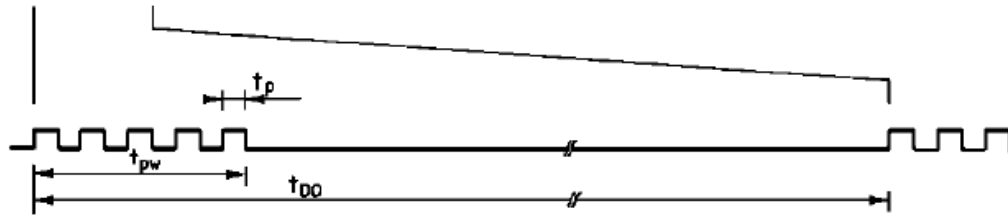
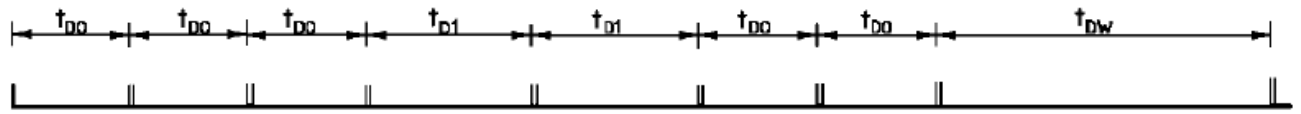


AC1 Tastatur und Kassetten Anschluss

KC85 Keyboard serielles Signal



- $t_c = t_p$ Taktperiode
- $t_c = 16 \mu s$
- $t_{PW} = 9 \cdot t_c = 144 \mu s$ Burstdauer
- $t_u = 64 \cdot t_c = 1024 \mu s$ Zeiteinheit
- $t_{D0} = 5 \cdot t_u = 5,12 \text{ ms}$ Pulsabstand für logische Null
- $t_{D1} = 7 \cdot t_u = 7,168 \text{ ms}$ Pulsabstand für logische Eins
- $t_{DW} = 14 \cdot t_u = 14,336 \text{ ms}$ Wortabstand
- $t_{DS} = 13 \cdot t_u = 13,312 \text{ ms}$ Doppelwortabstand

Bild 1

Umwandlung in ein Datenwort und Umsetzung in das AC1 Tastatur Datenwort durch ein EPROM.

Bit Delay U3A = 2,5ms

D1_D0 Delay U3B = 3,5ms

Clear Delay U6A = 12ms

Taste Ready U6B = 1ms

DL123D Timing Berechnung

| T in ms | T in ns | C in nF | C in pF | K | Rvar | R0_lcalc | R0_target | Rref | C_lcalc nF | Ctarget |
|---------|----------|---------|---------|------|------|----------|-----------|------|------------|---------|
| 2,5 | 2500000 | 220 | 220000 | 0,45 | 10 | 20 | 22 | 5,5 | 1810 | 1000 |
| 3,5 | 3500000 | 220 | 220000 | 0,45 | 10 | 30 | 33 | 3,5 | 2222 | 2200 |
| 12 | 12000000 | 1000 | 1000000 | 0,45 | 10 | 22 | 22 | 5,7 | 4678 | 4700 |
| 1 | 1000000 | 100 | 100000 | 0,45 | 10 | 17 | 18 | 4,8 | 463 | 470 |

Keyboard Stecker

1 3 5 7 9

1 3 5 7 9 11 13 15



2 4 6 8 10

2 4 6 8 10 12 14 16

1 = +5V

1 = PA03

2 = CLK0

2 = ZC/T02

3 = PA07

3 = PA02

4 = ZC/T00

4 = CLK3

5 = PA06

5 = PA01

6 = CLK1

6 = PB00

7 = PA05

7 = PA00

8 = ZC/T01

8 = PB06

9 = PA04

9 = PASTB

10 = CLK2

10 = PB07

11 = PARDY

12 =

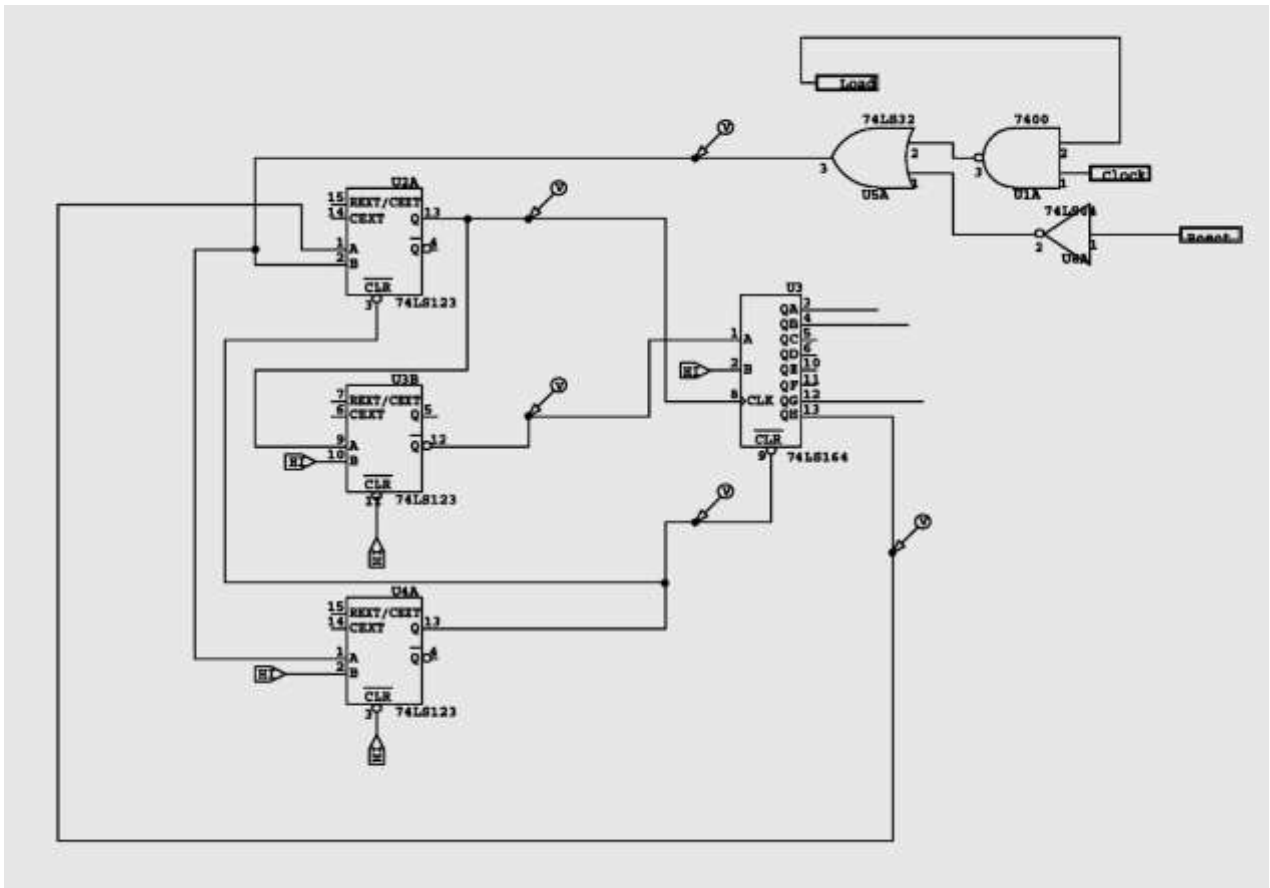
13 =

14 = GND

15 = GND

16 =

KC85 Signalumwandlung in ein Datenwort



7Bit Serial Umsetzung in das AC1 Tastatur Datenwort

| | | | | | | | | | | | | | | | | | |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------------------|
| 000 | 77 | 69 | 74 | 72 | 65 | 7A | 75 | 71 | 1A | 6B | 07 | 3B | 18 | 6C | 06 | 11 | Witrezuq.k.;.l.. |
| 010 | 22 | 28 | 25 | 24 | 23 | 26 | 27 | 21 | 00 | 0E | 01 | 02 | 17 | 1C | 04 | 1D | "(%\$#&'!..... |
| 020 | 61 | 6A | 66 | 64 | 73 | 67 | 68 | 0F | 3D | 3C | 40 | 3F | 2A | 3E | 29 | 12 | ajfdsgh.=<@?*>). |
| 030 | 14 | 1E | 70 | 7C | 5C | 1F | 6F | 15 | 79 | 6D | 76 | 63 | 78 | 62 | 6E | 19 | ..p \\.o.ymvcxhn. |
| 040 | 57 | 49 | 54 | 52 | 45 | 5A | 55 | 51 | 10 | 4B | 7F | 2B | 0C | 4C | 05 | 0B | WITREZUQ.K.+L.. |
| 050 | 32 | 38 | 35 | 34 | 33 | 36 | 37 | 31 | 7E | 13 | 5B | 7D | 7B | 5D | 03 | 1B | 2854367l~.[]{}.. |
| 060 | 41 | 4A | 46 | 44 | 53 | 47 | 48 | 16 | 2D | 2C | 30 | 2F | 3A | 2E | 39 | 09 | AJFDSGH.-,0/:.9. |
| 070 | 08 | 20 | 50 | 5F | 5E | 60 | 4F | 0A | 59 | 4D | 56 | 43 | 58 | 42 | 4E | 0D | . P_^`O.YMVCXBN. |

KC85 Daten

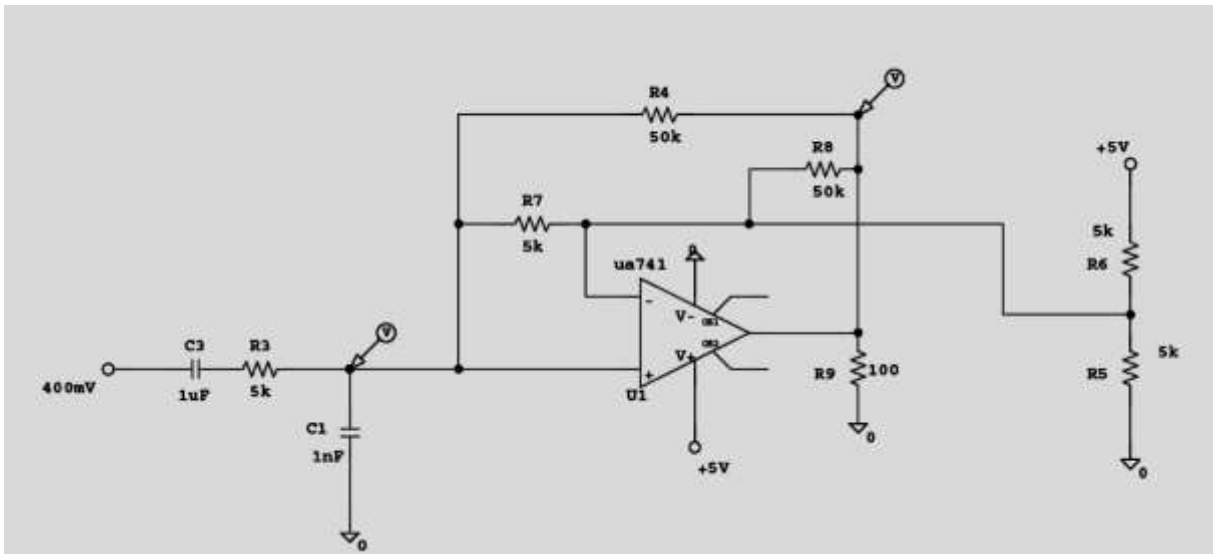
U3B pin 12 (Daten)

U4A pin 13 (Clear)

U2A pin 13 (Clock)

U3 pin 13 (LoopBack)





Eingangsverstärker Kasette Audio zu AC1 Kasette Eingang

