



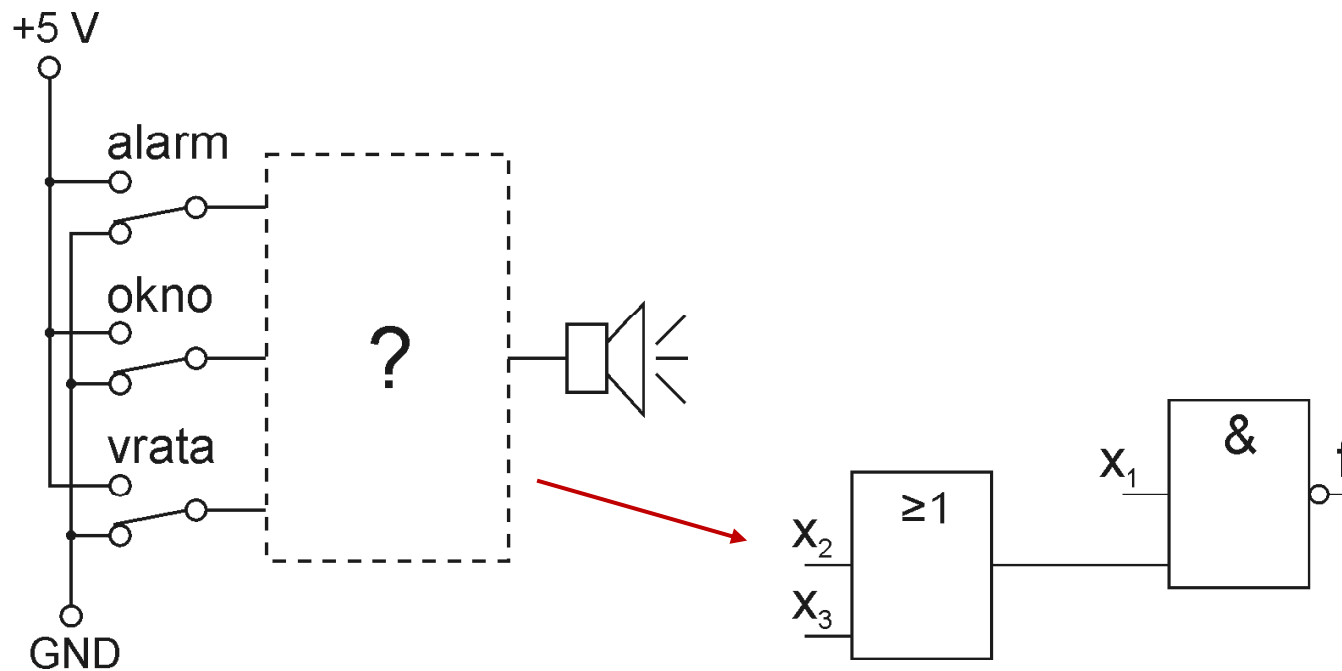
Preklopna vezja

2. Vaja

Simulacija delovanja kombinacijskih vezij (P-SPICE)



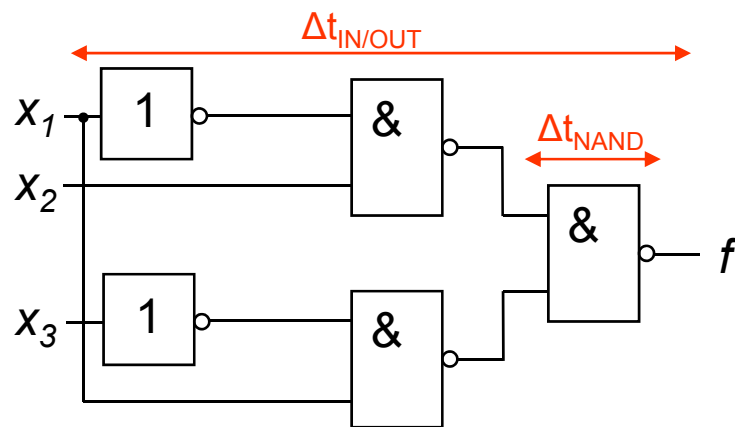
1. Naloga: Simulacija delovanja krmilnega vezja za alarm (PSpice)



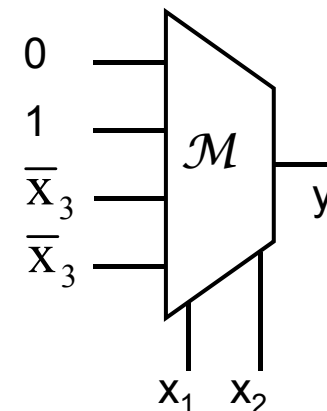


2. Naloga: Simulacija delovanja logičnih vezij z vrati NAND/NOR (PSpice)

a) Simulacija vezja iz prve vaje:



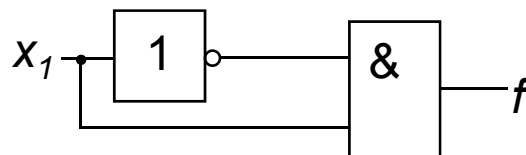
b) Simulacija vezja iz prve vaje z MUX 74HC151:



Določite:

- Δt_{NAND} : Zakasnitev na vratih NAND oz. NOR
- $\Delta t_{\text{IN/OUT}}$: Zakasnitev vhod/izhod

c) Simulacija NOT-AND vezja in razlaga delovanja:





OrCAD (PSpice)

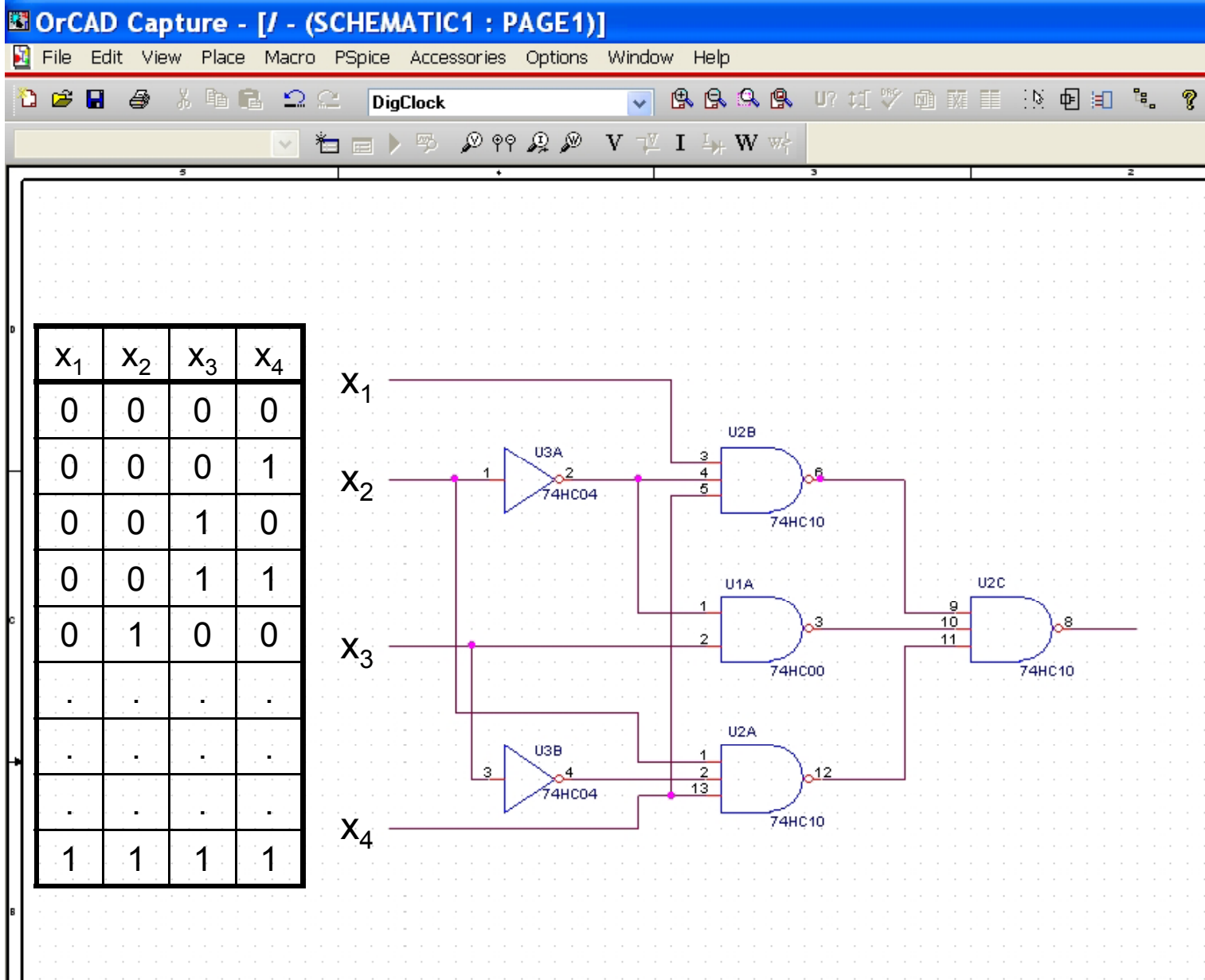
The screenshot shows the OrCAD Capture interface. On the left, a vertical toolbar contains several icons with arrows pointing to them from Slovenian text labels: 'knjižnica elementov' (element library), 'povezave' (connections), 'imena povezav' (connection names), and 'stičišče' (junctions). The 'Place Part' dialog box is open, showing a list of parts with '74HC00' selected. The dialog includes fields for 'Part', 'Part List', 'Libraries', 'Graphic' (Normal/Convert), 'Packaging' (Parts per Pkg: 4, Part: A, Type: Homogeneous), and a preview window showing a 74HC00 NAND gate symbol. At the bottom right, a metadata table is visible:

Title	<Title>	
Size	Document Number	Rev
A	<Doc>	<RevCode>
Date:	Friday, November 09, 2007	Sheet 1 of 1

At the bottom of the window, the status bar shows '0 items selected', 'Scale=116%', and coordinates 'X=1.70 Y=3.10'.

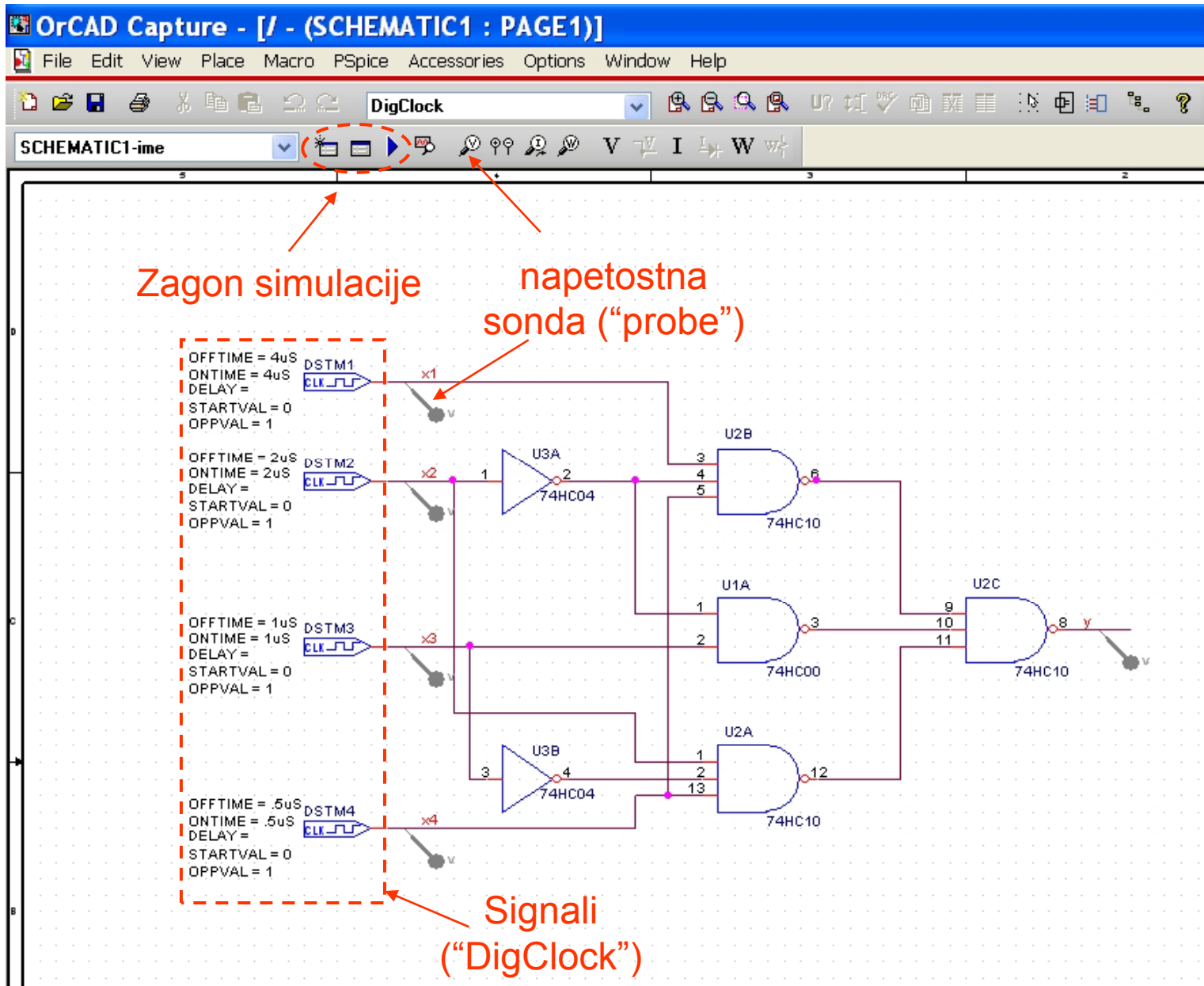


Vezje





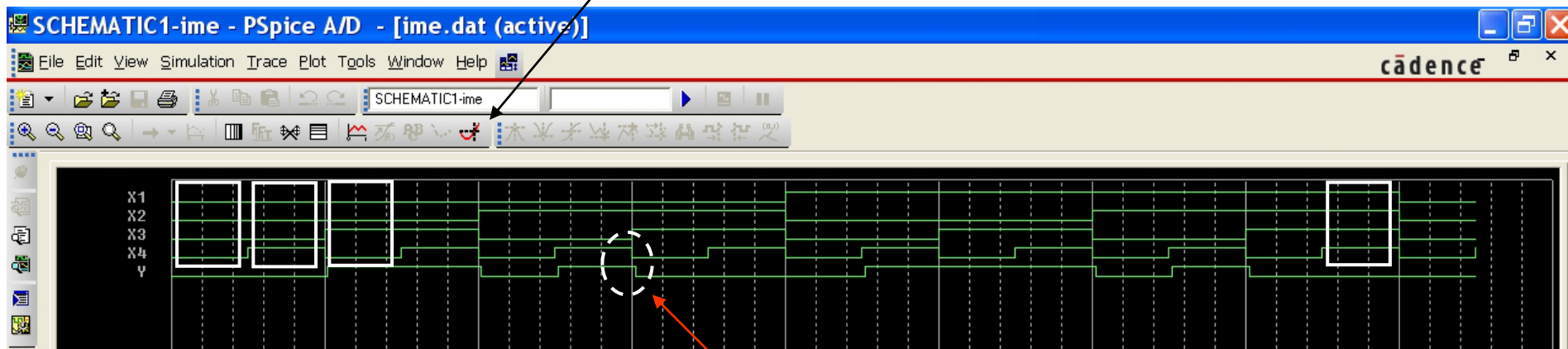
Vhodni
signali
in sonde





Rezultati simulacije (časovni diagram)

kurzorji



zakasnitev vhod/izhod

x ₁	x ₂	x ₃	x ₄	y
0	0	0	0	0
0	0	0	1	0
0	0	1	0	1
.	.	.	.	
.	.	.	.	
.	.	.	.	
1	1	1	1	0



Poročilo

- ❑ Besedilo vaje
- ❑ Časovni diagram vhodnih in izhodne spremenljivke (f in MUX)
- ❑ Zakasnitev na vratih NAND/NOR, zakasnitev vhod/izhod
- ❑ Časovni diagram in razlaga vezja NOT-AND