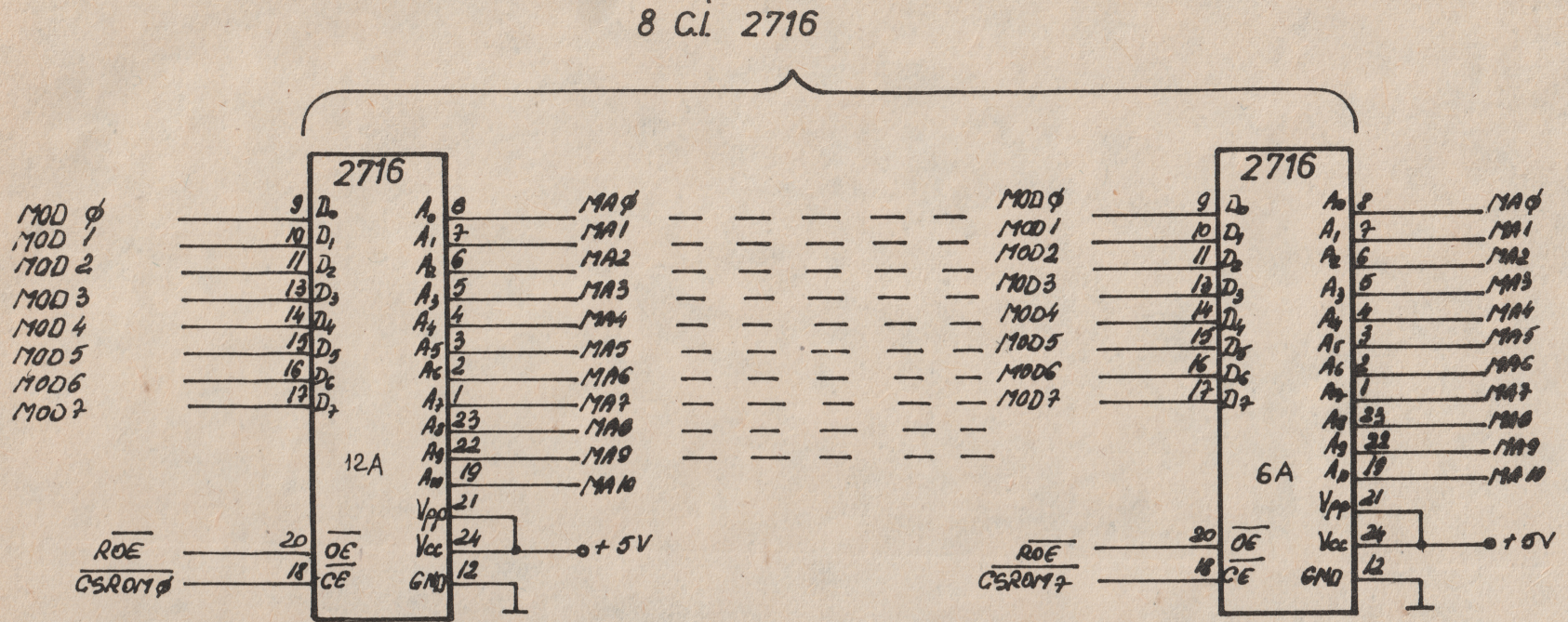
Z-80 CTC
CIRCUITUL RESET si GENERATORUL DE TACT



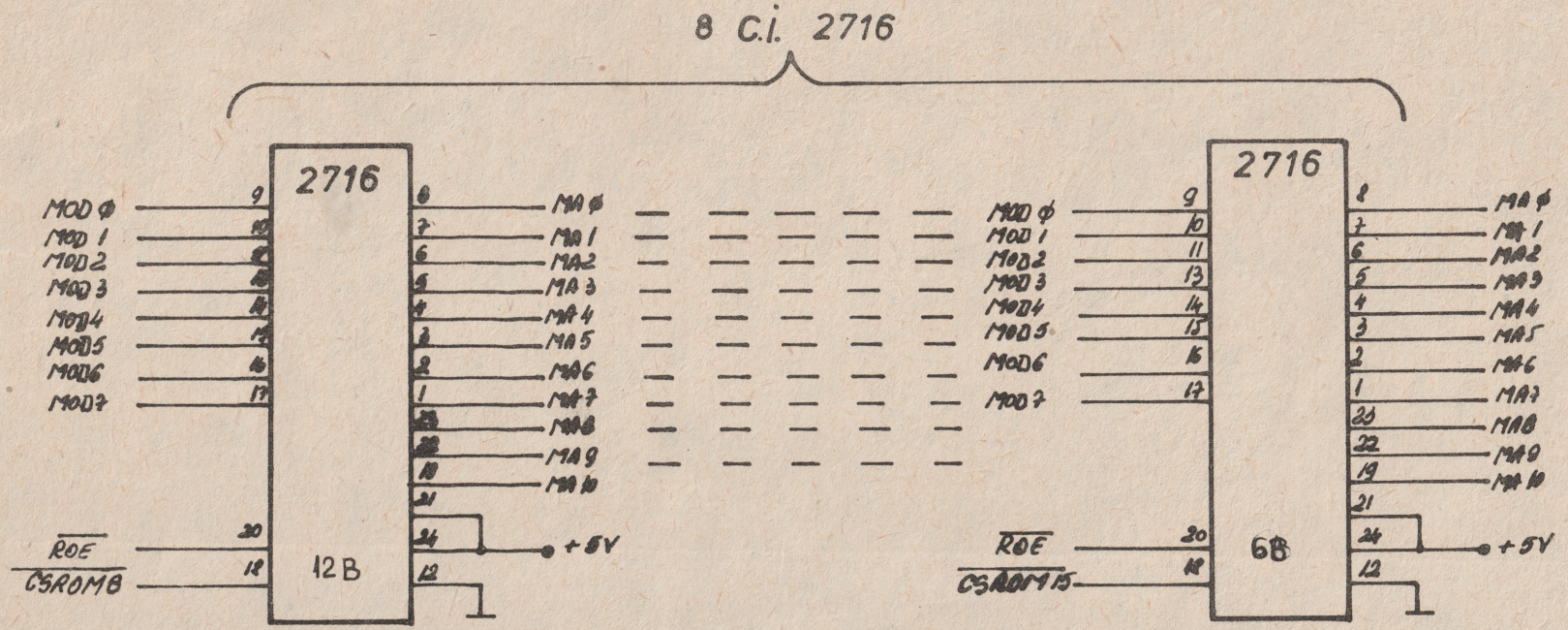
INTERFAȚĂ IMPRIMANTĂ PARALELĂ
SI
INTERFAȚĂ BIDIRECȚIONALĂ OPȚIONALĂ



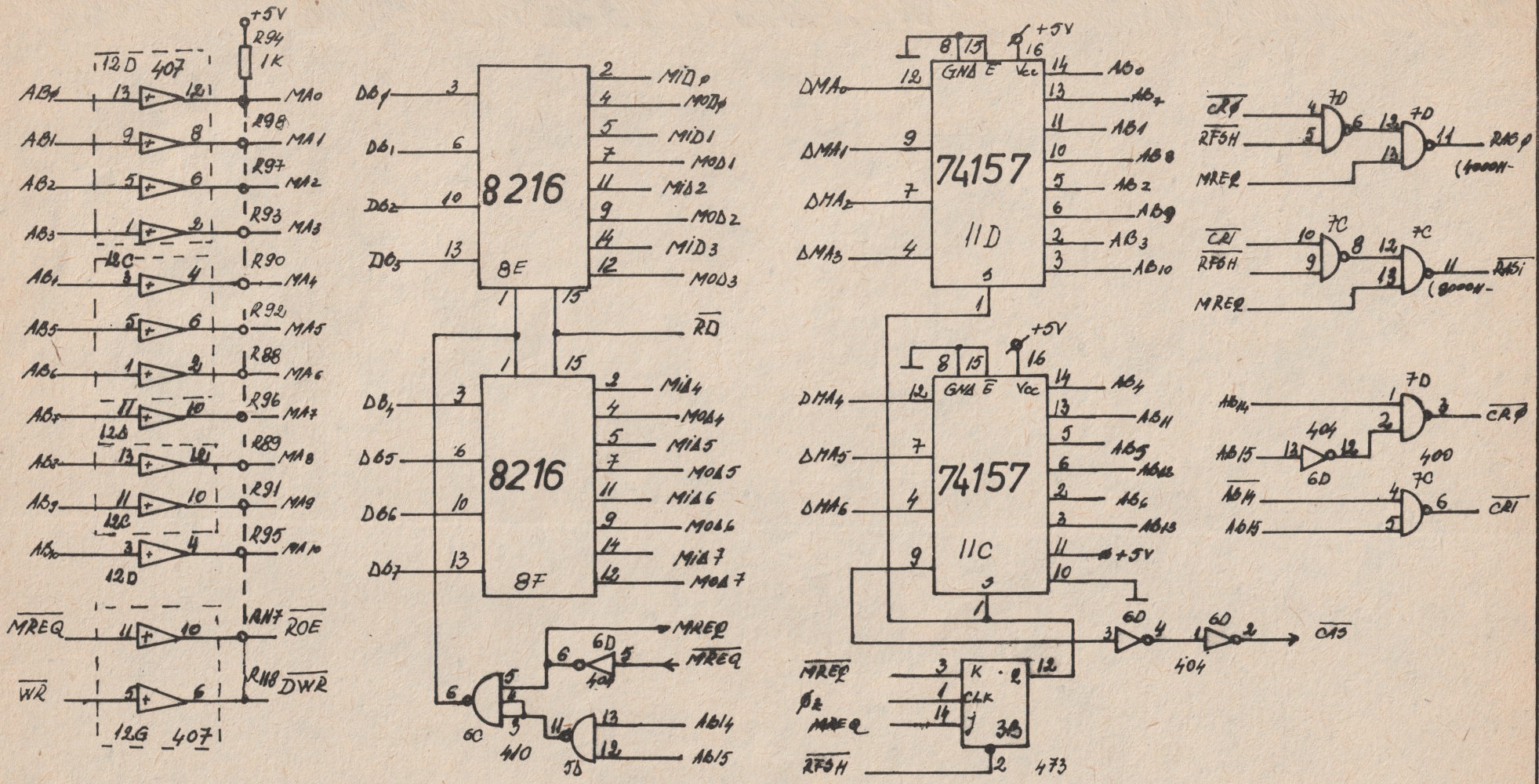
BLOCUL SELECȚIE ROM



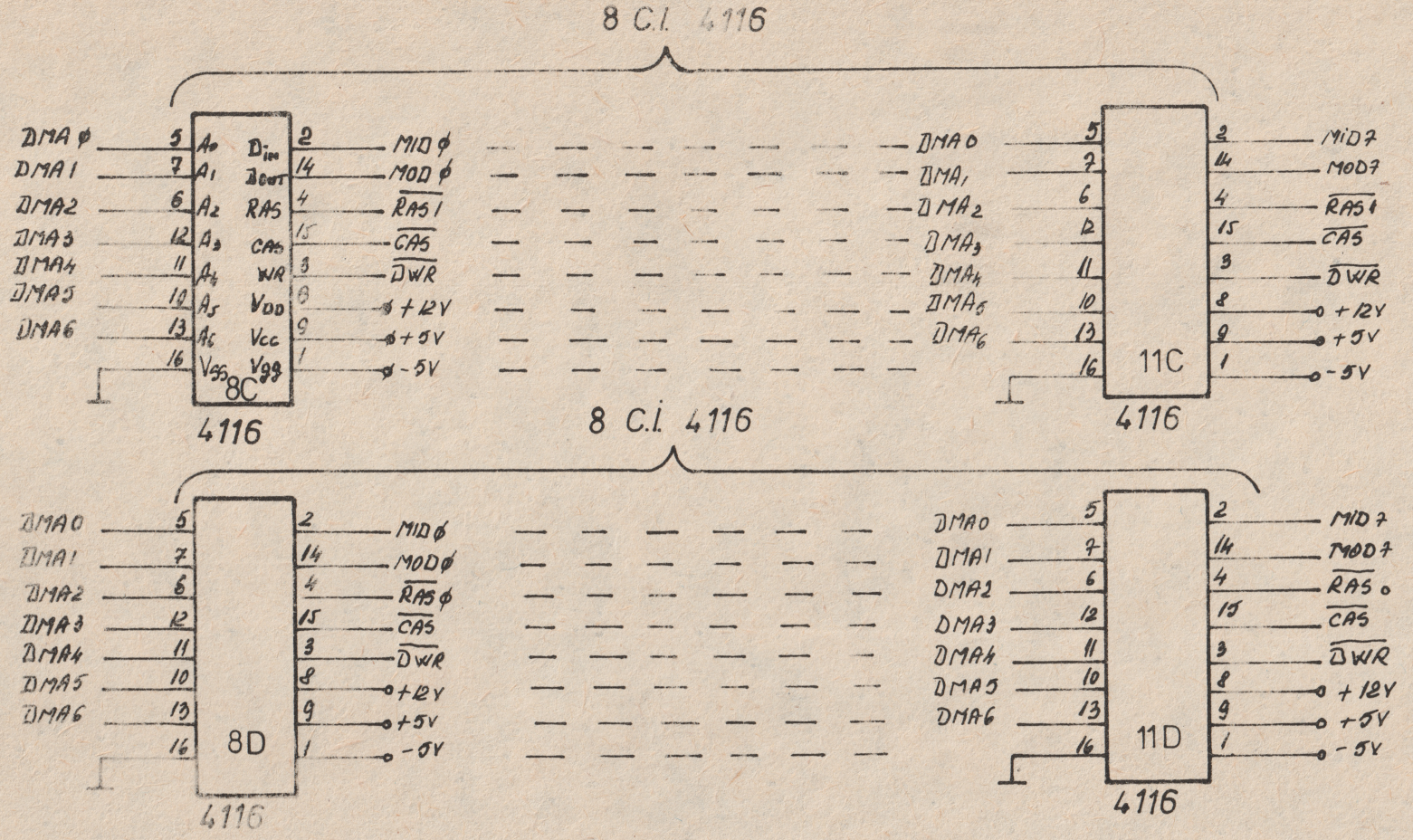
MEMORIILE EPROM



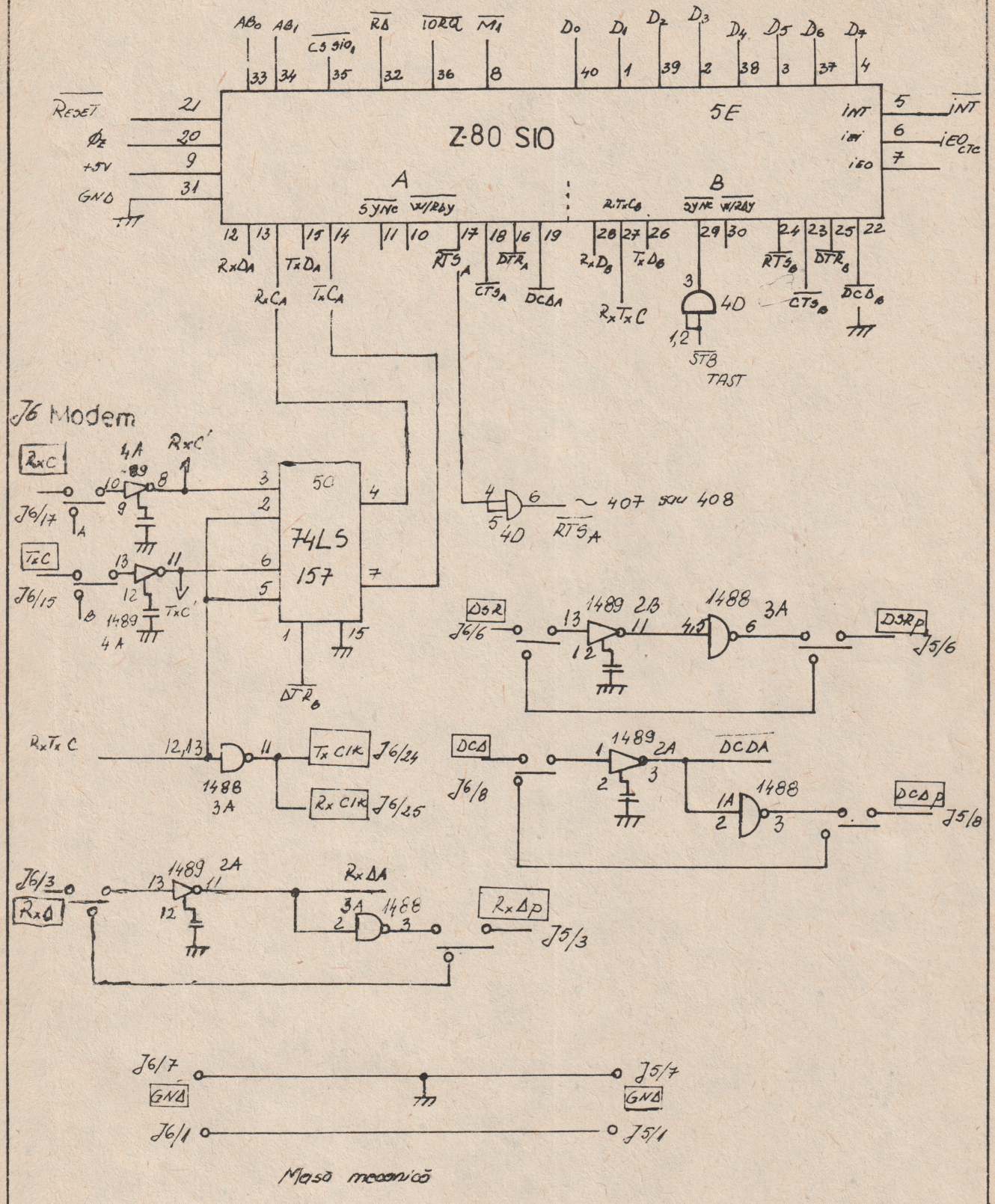
MEMORII EPROM (OPȚIONAL)



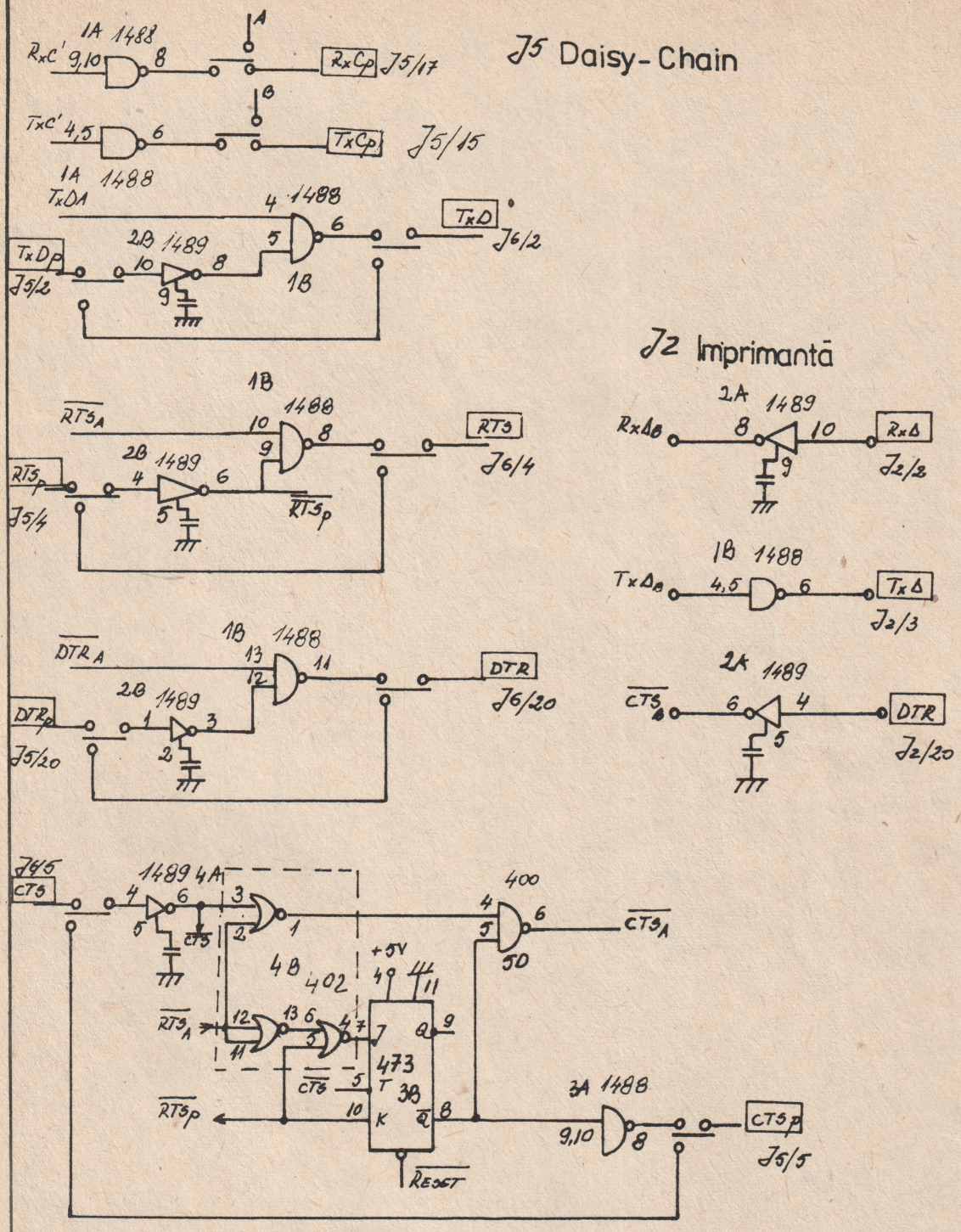
INTERFAȚĂ MEMORIE DINAMICĂ


8 C.I. 4116
DMA ϕ
DMA 1
DMA2
DMA3
DMA4
DMA5
DMA6
8C
4116
MID ϕ
MOD ϕ
RAS 1
CAS
DWR
+12V
+5V
-5V
DMA 0
DMA 1
DMA 2
DMA 3
DMA 4
DMA 5
DMA 6
11C
4116
MID 7
MOD 7
RAS 1
CAS
DWR
+12V
+5V
-5V
8 C.I. 4116
DMA 0
DMA 1
DMA2
DMA3
DMA4
DMA5
DMA6
8D
4116
MID ϕ
MOD ϕ
RAS ϕ
CAS
DWR
+12V
+5V
-5V
DMA 0
DMA 1
DMA2
DMA3
DMA4
DMA5
DMA6
11D
4116
MID 7
MOD 7
RAS 0
CAS
DWR
+12V
+5V
-5V

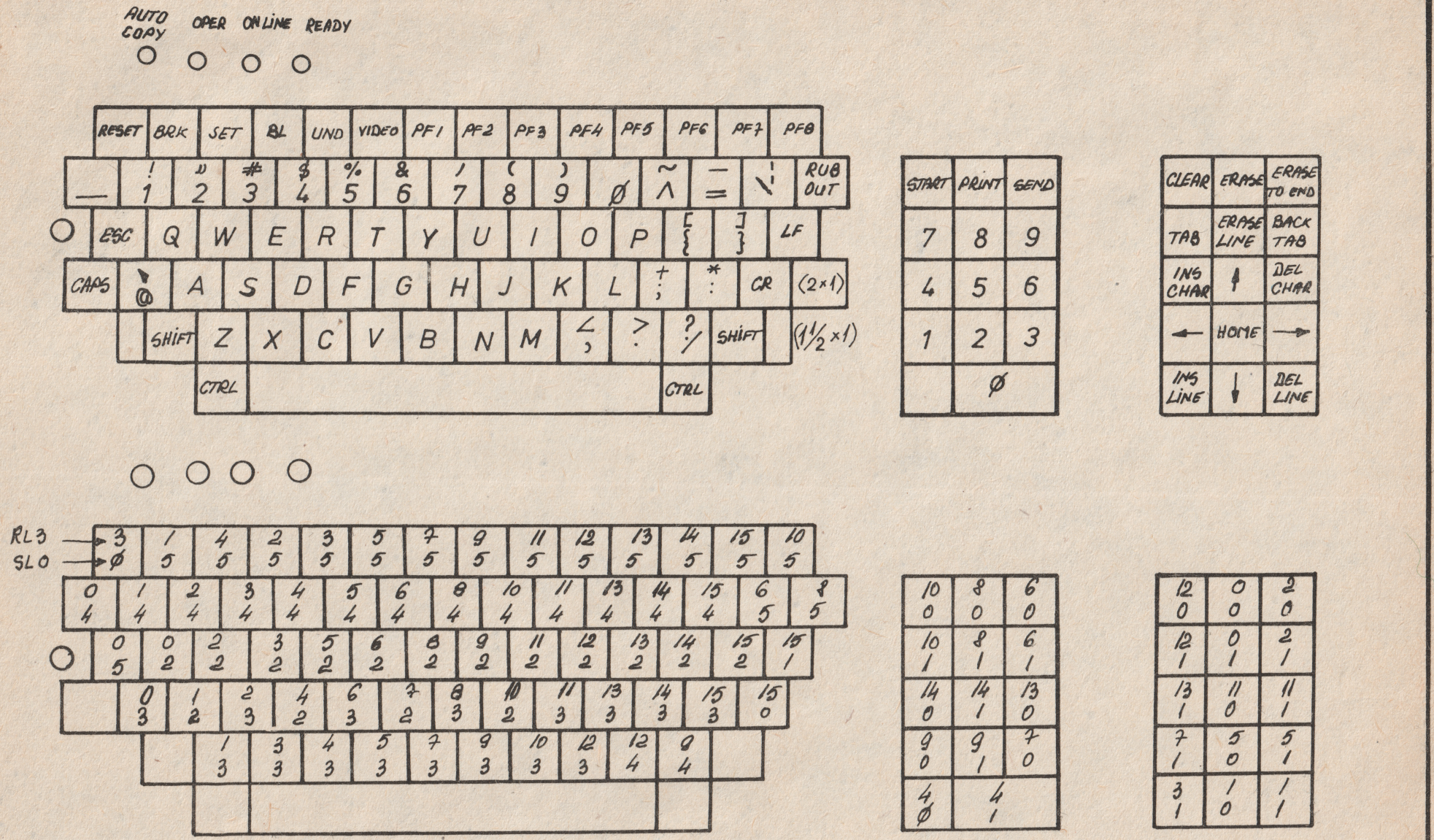
RAM DINAMIC

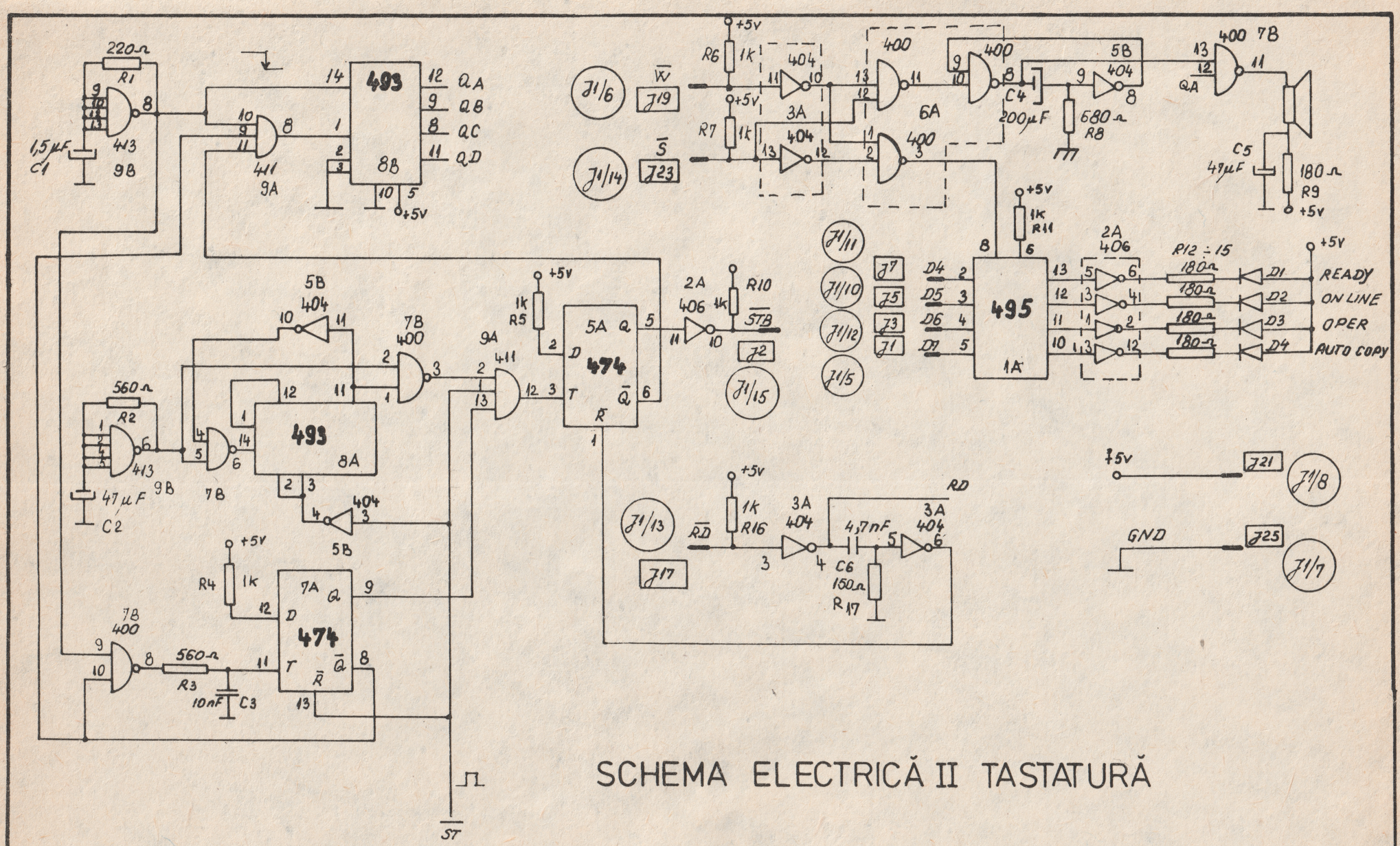


INTERFAȚĂ SERIALĂ I

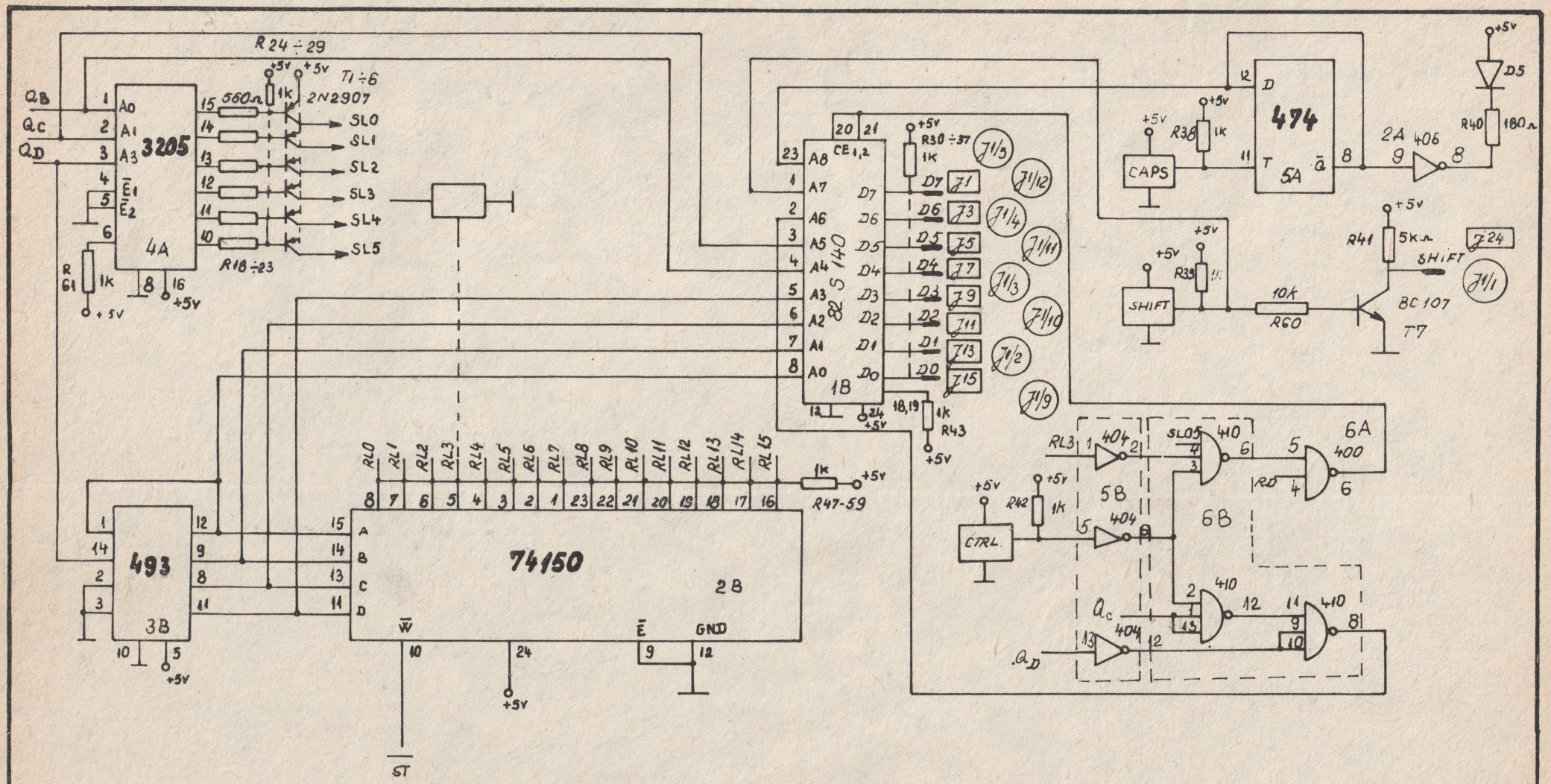


INTERFAȚĂ SERIALĂ II

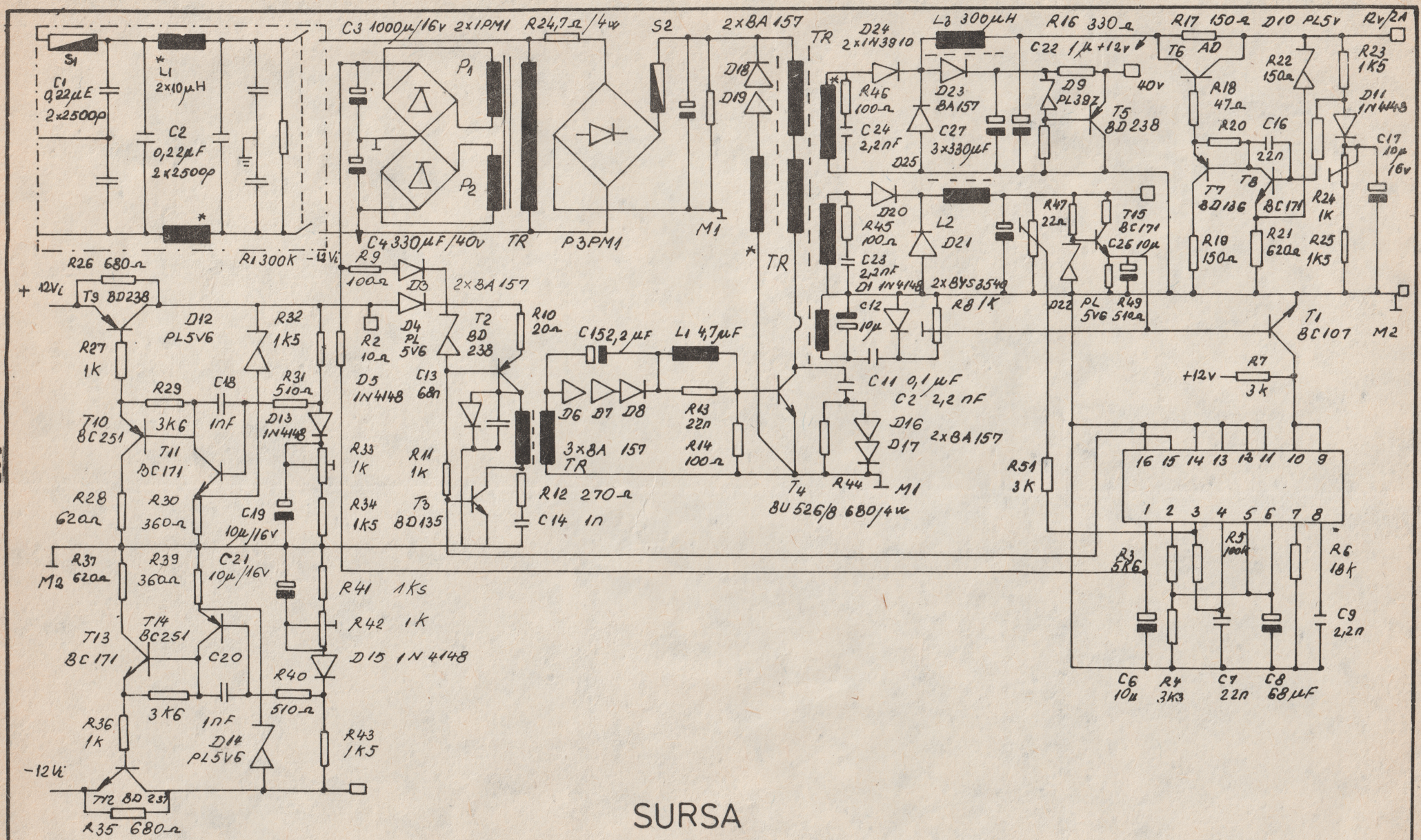

AUTO COPY
OPER
ON LINE
READY
RESET BRK SET BL UND VIDEO PF1 PF2 PF3 PF4 PF5 PF6 PF7 PF8
RUB OUT
ESC
LF
CAPS
CR
(2×1)
SHIFT
SHIFT
(1½×1)
CTRL
CTRL
START PRINT SEND
CLEAR ERASE ERASE TO END
TAB ERASE LINE BACK TAB
INS CHAR DEL CHAR
HOME
INS LINE DEL LINE
RL3
SL0



SCHEMA ELECTRICĂ II TASTATURĂ

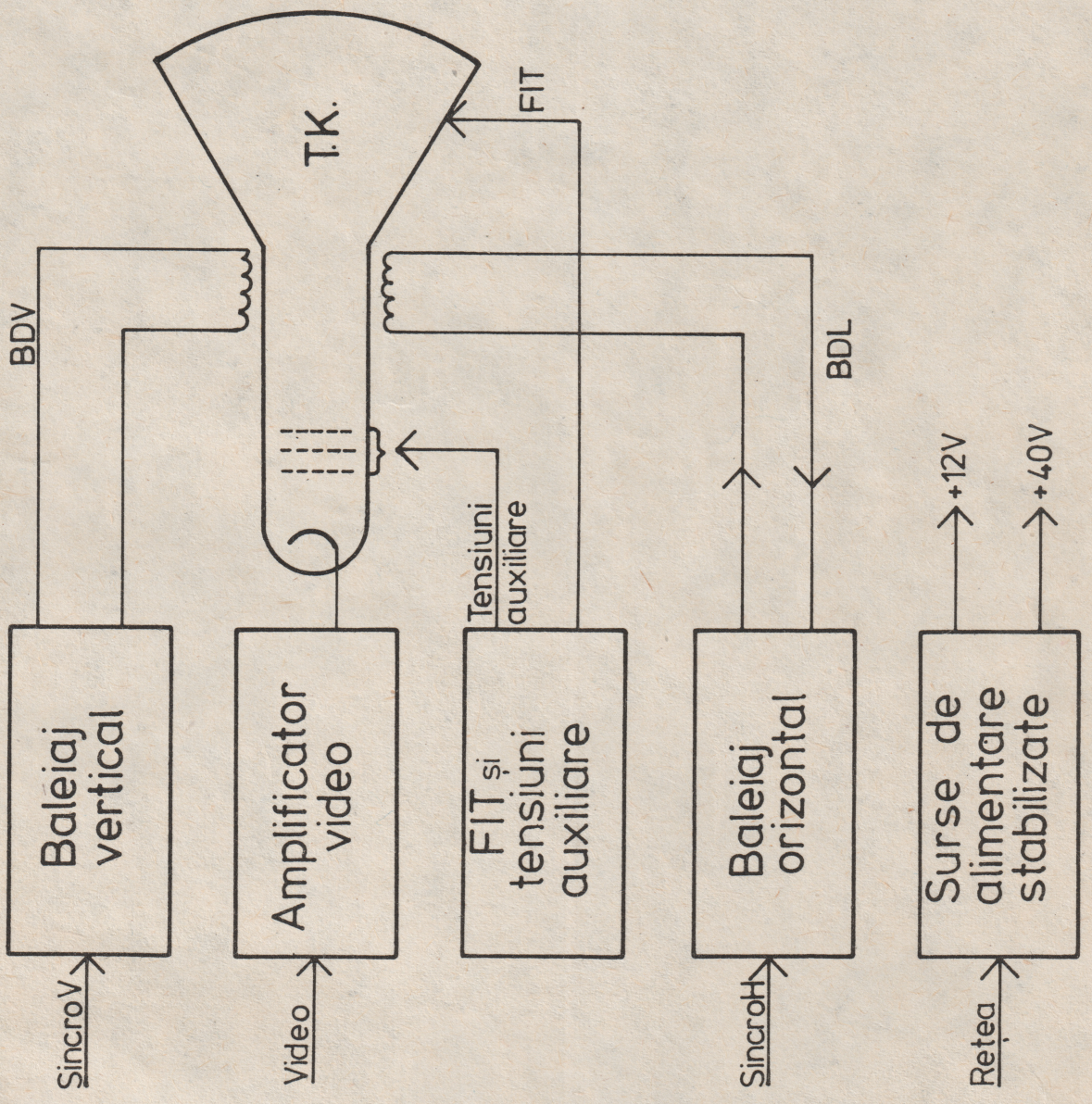


SCHEMA ELECTRICĂ I TASTATURĂ

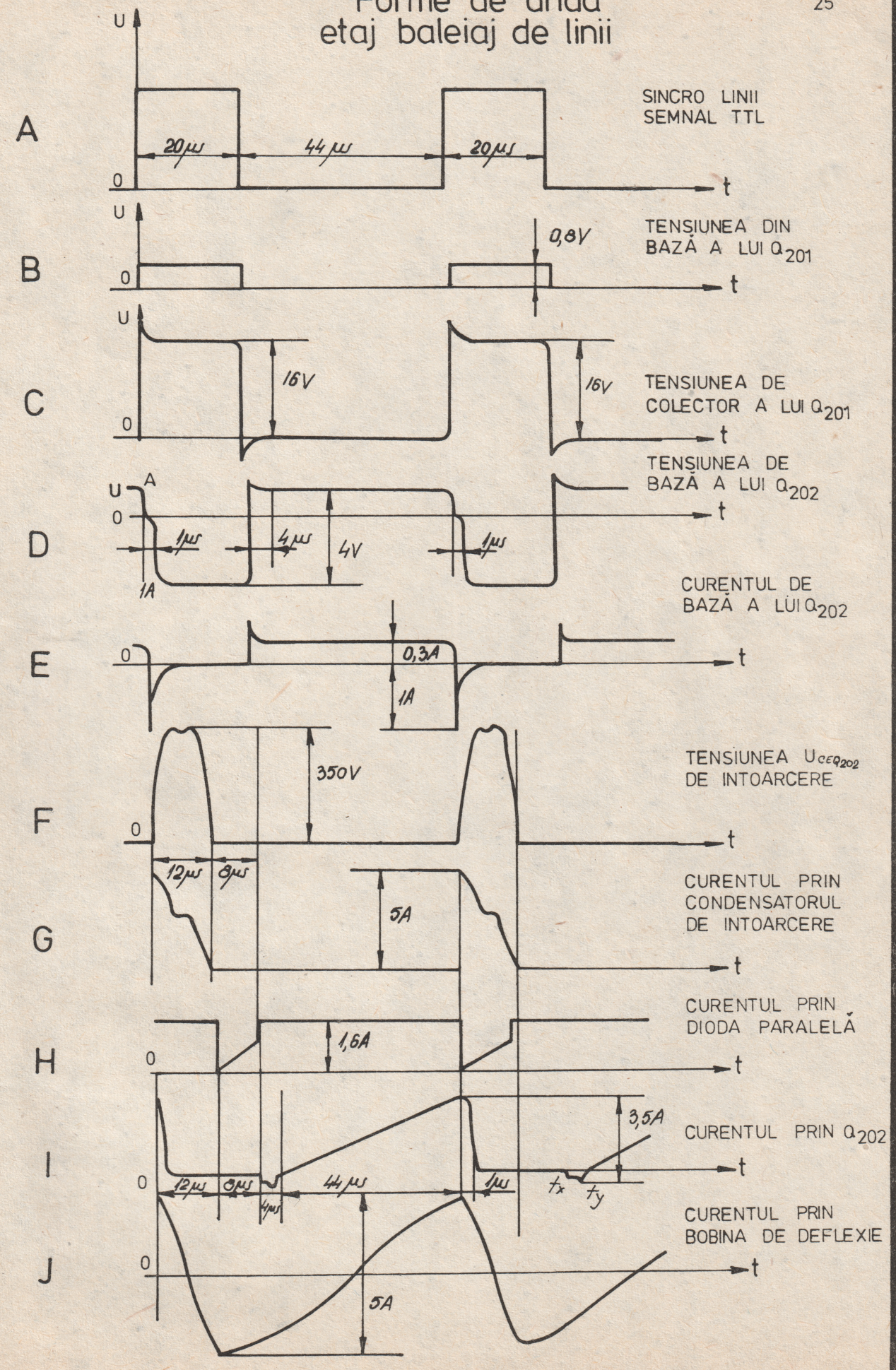

S1
C1 0,22µF 2x2500p
L1 2x10µH
C2 0,22µF 2x2500p
C3 1000µ/16v 2x1PM1
R24,7Ω/4w
P1
P2
P3PM1
S2
2x8A157
D18
D19
C4 330µF/40v
TR
M1
R1 300K
-12Vi
R26 680Ω
+12Vi
T9 BD238
D12 PL5V6
R27 1K
R29
C18
R31 510Ω
D13 1N4148
T10 BC251
T11 BC171
3K6
1nF
R28 620Ω
R30 360Ω
C19 10µ/16V
R37 620Ω
R39 360Ω
C21 10µ/16V
M2
T14 BC251
T13 BC171
C20
3K6
1nF
R36 1K
D14 PL5V6
R40 510Ω
R43 1K5
T12 BD237
R35 680Ω
R41 1K5
R42 1K
D15 1N4148
R32 1K5
R9 100Ω
D3
2x8A157
D4 PL 5V6
R2 10Ω
D5 1N4148
C13 68n
T2 BD 238
R10 20Ω
T3 BD135
R33 1K
R11 1K
R34 1K5
C15 2,2µF
L1 4,7µF
D6 D7 D8
3x8A 157 TR
R13 22n
R14 100Ω
R12 270Ω
C14 1n
C11 0,1µF
C2 2,2 nF
D16
D17
2x8A157
R44
M1
T4 BU 526/8 680/4w
TR
D24 2x1N3910
L3 300µH
R16 330Ω
C22 1µ +12v
D23 BA157
C27 3x330µF
D9 PL39Z
40v
T5 BD 238
R46 100Ω
C24 2,2nF
D25
D20
R45 100Ω
C23 2,2nF
D1 1N4148
L2
D21
2x BYS3540
R8 1K
C12 10µ
D22
R47 22Ω
T15 BC171
C26 10µ
PL 5V6
R49 510Ω
R17 150Ω
D10 PL5V
12v/2A
T6 AD
R18 47Ω
R20
C16 22n
T7 BD136
T8 BC171
R22 150Ω
R23 1K5
D11 1N4148
C17 10µ 16v
R24 1K
R19 150Ω
R21 620Ω
R25 1K5
T1 BC107
M2
+12v
R7 3K
R51 3K
16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
R3 5K6
R5 100K
R6 18K
C9 2,2n
C6 10µ
R4 3K3
C7 22n
C8 68µF

SURSA

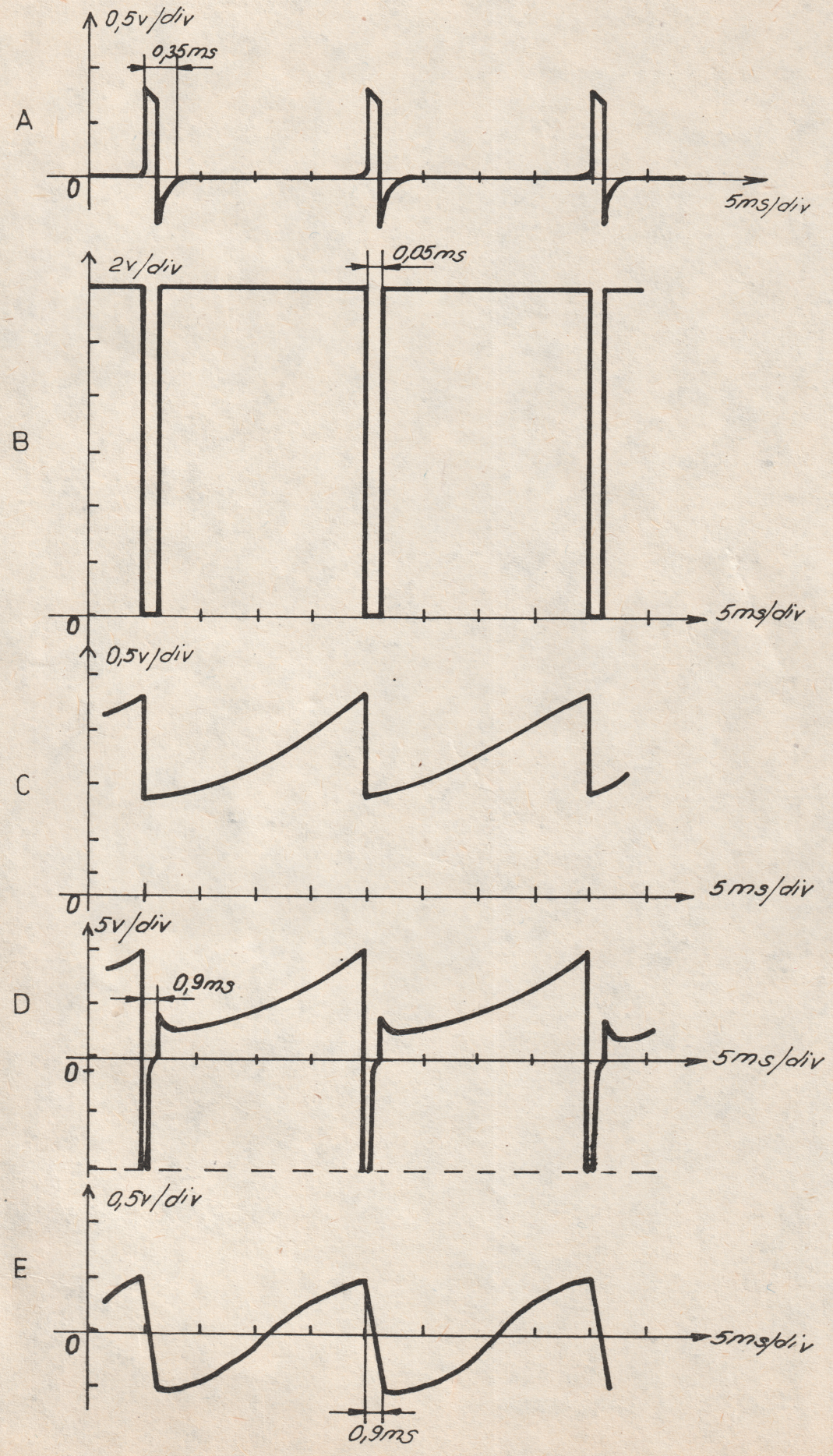
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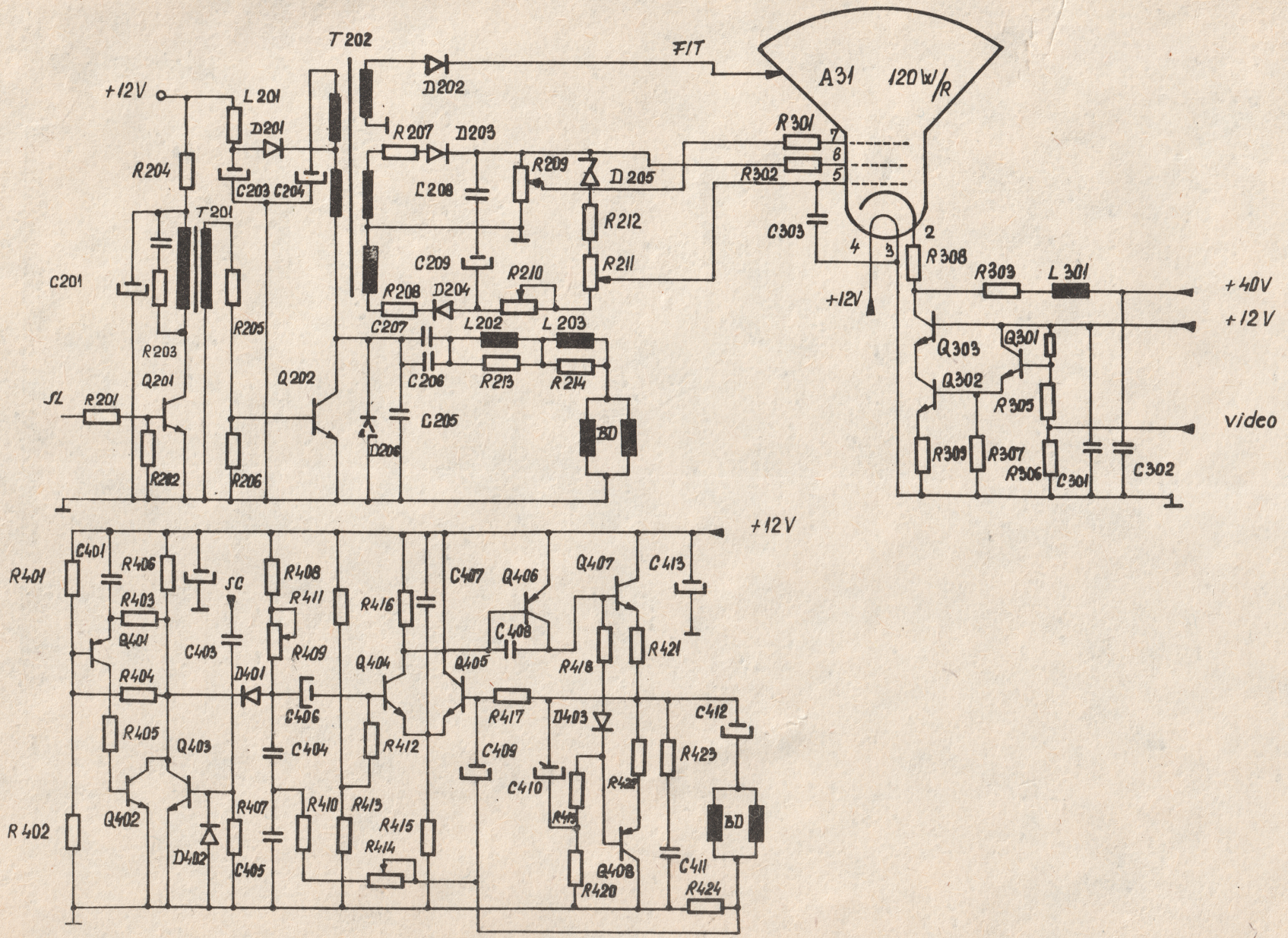

T.K.
FIT
BDV
BDL
Tensiuni auxiliare
Baleiaj vertical
Amplificator video
FIT și tensiuni auxiliare
Baleiaj orizontal
Surse de alimentare stabilizate
+12V
+40V
Sincro V
Video
Sincro H
Rețea

Forme de undă etaj baleiaj de linii



Forme de undă, baleiaj cadre cu tranzistoare




T202
FIT
A31
120W/R
+12V
L201
D201
D202
R207
D203
R204
C203
C204
T201
L208
R209
D205
R212
R211
C209
R210
R208
D204
C207
L202
L203
C206
R213
R214
C205
D206
C201
R203
R205
Q201
Q202
SL
R201
R202
R206
BD
R301
R302
C303
R308
R303
L301
+40V
+12V
Q303
Q301
Q302
R305
video
R309
R307
R306
C301
C302
+12V
C401
R401
R406
R403
Q401
SC
R408
R411
R409
C403
D401
C406
R404
R405
Q403
C404
R412
Q402
R402
D402
C405
R407
R410
R413
R415
R414
R416
C407
Q406
Q407
C413
C408
Q404
Q405
R418
R421
R417
D403
C412
C409
C410
R422
R423
R419
Q408
R420
C411
R424
BD