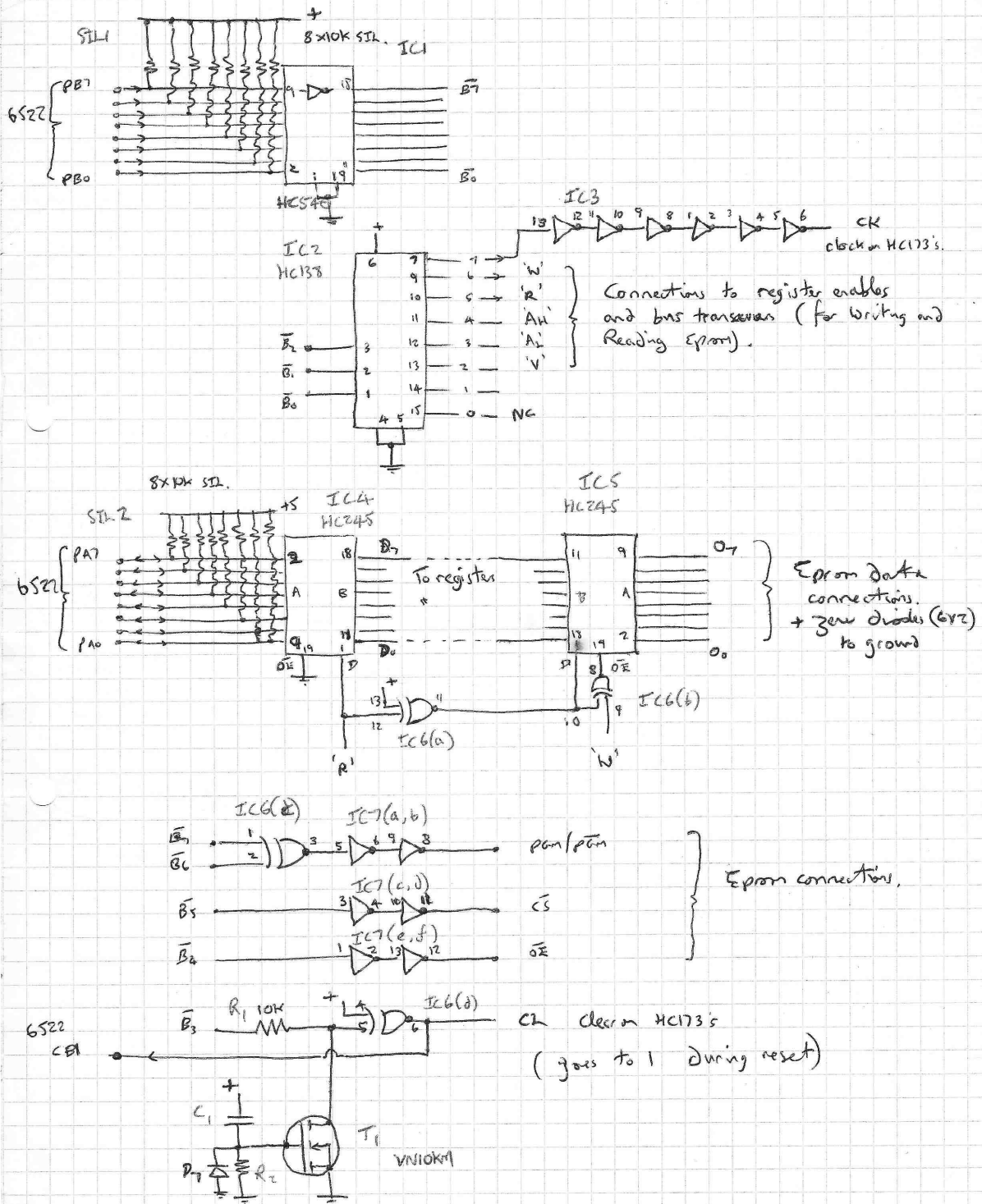


EEPROM PROGRAMMIER

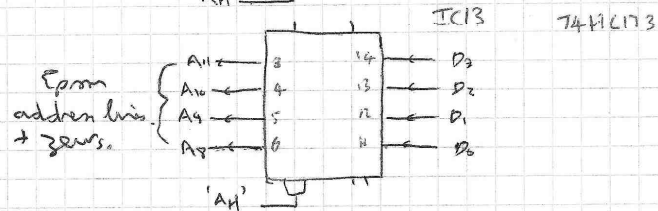
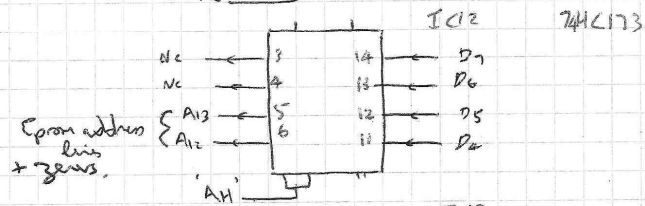
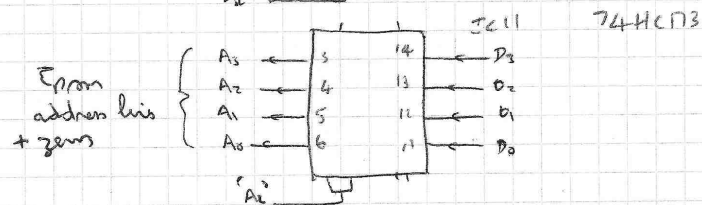
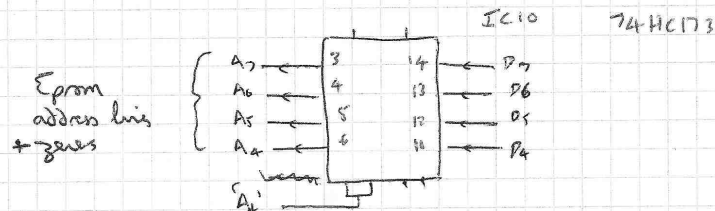
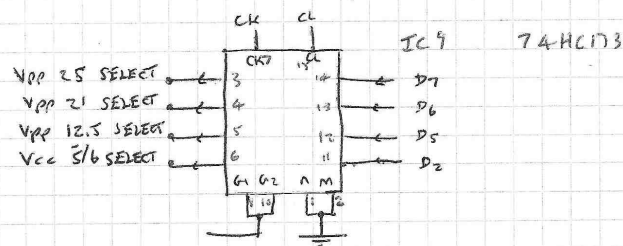
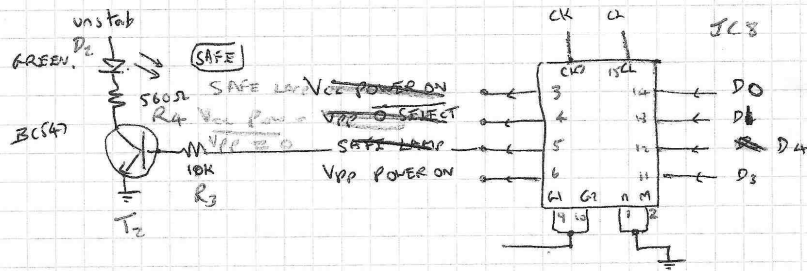
Port connections.



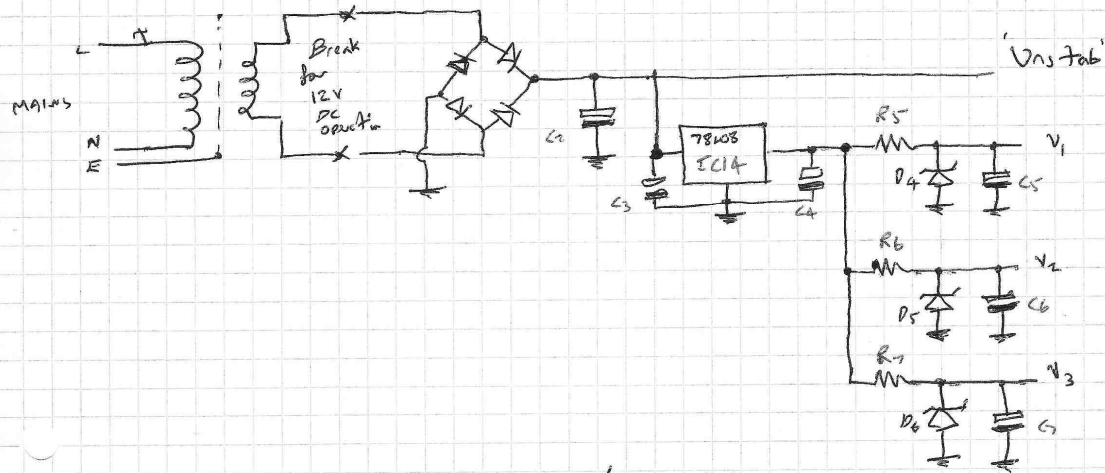
21

1 EPROM PROGRAMMER

- Register Connections



EEPROM PROGRAMMER - Power supply.

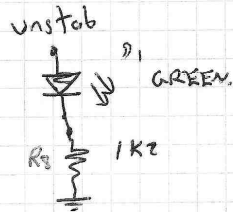


V_1 = IC4 only Input/output driver

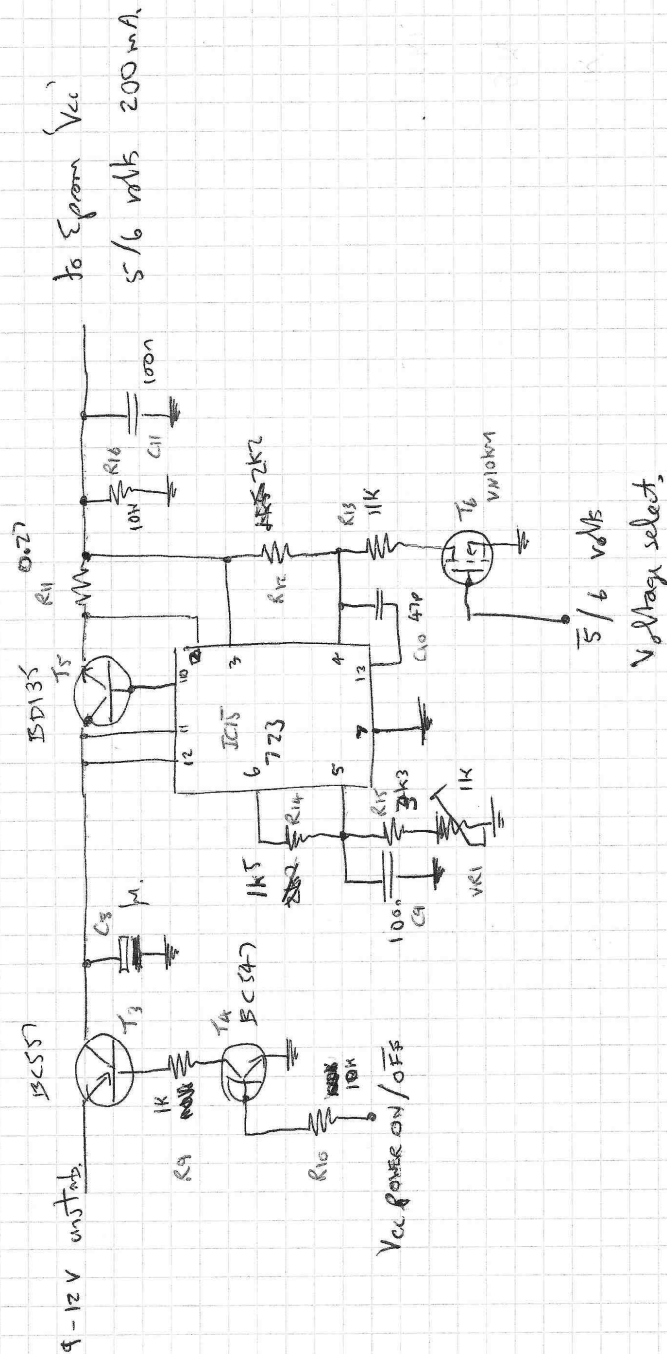
V_2 = IC1, IC2, IC3, IC6, IC8, IC9. Control chips.

V_3 = IC5, IC10, IC11, IC12, IC13. Eeprom driver.

Power LED



4



EPROM PROGRAMMER - Programming model. 1

PORTA (input and output)

PORTB (output from 6522)

7 6 5 4 3 2 1 0

Data transfer

7 6 5 4 3 2 1 0

Eprom
control
lines
(OE, CS, A15)
#14

0	1
Program pulse on (uses 6522 monostable)	program pulse off.
PGM type of eprom	PGM type of eprom
EC1 = 1	EC1 = 0
EC2 = 1	EC2 = 0
Program operational	program off, all registers cleared.

Note: On reset all lines pulled high
during eprom programmer.

Register and
eprom access
control.

Prime register loading circuit	0 0 0	Any
Write to eprom	0 0 1	olp
Read from eprom	0 1 0	ile
Load A ₁₅ if primed	0 1 1	olp *
" A ₁₄ "	1 0 0	olp *
Load volts register if primed	1 0 1	olp *
Reserved for expansion	1 1 0	-
No function selected.	1 1 1	any.

* Data must already be on PORTA.

EPROM PROGRAMMER - Programming model 2.

Data registers.

AL : Eeprom address latch low.

7	6	5	4	3	2	1	0
A7	A6	A5	A4	A3	A2	A1	A0

AH : Eeprom address latch high.

7	6	5	4	3	2	1	0
A7	A6	A5	A4	A3	A2	A1	A0

Volts register.

Valid combinations.

$V_{PP} = 0$

$V_{PP} = 5$

$V_{PP} = 12.5$

$V_{PP} = 21$

$V_{PP} = 25$

7	6	5	4	3	2	1	0
---	---	---	---	---	---	---	---

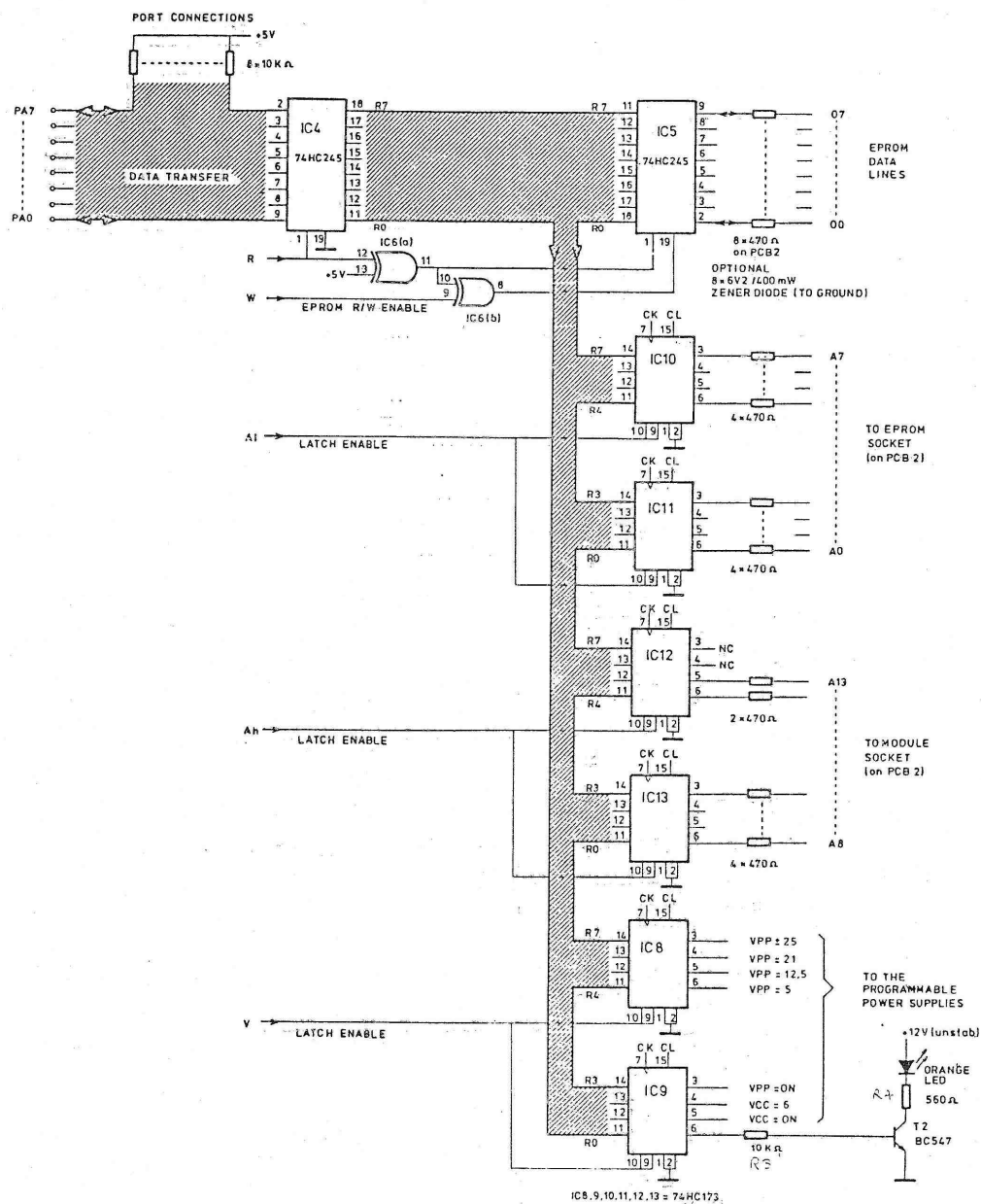
0	0	0	0				
0	0	0	1				
0	0	1	1				
0	1	0	1				
1	0	0	1				

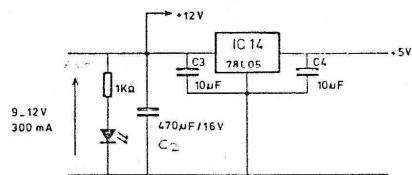
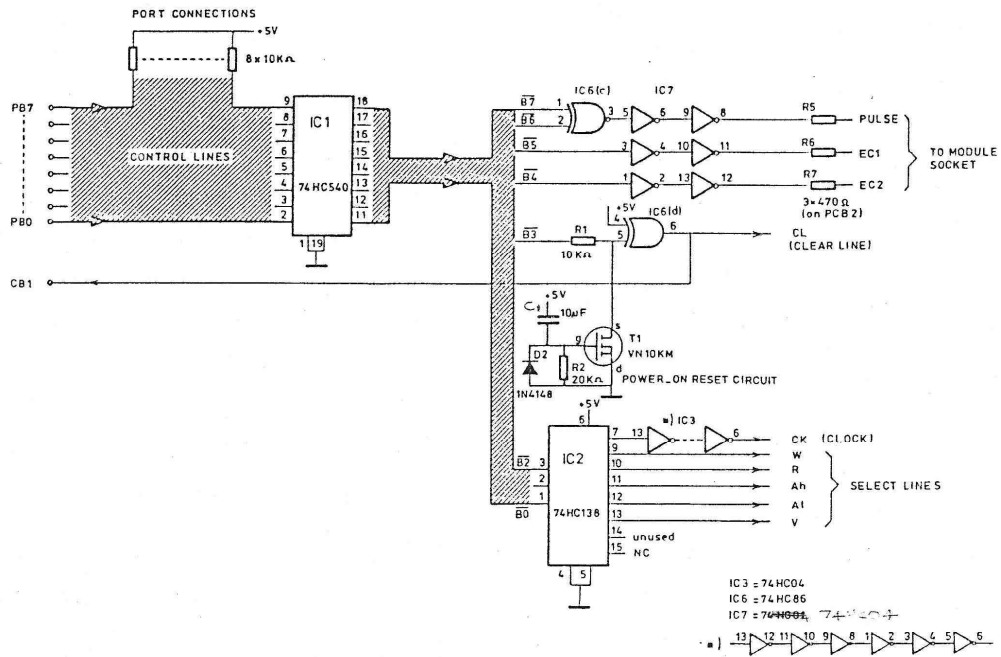
0	1
V_{PP} OFF	V_{PP} ON
$V_{CC} = 5$ (if on.)	$V_{CC} = 6$ (if on.)
V_{CC} OFF	V_{CC} ON
SAFE LAMP OFF	SAFE LAMP ON.

The above registers are cleared, turning the power off, if
Port B B4B3 = 1.

() = pin on 28 pin socket

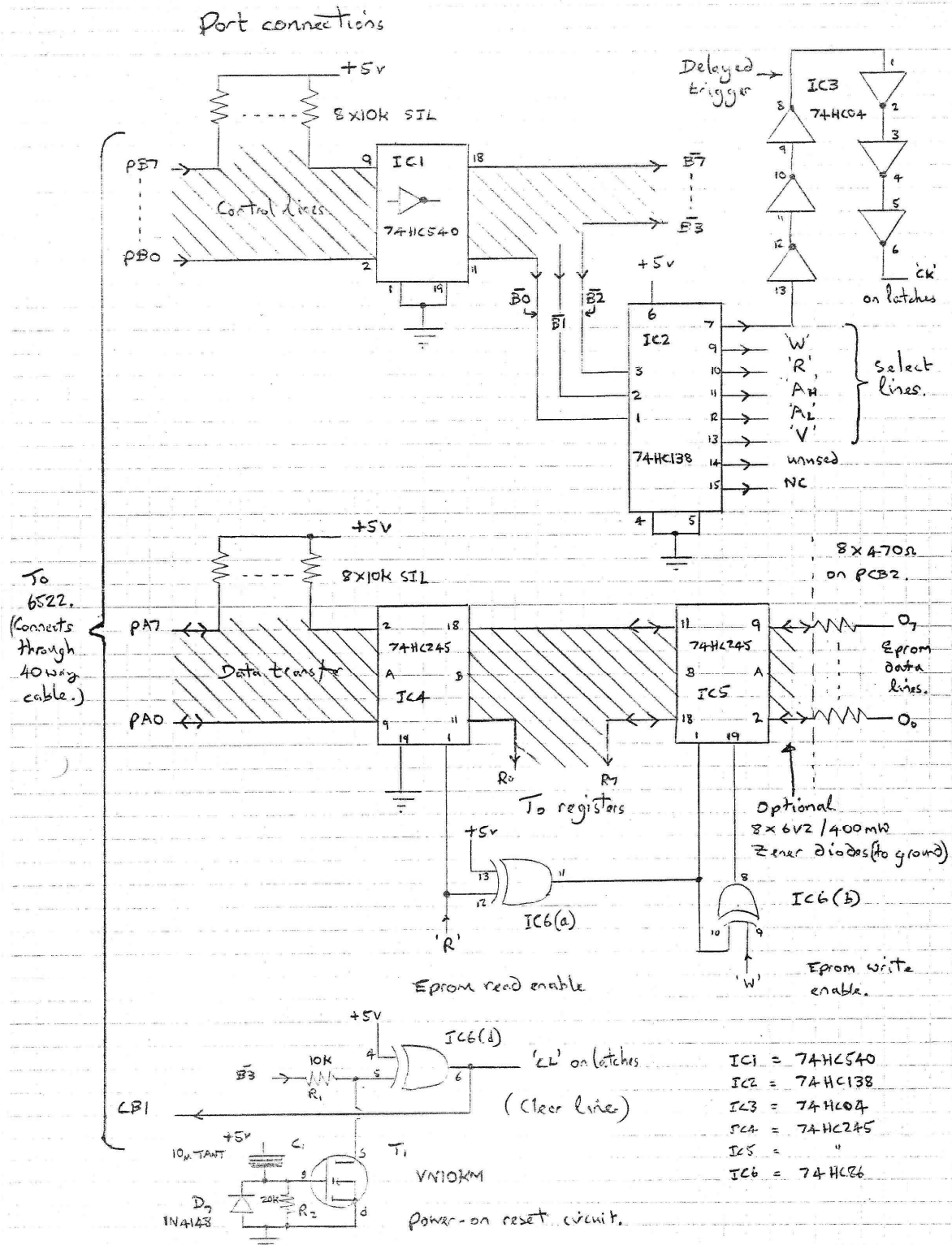
Device	EPROM CONNECTIONS				VPP			Vcc prog
	PULSE	EC1	EC2	VPP	Standby	Read	Program	
2716	PGM/CS (20)	NC	$\overline{OE}$ (22)	VPP (23)	S	S	25	+5
2732	PGM/CS (20)	NC	NC	$\overline{OE}/VPP$ (22)	S	0	A=21	A=+6
2764	$\overline{PGM}$ (21)	$\overline{CS}$ (23)	$\overline{OE}$ (22)	VPP (1)	S	S		
27128	$\overline{PGM}$ (21)	$\overline{CS}$ (23)	$\overline{OE}$ (22)	VPP (1)	S	S		
27256	$\overline{PGM}/\overline{CS}$	A14 (21)	$\overline{OE}$ (22)	VPP (1)				
27512 -1	$\overline{PGM}/\overline{CS}$	A14 (21)	A15 ()	VPP / $\overline{OE}$				
27512 -C								



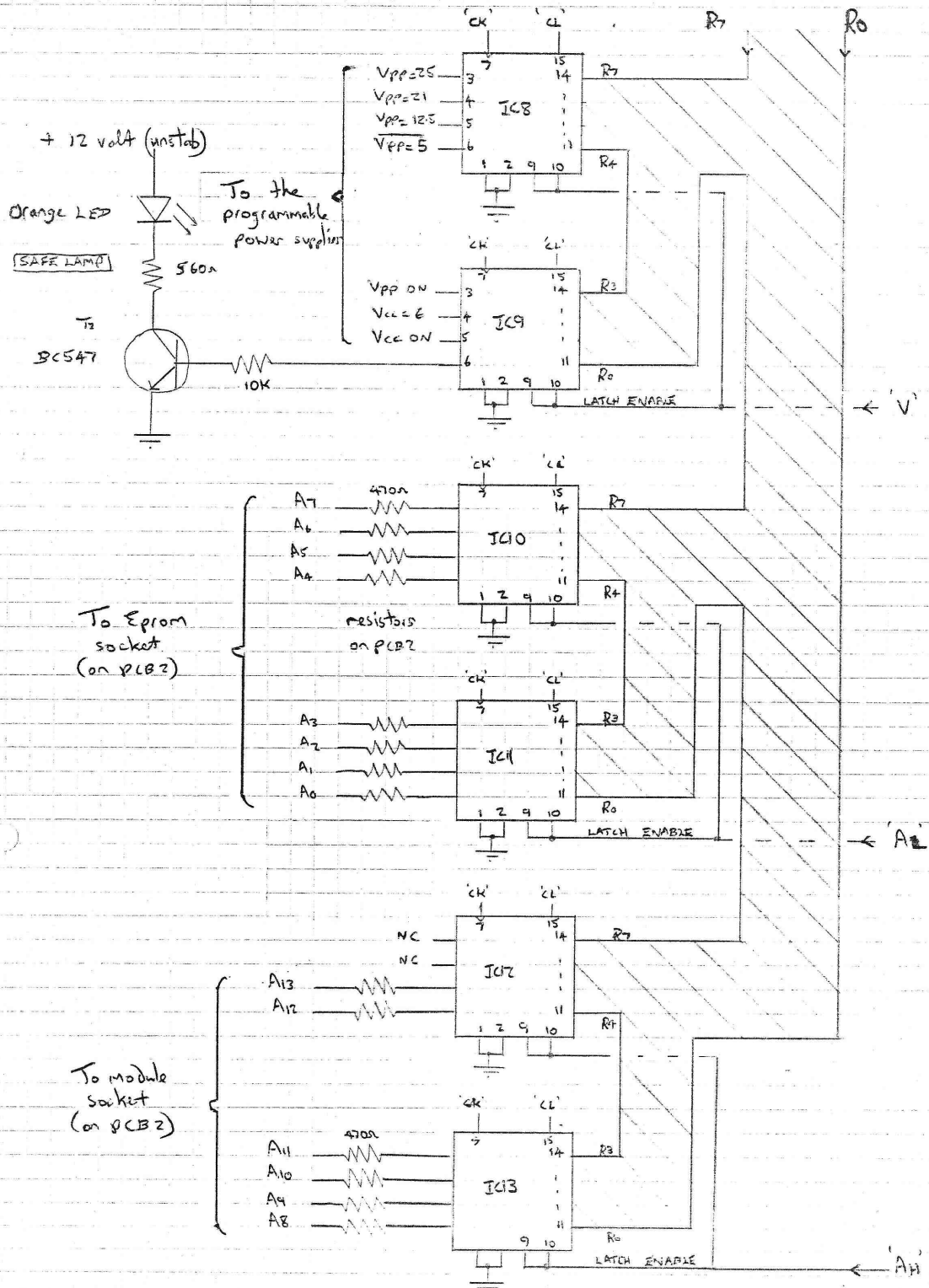


Andru Gargu

CIRCUIT OF EPROM PROGRAMMER



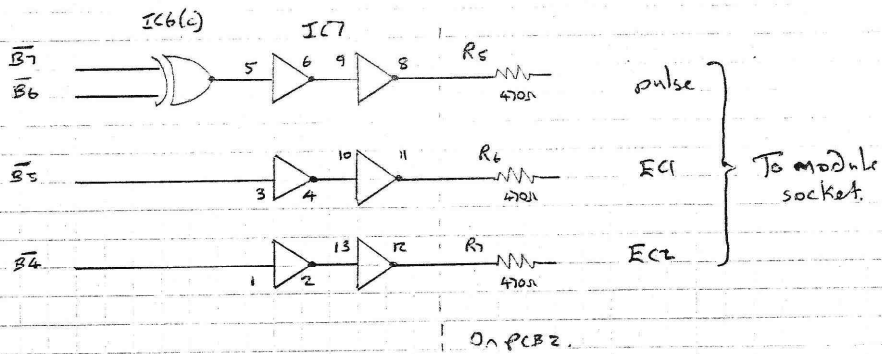
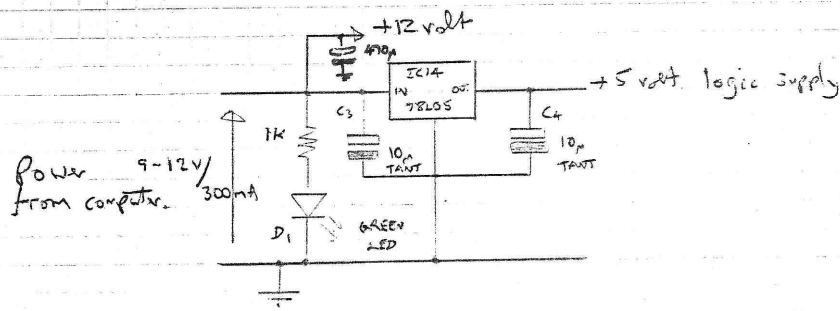
Eprom programmer - Register connections.



IC8, 9, 10, 11, 12, 13 = 74HC173

3/

Eeprom programmer - IC lines and 5 volt power supply.



Notes: I omitted R_5 , R_6 and R_7 .
Zener diodes can be included.

IC7 = 74HC04

4/

