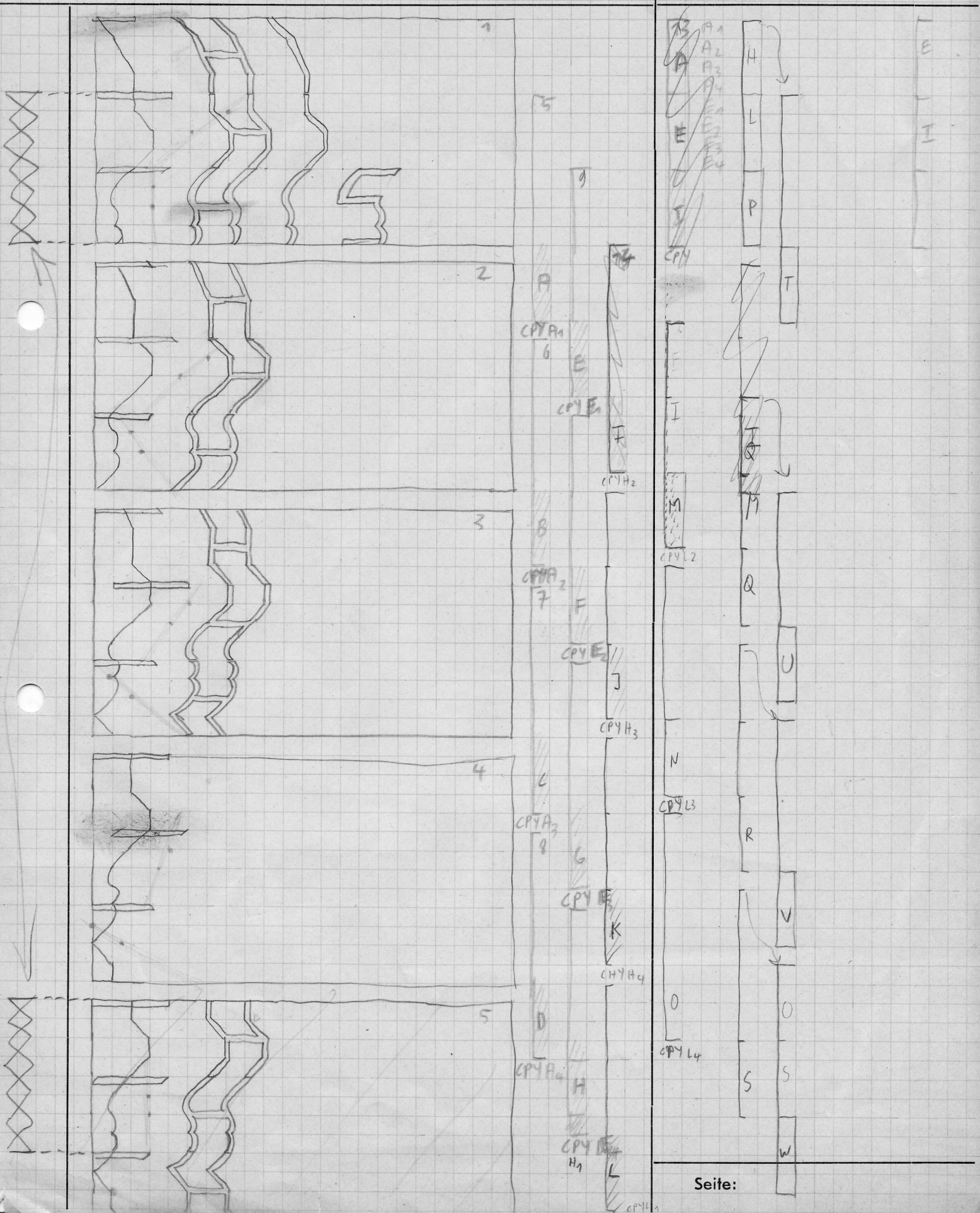
Name: Wohnort: Strasse: Stud. Nr.

Kursus: Elektrotechnik Lehrbrief Nr.

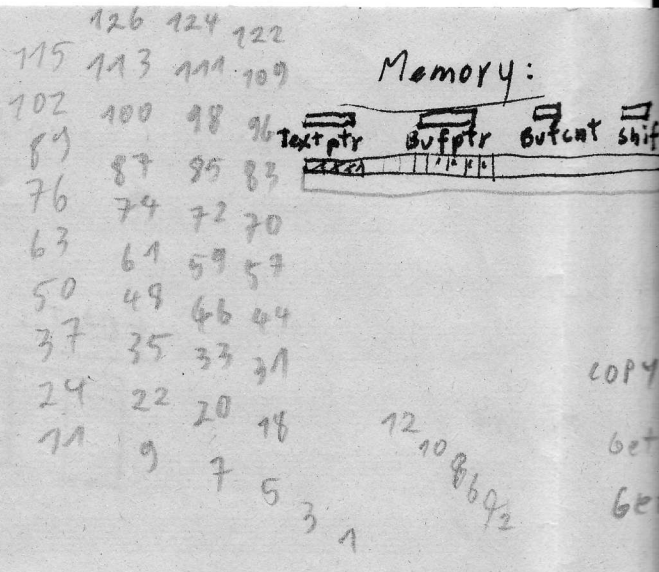


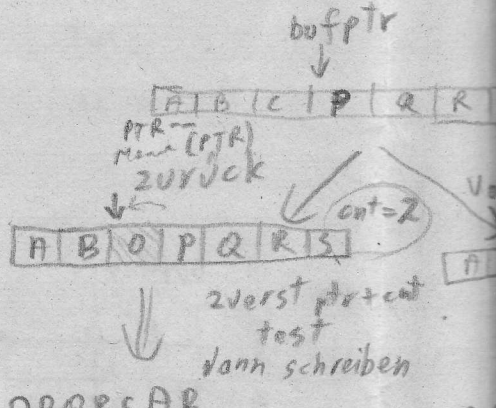
Seite:

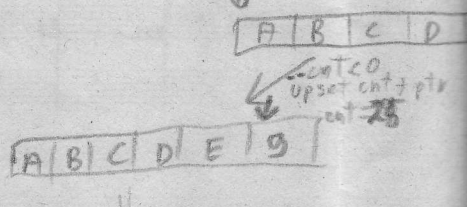
- HW SCROLL ROUT
- set next screenadr

- calc the distorter
  - scroll left/right if necessary (NACHSCHUB!)

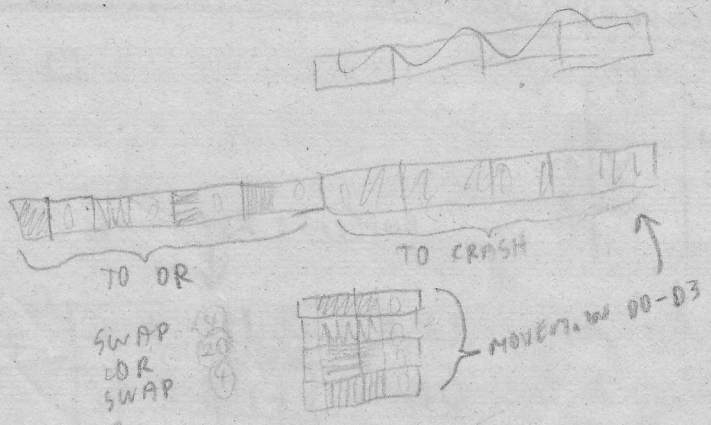
- copy buffer to screen (using dist tab)
- open border old MMU
- gest digisound
- open border new MMU
- copy buffer to screen
(-vblwait)
- gest megadist-scroll

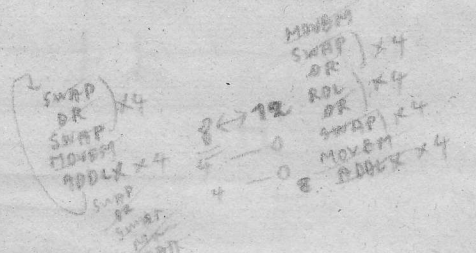


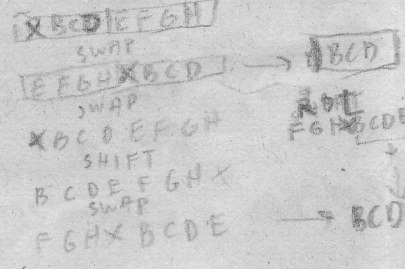




NACHSCHUB:
1 line: 60 × 16 = 960 cycles
= 240 nops
= 6 lines







ry:

r Bufcnt shiftNR

BUFF line 1 0 (4 planes) 25×16 pix × 16

shift 1
2
3
:
15

COPYROUT:

Get ~~BUFFER~~ ADRESS ADD ~~shift.w × 208~~

Get Bufcnt.w

JUMP TO CPYROUT(BUFCNT)

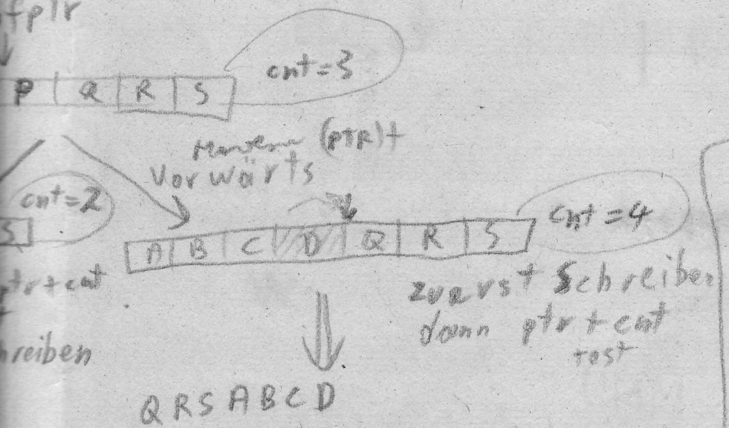
~~16~~ / 64 / 128

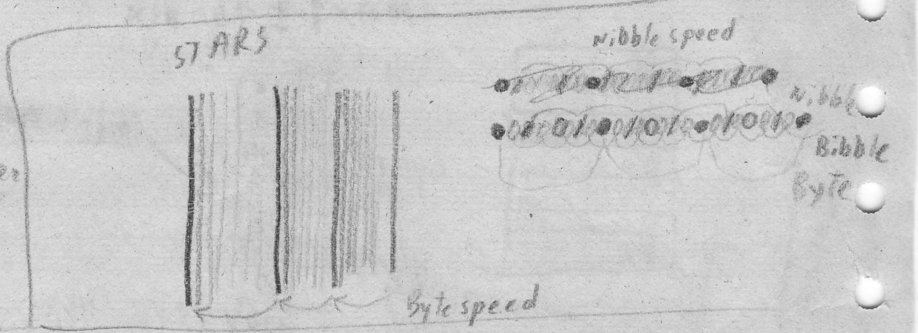
Registers **Digi**

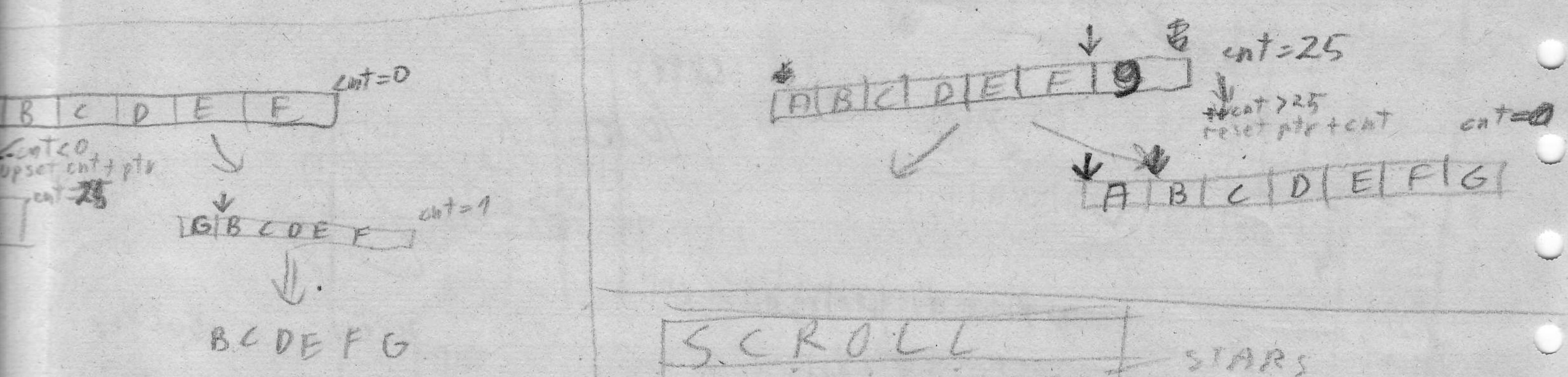
Reglist 2 ADR 1 ADR

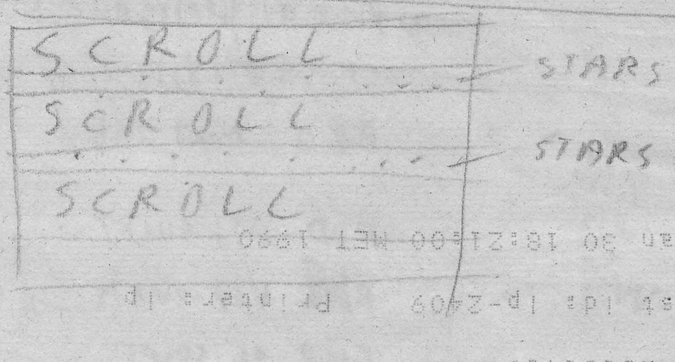
Digi

fptr



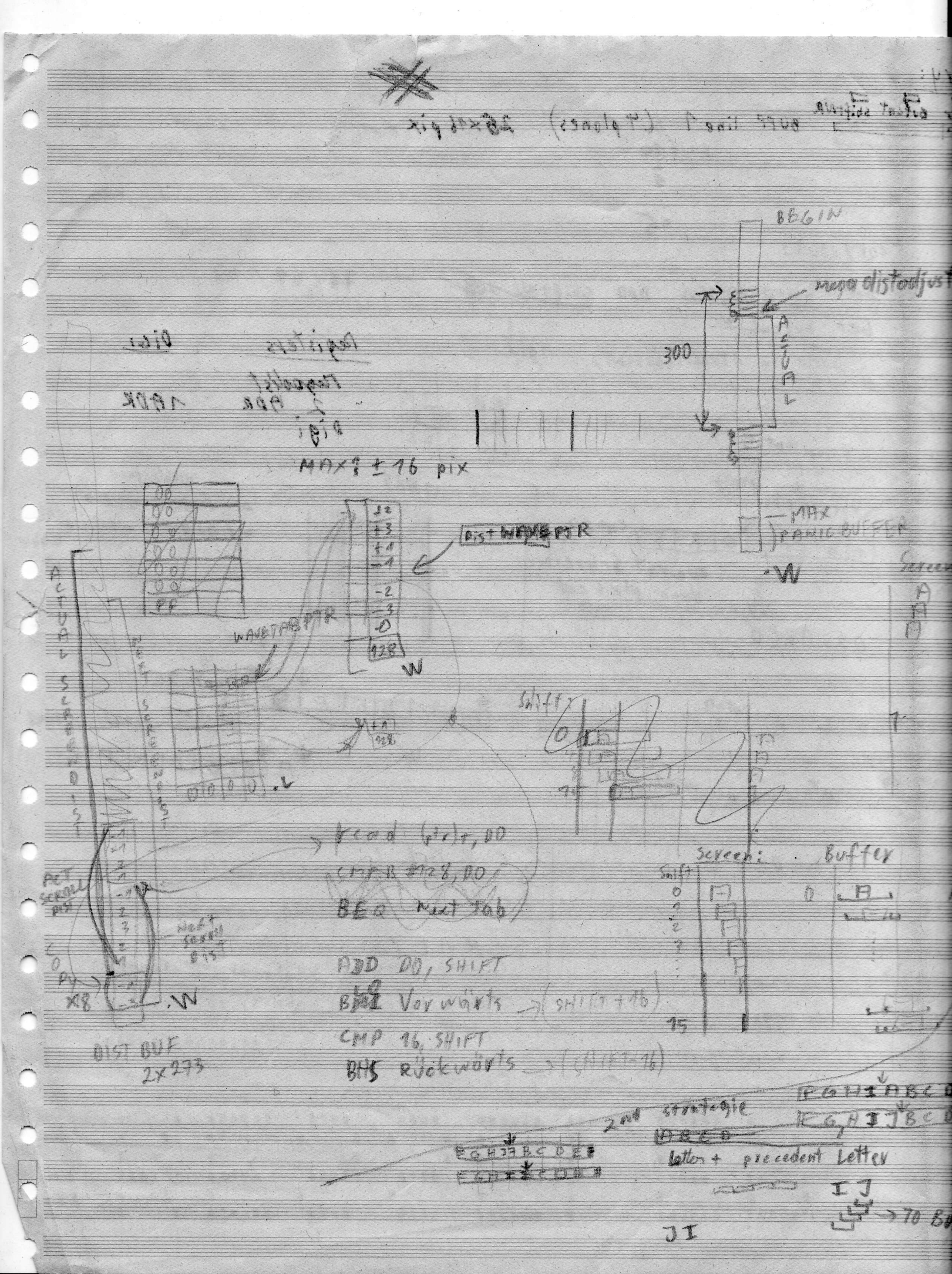






50 cycles
40 nops
lines
~~lines~~

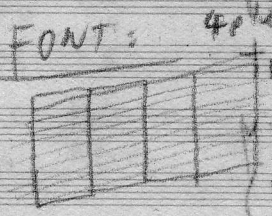
192


BEGIN
300
ACTUAL
MAX
PANIC BUFFER
MAX ± 16 pix
WAVETABPTR
ACTUAL SCREEN POS
PET SCROLL POS
DIST BUF
2x273
Screen
Buffer
Shift
read (ptr),r, DO
CMP.B #128, DO
BEQ Next Tab
ADD DO, SHIFT
BMI Vorwärts
CMP 16, SHIFT
BHS Rückwärts
2nd strategie
Letter + precedent Letter
JI

BEGIN

mega distoadjust

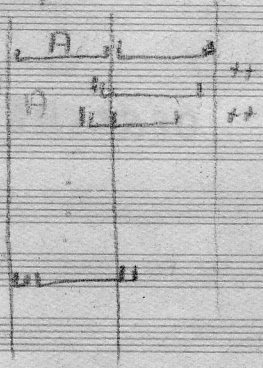
FONT:



Screen

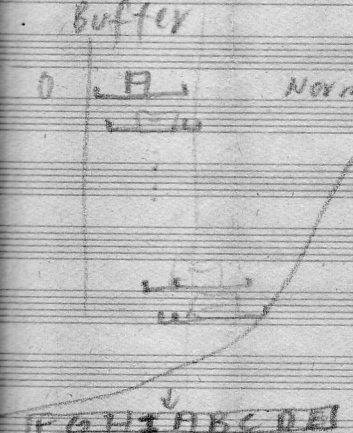
A	0
A	1
A	2
	14
	15

Buffer

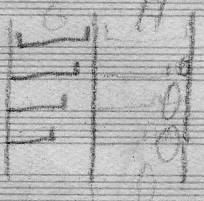


Buffer

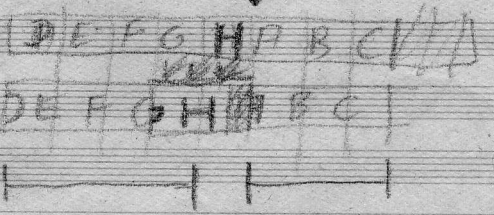
Normal



NACHSCHUB VORWÄRTS



Buffers: 26+1 words



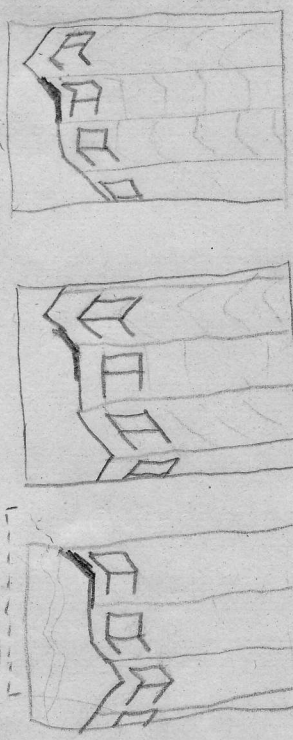
COPY

→ 70 BUFFERS

COPY 4 WORDS

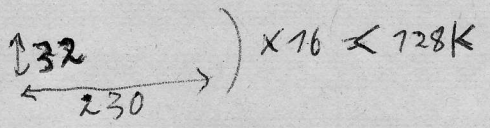
HALL
HALLO
HALLO
HALLO
/

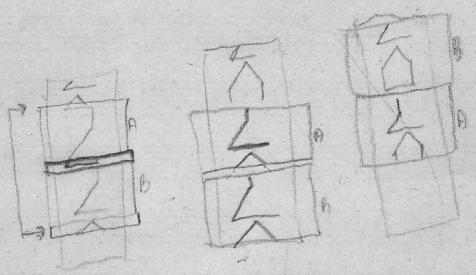
H E L L O G
H E L L O G
H E L L O G U
H E L L O G U Y
H E L L O G U Y S
H E L L O G U Y S T
H E L L O G U Y S T H
H E L L O G U Y S T H I
H E L L O G U Y S T H I S

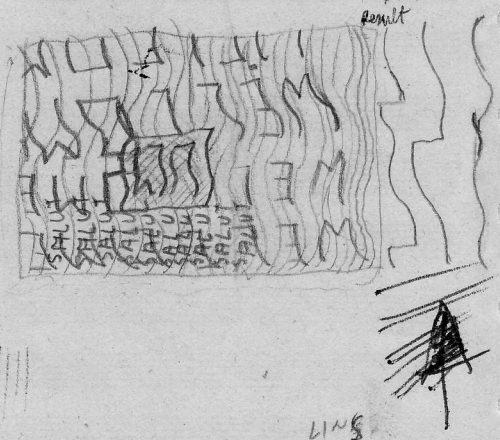


64K

64K



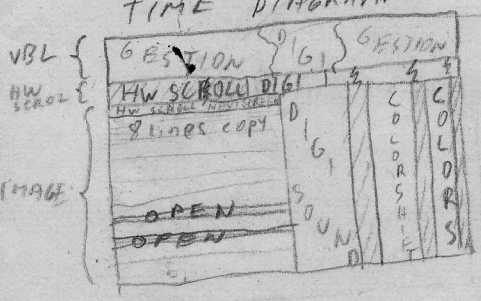




WITHOUT COLDIST:

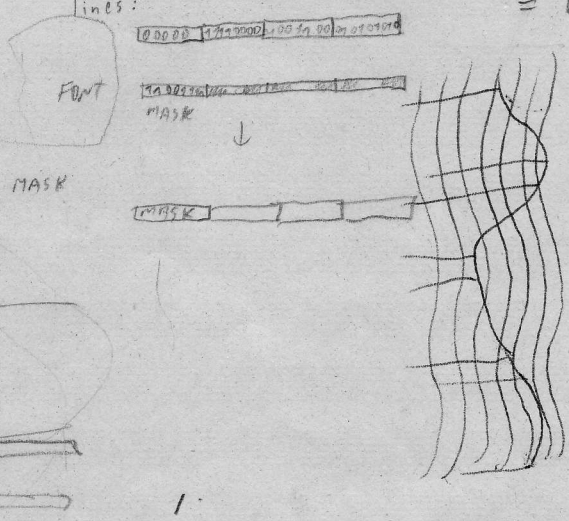
Die COLDIST linien sind noch gedistet!
Gegensteuern...

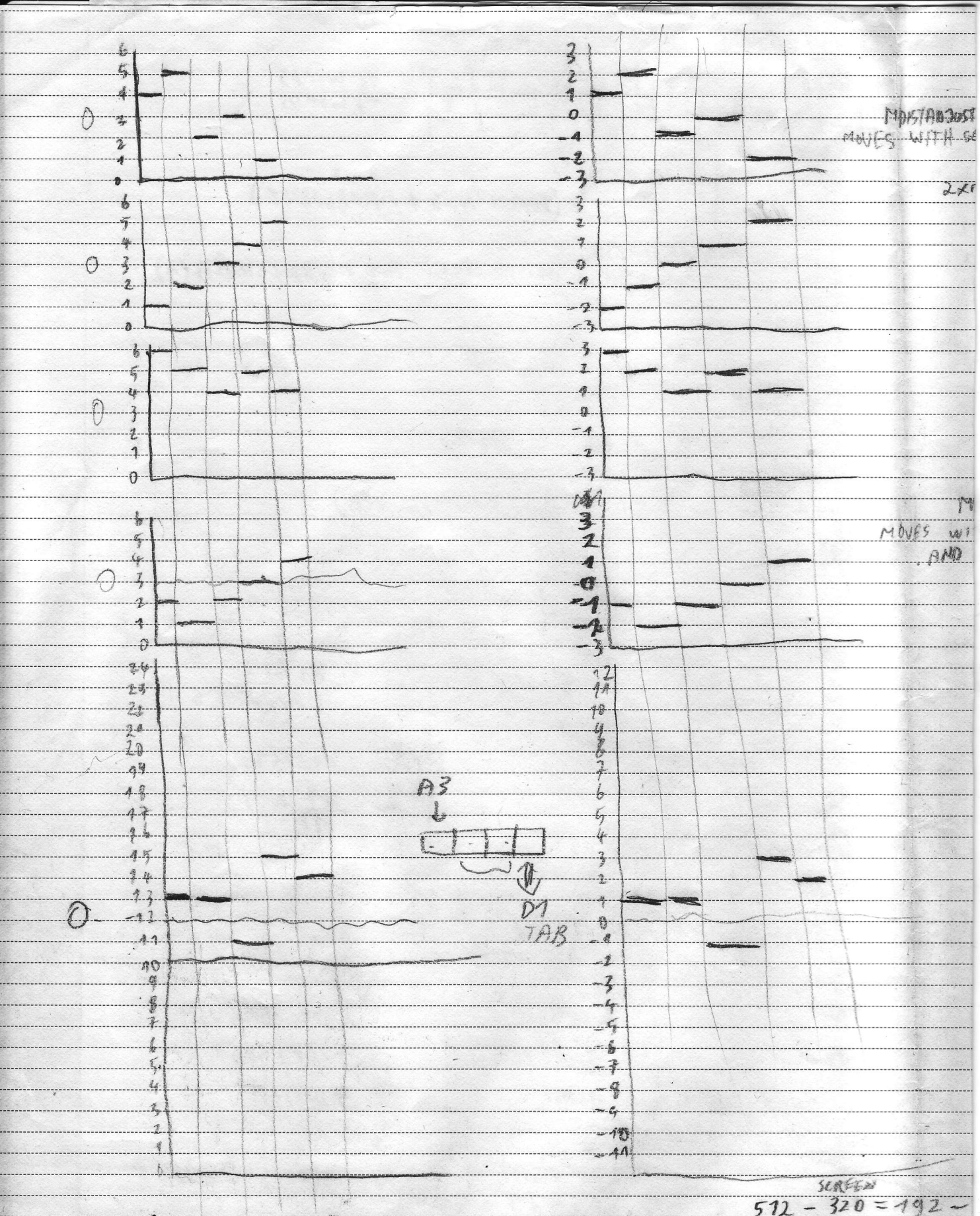
TIME DIAGRAMM



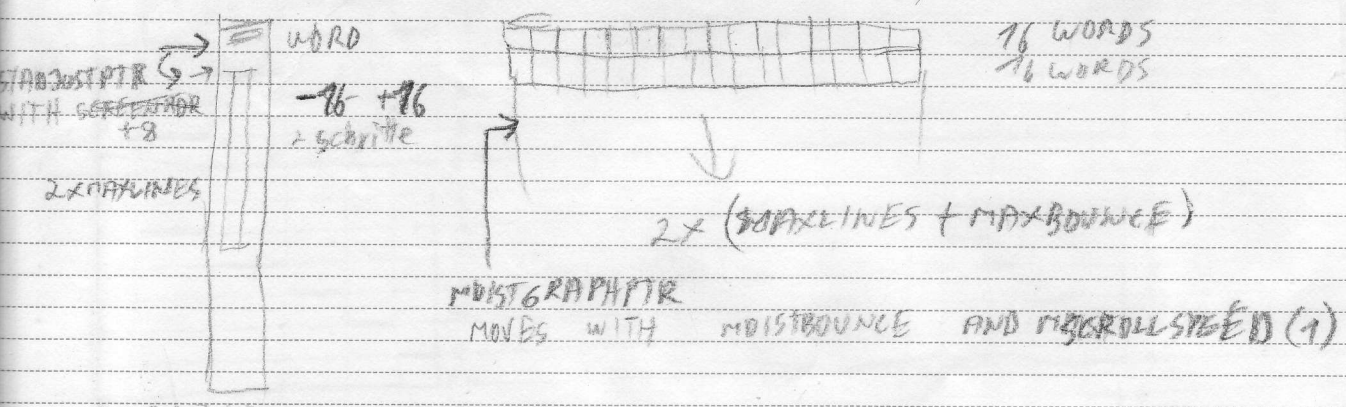
8 couleurs = 3 planes

AND MASK
= LINS
OR FONT (shifted)
= LINS



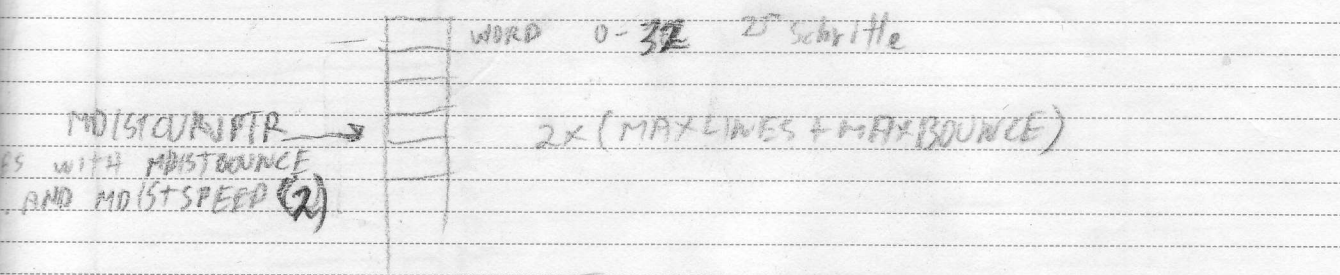


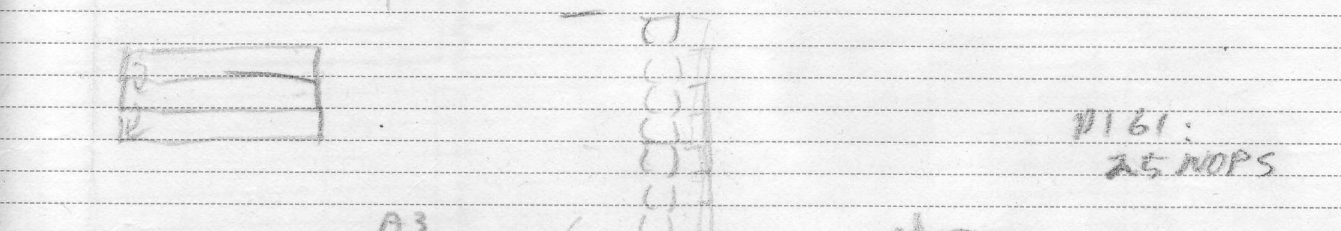
~~MDIST~~ MDISTADJUST



3+3+3+3 =

MDISTCURV





DIGI:
25 NOPS

MDIST:
17 NOPS

```
Move.w  (MDISTCURVPTR)+,D0
ADD.w   (MDISTADJUSTPTR)+,D0
MOVEM.L (MDISTGRAPHPTR,D0),D0-D3
<switch open right>
lea     32(MDISTGRAPHPTR),MDISTGRAPHPTR
```

MDIST:
3 ADR
4 COPY REG

DIGI:
2 ADR
1 COPY REG
1 DATA

REST:
2 ADR + SP/USP
4 COPY REG
3 DATA

BUFF FONT1 FONT2 MBUFF PROGRAMM 243007
12 - 85 = 107 - 22 = 85 - 10 = 75 - 21 = 54 -
585

OHNE DIGI: 480 800

460

Double Dist Speicher:

Font höhe x 16 x 40

höhe x 640

...

Word Shift Font: höhe x 24 x 40

höhe x 960 x 16 = h x 15360

byte Shift Font: höhe x 24 x 40 x 8 = h x 7680

18	138240	276480
20	153600	307200

vergiss es !!

SCREENS 280 x 230 x 5 = 322000

FONT: 32 x 640 = 20480

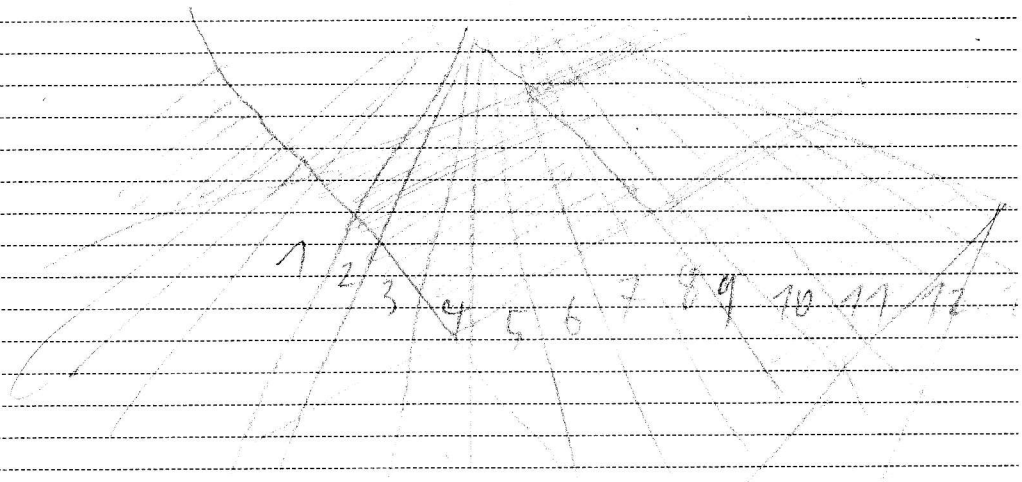
Rest : 169520

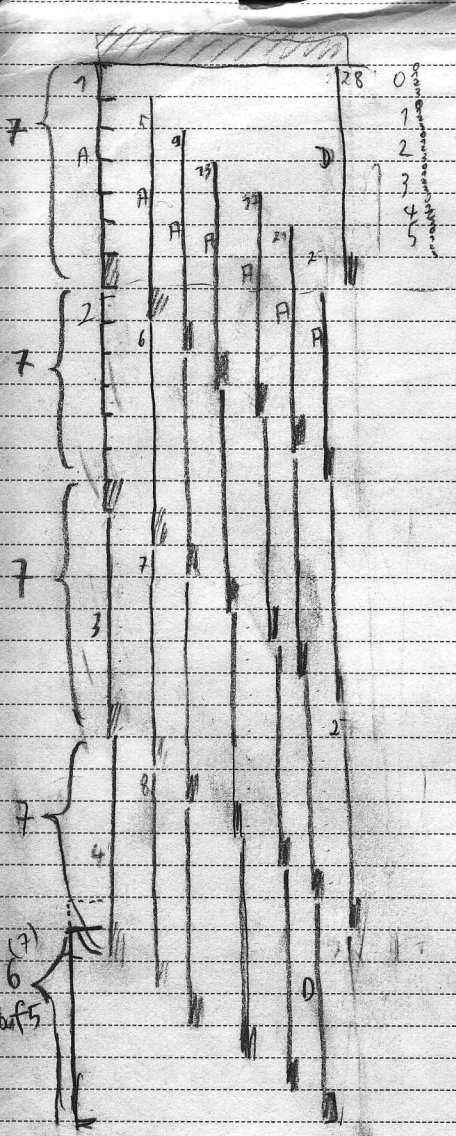
Buffers : 26 x 208 x 16 = 86528

estimation : M-Disttab 20 000

PROGRAM 20 000

Rest 40000 = 10 sec





Nextscrn = 0 ⟺ CNT = 28 :

⇓

→ set nextscrn to 1st scrn

→ Set copybuf to (buf5 − 1 scroll)

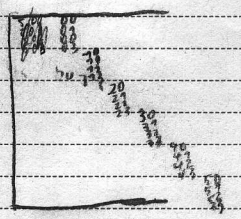
→ Offset destcopybuf to 1st buf − 1

7 scrolls / BUFF

Tot : 14 scrolls

1 Buff = 28

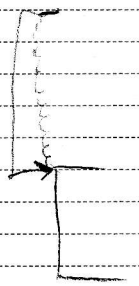
14 · 4 =



*

)

-1scroll



alls/buff

= 280 lines (⇒ Bounce = 6+6)

= 56 adresses

0 1 2 3 4 5 6 7 8 9 : ; (-)

? ! A B C D E F G H I J K

L M N O P Q R S T U V W

13 x 20 Reg = 1040 = 208·5

X Y Z ⊔

	0
+400	230 · 280
+400·2	230 · 2·280
+400·3	230 · 3 · 280
230	230 · 20 + ?
	230 · (280+20)
	230 (2·80+20)·2
	230 (280+20)·3
	230 20·2
	230 1280+20·2
	230 2280+20·1
	230 3280+20·2

(nextscrn) = scrnadrs+4

230 · (0 · 280 + 3 · 20)
230 · (1 · 280 + 3 · 20)
230 · (2 · 280 + 3 · 20)
230 · (3 · 280 + 3 · 20)
230 · (0 · 280 + 4 · 20)
230 · (1 · 280 + 4 · 20)
230 · (2 · 280 + 4 · 20)
230 · (3 · 280 + 4 · 20)

75

21