## SARCINI PENTRU LUCRUL INDIVIDUAL

## Indicatii:

- De executat cinci sarcine conform variantei indicate în tabele (varianta pentru fiecare student este prezentată în tabele);
- Schemele electrice de construit cu ajutorulu programului Electronics Workbenci;
- Raportul de prezentat într-un fișier de tip Word (în denumirea fișierului de indicat numele și grupa);
- Fiecare sarcină este apreciată cu 2 puncte;
- Raportul referitor la lucrul individual trebuie transmis pe email eugenplohotniuc@yahoo.com
- Termenul limită de prezentare a lucrului individual 16 decembrie 2022.

## Указания:

- выполнить пять заданий по варианту, указанному в таблицах (в таблицах представлен вариант для каждого студента);
- электрические схемы построить с помощью программы Electronics Workbench;
- отчет должен быть представлен в виде файла Word (указать фамилию и группу в названии файла);
- каждое задание оценивается в 2 балла;
- отчет по индивидуальной работе необходимо отправить по электронной почте eugenplohotniuc@yahoo.com
- Крайний срок представления индивидуальной работы 16 декабря 2022 года.

Nr. d/o	NUME, PRENUME	GRUPA	VARIANTA
1	Adam Denis	IS21Z	1
2	Caminceanu Valentin	IS21Z	2
3	Cernolev Corina	IS21Z	3
4	Cojocari Dmitri	IS21Z	4
5	Costiuc Igor	IS21Z	5
6	Davîdov Ecaterina	IS21Z	6
7	Diacov Cătălin	IS21Z	7
8	Driga Nicolai	IS21Z	8
9	Frasiniuc Ilona	IS21Z	9
10	Gaideic Victor	IS21Z	10
11	Gangan Anastasia	IS21Z	11
12	Gavriliță Dorin	IS21Z	12
13	Maximenco Vladislav	IS21Z	13
14	Novicov Daniil	IS21Z	14
15	Pogor Cristian	IS21Z	15
16	Russu Nicolai	IS21Z	16
17	Samciucov Valentin	IS21Z	17
18	Smoleac Mihai	IS21Z	18
19	Ulmada Dmitri	IS21Z	19
20	Tcaci Pavel	IS21Z	20
21	Chiperi Daniel	IT21Z	21
22	Curbăt Anatolie	IT21Z	22
23	Deleu Liviu	IT21Z	23
24	Gluşcov Alexandr	IT21Z	24
25	Marchitan Alexandru	IT21Z	25
26	Panciuc Cătălin	IT21Z	26
27	Vichilu Elena	IT21Z	27
28	Guranda Adrian	MI31Z	28
29	Guranda Natalia	MI31Z	29
30	Plîngău Cătălina	MI31Z	30

SARCINA 1. Completați tabelul de adevăr și construiți schema electrică ale dispozitivului care îndeplinește următoarea funcție. Verificați corectitudinea completării tabelului de adevăr cu ajutorul convertorului logic. (Заполнить таблицу истинности и построить электрическую схему устройства, которое выполняет следующую функцию. Проверить правильность заполнения таблицы истинности при помощи логического конвертора. )

Varianta	Funcția
1.	$f(a,b,c,d) = \bar{a}bcd + (ab + \bar{c}d) + \bar{a}b\bar{d}$
2.	$f(a,b,c,d) = \bar{a}cd + ab\bar{c}d + (\bar{a}b + \bar{d})$
3.	$f(a,b,c,d) = \overline{ab} + b\overline{c}d + \overline{a}b\overline{d}$
4.	$f(a,b,c,d) = \bar{a}d + ab\bar{c} + \overline{a+b}\bar{d}$
5.	$f(a,b,c,d) = \bar{a}bd + abd + \bar{a}c\bar{d}$
6.	$f(a,b,c,d) = (\bar{a}c + d) + ab\bar{c}d + \bar{a}d\bar{c}$
7.	$f(a,b,c,d) = \bar{a}bcd + ab\bar{c}d + \bar{a}b + \bar{d}$
8.	$f(a,b,c,d) = \bar{a}cd + ab\bar{c}d + \bar{a}\bar{d}$
9.	$f(a,b,c,d) = (\bar{a} + cd) + b\bar{c}d + \bar{b}\bar{d}$
10.	$f(a,b,c,d) = \bar{a}c + \overline{abc}d + (\bar{a} + \bar{d})$
11.	$f(a,b,c,d) = \bar{a}cd + (ab + \bar{c}d) + \bar{a}\bar{d}$
12.	$f(a,b,c,d) = (\bar{b}c + d) + ab\bar{c}d + \bar{a}b\bar{d}$
13.	$f(a,b,c,d) = \overline{a+b}cd + (a+b\overline{c}d) + \overline{a}\overline{c}\overline{d}$
14.	$f(a,b,c,d) = (\bar{b}c + d) + ab\bar{c} + \overline{abc}\bar{d}$
15.	$f(a,b,c,d) = (\bar{a}c + d) + abd + \overline{bc}\bar{d}$
16.	$f(a,b,c,d) = \bar{a}bcd + (b + \bar{c}d) + \bar{a}\overline{cd}$
17.	$f(a,b,c,d) = (\overline{ab} + cd) + ab\overline{c} + \overline{abcd}$
18.	$f(a,b,c,d) = \bar{a}c + bd + ab\bar{c}d + (\bar{a}b + \bar{d})$
19.	$f(a,b,c,d) = \overline{ab} + ab\overline{c}d + \overline{a}b\overline{d}$
20.	$f(a,b,c,d) = (\bar{a}+d) + ab\bar{c} + \overline{a+b}\bar{d}$
21.	$f(a,b,c,d) = \bar{a}bd + abd + \bar{a}bc\bar{d}$
22.	$f(a,b,c,d) = (\bar{a}c + d) + ab\bar{c}d + \bar{a}d\bar{c}$
23.	$f(a,b,c,d) = bd + ab\bar{c}d + (\bar{a}bc + \bar{d})$
24.	$f(a,b,c,d) = (\bar{a}+d) + b\bar{c}d + (\bar{a}\bar{b}+\bar{d})$
25.	$f(a,b,c,d) = \overline{ab}cd + (a+b\overline{c}d) + \overline{c}\overline{d}$
26.	$f(a,b,c,d) = \overline{ac}d + (ab\overline{c} + d) + \overline{a}\overline{d}$
27.	$f(a,b,c,d) = \bar{a}cd + (ab + \bar{c}d) + \bar{a}\bar{d}$
28.	$f(a,b,c,d) = (\bar{a} + cd) + b\bar{c}d + \overline{abc}\bar{d}$
29.	$f(a,b,c,d) = (\bar{a}c + abd) + b\bar{c}d + \bar{a}d\bar{c}$
30.	$f(a,b,c,d) = \bar{a}bcd + ab\bar{c}d + (\bar{a}b + \bar{d})$

**SARCINA 2.** Transformați funcția logică din FCNC în FCND și prezentați funcția obținută prin metoda numerică (Преобразовать логическую функцию из СКНФ в СДНФ и представить полученную функцию в цифровом виде)

Varianta	Funcția
1.	$f(a,b,c,d,e) = (\bar{a} + \bar{b} + \bar{c} + d + \bar{e})(\bar{a} + \bar{b} + c + \bar{d} + \bar{e})$
	$(\bar{a}+b+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+e)$
2.	$f(a,b,c,d,e) = (\bar{a} + \bar{b} + \bar{c} + \bar{d} + \bar{e})(\bar{a} + \bar{b} + \bar{c} + \bar{d} + e)$
	$(\bar{a}+\bar{b}+\bar{c}+d+\bar{e})(\bar{a}+\bar{b}+c+\bar{d}+\bar{e})(\bar{a}+b+\bar{c}+\bar{d}+\bar{e})$
3.	$f(a,b,c,d,e) = (\bar{a} + \bar{b} + \bar{c} + \bar{d} + e)(\bar{a} + \bar{b} + \bar{c} + d + \bar{e})$
	$(\bar{a} + \bar{b} + c + \bar{d} + \bar{e})(\bar{a} + b + \bar{c} + \bar{d} + \bar{e})(a + \bar{b} + \bar{c} + \bar{d} + \bar{e})$
4.	$f(a,b,c,d,e) = (\bar{a} + \bar{b} + \bar{c} + d + \bar{e})(\bar{a} + \bar{b} + c + \bar{d} + \bar{e})$
	$(\bar{a}+b+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+e)$
5.	$f(a,b,c,d,e) = (\bar{a} + \bar{b} + c + \bar{d} + \bar{e})(\bar{a} + b + \bar{c} + \bar{d} + \bar{e})$
	$(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+e)(a+\bar{b}+\bar{c}+d+e)$
6.	$f(a,b,c,d,e) = (\bar{a}+b+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})$
	$(a+\bar{b}+\bar{c}+\bar{d}+e)(a+\bar{b}+\bar{c}+d+e)(a+\bar{b}+c+\bar{d}+\bar{e})$
7.	$f(a,b,c,d,e) = (a + \overline{b} + \overline{c} + \overline{d} + \overline{e})(a + \overline{b} + \overline{c} + \overline{d} + e)$
	$(a+\bar{b}+\bar{c}+d+e)(a+\bar{b}+c+\bar{d}+\bar{e})(a+\bar{b}+c+\bar{d}+e)$
8.	$f(a,b,c,d,e) = (a+\bar{b}+\bar{c}+\bar{d}+e)(a+\bar{b}+\bar{c}+d+e)$
	$(a+\bar{b}+c+\bar{d}+\bar{e})(a+\bar{b}+c+\bar{d}+e)(a+\bar{b}+c+d+e)$
9.	$f(a,b,c,d,e) = (a+\bar{b}+\bar{c}+d+e)(a+\bar{b}+c+\bar{d}+\bar{e})$
	$(a+\bar{b}+c+\bar{d}+e)(a+\bar{b}+c+d+e)(a+b+\bar{c}+\bar{d}+\bar{e})$
10.	$f(a,b,c,d,e) = (a + \overline{b} + c + \overline{d} + \overline{e})(a + \overline{b} + c + \overline{d} + e)$
	$(a+\bar{b}+c+d+e)(a+b+\bar{c}+\bar{d}+\bar{e})(a+b+\bar{c}+\bar{d}+e)$
11.	$f(a,b,c,d,e) = (a+\bar{b}+c+\bar{d}+e)(a+\bar{b}+c+d+e)$
10	$(a+b+\bar{c}+\bar{d}+\bar{e})(a+b+\bar{c}+\bar{d}+e)(a+b+\bar{c}+d+\bar{e})$
12.	$f(a,b,c,d,e) = (a+\bar{b}+c+d+e)(a+b+\bar{c}+\bar{d}+\bar{e})$
	$(a+b+\bar{c}+\bar{d}+e)(a+b+\bar{c}+d+\bar{e})(a+b+\bar{c}+d+e)$
13.	$f(a,b,c,d,e) = (a+b+\bar{c}+\bar{d}+\bar{e})(a+b+\bar{c}+\bar{d}+e)$
1.4	$(a+b+\bar{c}+d+\bar{e})(a+b+\bar{c}+d+e)(a+b+c+\bar{d}+\bar{e})$
14.	$f(a,b,c,d,e) = (a+b+\bar{c}+\bar{d}+e)(a+b+\bar{c}+d+\bar{e})$
15.	$(a+b+\bar{c}+d+e)(a+b+c+\bar{d}+\bar{e})(a+b+c+d+\bar{e})$ $f(a,b,c,d,e) = (\bar{a}+\bar{b}+c+\bar{d}+\bar{e})(\bar{a}+\bar{b}+c+d+\bar{e})$
13.	$(\bar{a} + b + \bar{c} + \bar{d} + \bar{e})(\bar{a} + b + \bar{c} + \bar{d} + \bar{e})$ $(\bar{a} + b + \bar{c} + \bar{d} + \bar{e})(\bar{a} + b + \bar{c} + d + \bar{e})(\bar{a} + b + c + \bar{d} + \bar{e})$
16.	$f(a,b,c,d,e) = (\bar{a} + \bar{b} + c + d + \bar{e})(\bar{a} + b + \bar{c} + \bar{d} + \bar{e})$
10.	
17.	$(\bar{a}+b+\bar{c}+d+\bar{e})(\bar{a}+b+c+\bar{d}+\bar{e})(\bar{a}+b+c+\bar{d}+e)$
17.	$f(a,b,c,d,e) = (\bar{a}+b+\bar{c}+\bar{d}+\bar{e})(\bar{a}+b+\bar{c}+d+\bar{e})$
10	$(\bar{a}+b+c+\bar{d}+\bar{e})(\bar{a}+b+c+\bar{d}+e)(\bar{a}+b+c+d+\bar{e})$
18.	$f(a,b,c,d,e) = (\bar{a}+b+\bar{c}+d+\bar{e})(\bar{a}+b+c+\bar{d}+\bar{e})$
19.	$(\bar{a}+b+c+\bar{d}+e)(\bar{a}+b+c+d+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})$ $f(a,b,c,d,e) = (\bar{a}+b+c+\bar{d}+\bar{e})(\bar{a}+b+c+\bar{d}+e)$
17.	$\int (u, u, c, u, c) = (u + u + c + u + e)(u + u + c + u + e)$

	$(\bar{a}+b+c+d+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+d+\bar{e})$
20.	$f(a,b,c,d,e) = (\bar{a}+b+c+\bar{d}+e)(\bar{a}+b+c+d+\bar{e})$
	$(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+d+\bar{e})(a+\bar{b}+c+\bar{d}+\bar{e})$
21.	$f(a,b,c,d,e) = (\bar{a}+b+c+d+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})$
	$(a+\bar{b}+\bar{c}+d+\bar{e})(a+\bar{b}+c+\bar{d}+\bar{e})(a+b+\bar{c}+\bar{d}+\bar{e})$
22.	$f(a,b,c,d,e) = (a + \overline{b} + \overline{c} + \overline{d} + \overline{e})(a + \overline{b} + \overline{c} + d + \overline{e})$
	$(a+\bar{b}+c+\bar{d}+\bar{e})(a+b+\bar{c}+\bar{d}+\bar{e})(a+b+\bar{c}+d+\bar{e})$
23.	$f(a,b,c,d,e) = (\bar{a} + \bar{b} + \bar{c} + d + \bar{e})(\bar{a} + \bar{b} + c + \bar{d} + \bar{e})$
	$(\bar{a}+b+\bar{c}+\bar{d}+\bar{e})(\bar{a}+b+\bar{c}+d+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})$
24.	$f(a,b,c,d,e) = (\bar{a} + \bar{b} + c + \bar{d} + \bar{e})(\bar{a} + b + \bar{c} + \bar{d} + \bar{e})$
	$(\bar{a}+b+\bar{c}+d+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+d+e)$
25.	$f(a,b,c,d,e) = (\bar{a}+b+\bar{c}+\bar{d}+\bar{e})(\bar{a}+b+\bar{c}+d+\bar{e})$
	$(a+\overline{b}+\overline{c}+\overline{d}+\overline{e})(a+\overline{b}+\overline{c}+d+e)(a+\overline{b}+c+\overline{d}+\overline{e})$
26.	$f(a,b,c,d,e) = (\bar{a}+b+\bar{c}+d+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})$
	$(a+\bar{b}+\bar{c}+d+e)(a+\bar{b}+c+\bar{d}+\bar{e})(a+\bar{b}+c+d+e)$
27.	$f(a,b,c,d,e) = (a+\bar{b}+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+d+e)$
	$(a+\bar{b}+c+\bar{d}+\bar{e})(a+\bar{b}+c+d+e)(a+b+c+\bar{d}+\bar{e})$
28.	$f(a,b,c,d,e) = (a + \overline{b} + c + \overline{d} + \overline{e})(a + \overline{b} + \overline{c} + d + e)$
	$(a+\overline{b}+c+\overline{d}+e)(a+\overline{b}+c+d+e)(a+b+c+\overline{d}+\overline{e})$
29.	$f(a,b,c,d,e) = (\bar{a}+b+\bar{c}+d+\bar{e})(\bar{a}+b+c+\bar{d}+\bar{e})$
	$(\bar{a}+b+c+\bar{d}+e)(\bar{a}+b+c+d+\bar{e})(a+\bar{b}+c+d+\bar{e})$
30.	$f(a,b,c,d,e) = (\bar{a}+b+c+\bar{d}+\bar{e})(\bar{a}+b+c+\bar{d}+e)$
	$(\bar{a}+b+c+d+\bar{e})(a+\bar{b}+\bar{c}+\bar{d}+\bar{e})(a+\bar{b}+\bar{c}+d+e)$

**SARCINA 3.** Construiți schema electrică a registrului de deplasare directă de ordinul 5 din bistabili JK și prezentați diagramele temporale pentru cazul înscrieri codului indicat în tabel. (Построить электрическую схему регистра прямого смещения 5 порядка из JK триггеров и представить временные диаграммы при записи кода, указанного в таблице).

Varianta	Codul	
1.	00100	
2.	01001	
3.	01010	
4.	01011	
5.	01100	
6.	01101	
7.	01110	
8.	10010	
9.	10011	
10.	10100	
11.	10110	
12.	10111	
13.	11000	
14.	11001	
15.	11010	
16.	11011	
17.	11100	
18.	11101	
19.	11110	
20.	00101	
21.	00110	
22.	00111	
23.	01111	
24.	10001	
25.	10101	
26.	00011	
27.	00010	
28.	10000	
29.	10110	
30.	11001	

**SARCINA 4.** Construiți schema electrică a unui contor din bistabili D cu modul de numărare M, indicat în tabel (Построить электрическую схему счётчика из D триггеров по модулю M, указанного в таблице).

Varianta	Modulul de numărare M
1.	011001
2.	101001
3.	101010
4.	101011
5.	101100
6.	101101
7.	101110
8.	110010
9.	110011
10.	110100
11.	110110
12.	110111
13.	111000
14.	111001
15.	111010
16.	111011
17.	111100
18.	111101
19.	111110
20.	100101
21.	100110
22.	100111
23.	101111
24.	010100
25.	010101
26.	011101
27.	010110
28.	010111
29.	101011
30.	100100

**SARCINA 5.** Construiți schema electrică a microcircuitului memoriei permanente și înscrieți programa din tabel (Построить электрическую схему микросхемы постоянной памяти и запишите программу, представленную в таблице.)

Varianta	Tabele				
1	Locația Adresa Datele				
*	memoriei $A_3A_2A_1A_0$ $D_5D_4D_3D_2D_1$	$D_0$			
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	<del>- 0</del>			
	$M_1$ 0001 110010				
	$M_2 = 0010 = 011001$				
	M <sub>3</sub> 0011 100010				
	M <sub>4</sub> 0100 101101				
	M <sub>5</sub> 0101 111010				
	M <sub>6</sub> 0110 001110				
	M <sub>7</sub> 0111 010001				
	M <sub>8</sub> 1000 101011				
2	Locația Adresa Datele				
	memoriei $A_3A_2A_1A_0$ $D_5D_4D_3D_2D_1$	$D_0$			
	M <sub>0</sub> 0000 001011				
	$M_1 = 0001 = 110010$				
	M <sub>2</sub> 0010 011001				
	$M_3$ 0011 100010				
	M <sub>4</sub> 0100 101101				
	M <sub>5</sub> 0101 111010				
	$egin{array}{ c c c c c c c c c c c c c c c c c c c$	$\dashv$			
	M <sub>8</sub> 1000 101011				
3	101011				
	Locația Adresa Datele				
	memoriei $A_3A_2A_1A_0$ $D_5D_4D_3D_2I$				
	$M_0$ 0000 101001				
	$M_1 = 0001 = 110010$				
	$M_2$ 0010 011000				
	M <sub>3</sub> 0011 101010				
	M <sub>4</sub> 0100 001101				
	$M_5$ 0101 011010				
	M <sub>6</sub> 0110 001110				
	M <sub>7</sub> 0111 010101				
	M <sub>8</sub> 1000 101010				
4					
	Locația Adresa Datele				
	memoriei $A_3A_2A_1A_0$ $D_5D_4D_3D_2D_3$	$D_1D_0$			
	M <sub>0</sub> 0000 111001				
	$\begin{array}{c ccccc} & M_1 & 0001 & 110010 \\ \hline & M_2 & 0010 & 011001 \\ \end{array}$				
	$M_2 = 0010 = 011001$ $M_3 = 0011 = 100010$				
	$M_{4}$ 0100 001101				
	$M_4$ 0100 001101 $M_5$ 0101 111011				
	$M_6 = 0110 = 001110$				
	$M_7$ 0111 010101				
	M <sub>8</sub> 1000 101010				

5				
	Locația	Adresa	Datele	
	memoriei		$D_5D_4D_3D_2D_1D_0$	
	$M_0$	0000	001101	
	$M_1$	0001	110010	
	$M_2$	0010	011001	
	$M_3$	0011	100010	
	$M_4$	0100	000101	
	$M_5$	0101	111010	
	$M_6$	0110	101110	
	$M_7$	0111	010001	
	$M_8$	1000	101010	
6				
	Locația	Adresa	Datele	
	memorie		$D_5D_4D_3D_2D_1D_0$	
	$M_0$	0000	101001	
	$M_1$	0001	110010	
	$M_2$	0010	111001	
	$M_3$	0011	100010	
	$M_4$	0100	001101	
	$M_5$	0101	111010	
	$M_6$	0110	001110	
	$M_7$	0111	010011	
	$M_8$	1000	101010	
7				
7	Locația	Adresa	Datele	
7	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$	
7	memoriei M <sub>0</sub>	$A_3A_2A_1A_0$ $0000$	$\begin{array}{c} D_5 D_4 D_3 D_2 D_1 D_0 \\ \hline 001001 \end{array}$	
7	$\begin{array}{c} \text{memoriei} \\ M_0 \\ M_1 \end{array}$	$\begin{array}{c c} A_3 A_2 A_1 A_0 & 2 \\ \hline 0000 & \\ \hline 0001 & \\ \end{array}$	$ \begin{array}{c} D_5D_4D_3D_2D_1D_0\\ 001001\\ 110010 \end{array} $	
7	$\begin{array}{c c} \text{memoriei} \\ \hline M_0 \\ \hline M_1 \\ \hline M_2 \\ \end{array}$	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 2 0000 0001 0001 0010	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ \hline 110010 \\ \hline 011001 \\ \end{array}$	
7	$\begin{array}{c c} \text{memoriei} \\ \hline M_0 \\ \hline M_1 \\ \hline M_2 \\ \hline M_3 \\ \end{array}$	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ \hline 110010 \\ \hline 011001 \\ \hline 100010 \\ \end{array}$	
7	$\begin{array}{c} \text{memoriei} \\ \hline M_0 \\ \hline M_1 \\ \hline M_2 \\ \hline M_3 \\ \hline M_4 \\ \end{array}$	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ \hline 110010 \\ \hline 011001 \\ \hline 100010 \\ \hline 001101 \\ \end{array}$	
	$\begin{array}{c c} memoriei \\ \hline M_0 \\ \hline M_1 \\ \hline M_2 \\ \hline M_3 \\ \hline M_4 \\ \hline M_5 \\ \end{array}$	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ \hline 110010 \\ \hline 011001 \\ \hline 100010 \\ \hline 001101 \\ \hline 111010 \\ \end{array}$	
7	memoriei  M <sub>0</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub>	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0110	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline 001101 \\ 111010 \\ \hline 001110 \\ \end{array}$	
7	memoriei  M <sub>0</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> M <sub>7</sub>	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0110 0111	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline 001101 \\ 111010 \\ \hline 001110 \\ \hline 010001 \\ \end{array}$	
	memoriei  M <sub>0</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub>	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0110	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline 001101 \\ 111010 \\ \hline 001110 \\ \end{array}$	
8	memoriei           M <sub>0</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> M <sub>7</sub> M <sub>8</sub>	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0110 0111 1000	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline 001101 \\ 111010 \\ \hline 001110 \\ \hline 010001 \\ 100010 \\ \end{array}$	
	memoriei  M <sub>0</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> M <sub>7</sub> M <sub>8</sub>	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0110 0111 1000 Adresa	D <sub>5</sub> D <sub>4</sub> D <sub>3</sub> D <sub>2</sub> D <sub>1</sub> D <sub>0</sub> 001001 110010 011001 100010 001101 111010 001110 010001 100010	
	memoriei  M <sub>0</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> M <sub>7</sub> M <sub>8</sub>	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0110 0111 1000 Adresa A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub>	$\begin{array}{c} D_5D_4D_3D_2D_1D_0\\ \hline 001001\\ \hline 110010\\ \hline 011001\\ \hline 100010\\ \hline 001101\\ \hline 111010\\ \hline 001110\\ \hline 01100\\ \hline 01100\\ \hline 100010\\ \hline \end{array}$	
	$\begin{array}{c c} \text{memoriei} \\ \hline M_0 \\ M_1 \\ M_2 \\ M_3 \\ M_4 \\ M_5 \\ M_6 \\ M_7 \\ M_8 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0111 1000  Adresa A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline 001101 \\ 111010 \\ \hline 001110 \\ \hline 010001 \\ 100010 \\ \\ \hline \end{array}$	
	$\begin{array}{c c} \text{memoriei} \\ \hline M_0 \\ \hline M_1 \\ \hline M_2 \\ \hline M_3 \\ \hline M_4 \\ \hline M_5 \\ \hline M_6 \\ \hline M_7 \\ \hline M_8 \\ \\ \hline \\ Locația \\ memoriei \\ \hline M_0 \\ \hline M_1 \\ \end{array}$	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0110 0111 1000 Adresa A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline 001101 \\ 111010 \\ \hline 001110 \\ 010001 \\ \hline 100010 \\ \\ \hline \\ Datele \\ D_5D_4D_3D_2D_1D_0 \\ \hline 001011 \\ 110010 \\ \\ \end{array}$	
	$\begin{array}{c c} \text{memoriei} \\ \hline M_0 \\ \hline M_1 \\ \hline M_2 \\ \hline M_3 \\ \hline M_4 \\ \hline M_5 \\ \hline M_6 \\ \hline M_7 \\ \hline M_8 \\ \\ \hline \\ Locația \\ memoriei \\ \hline M_0 \\ \hline M_1 \\ \hline M_2 \\ \\ \end{array}$	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0111 1000 Adresa A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline 001101 \\ 111010 \\ \hline 001110 \\ \hline 010001 \\ 100010 \\ \\ \hline \\ Datele \\ D_5D_4D_3D_2D_1D_0 \\ \hline 001011 \\ 110010 \\ \hline \\ 011001 \\ \\ \end{array}$	
	Mo	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0111 1000  Adresa A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0011	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ \hline 110010 \\ \hline 011001 \\ \hline 100010 \\ \hline 001101 \\ \hline 111010 \\ \hline 001101 \\ \hline 111010 \\ \hline 001110 \\ \hline 100010 \\ \\ \hline \\ Datele \\ D_5D_4D_3D_2D_1D_0 \\ \hline 001011 \\ \hline 110010 \\ \hline 011001 \\ \hline 100010 \\ \\ \hline \end{array}$	
	memoriei  M <sub>0</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> M <sub>7</sub> M <sub>8</sub> Locația memoriei  M <sub>0</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub>	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0111 1000  Adresa A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0011 0010	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ \hline 110010 \\ \hline 011001 \\ \hline 100010 \\ \hline 001101 \\ \hline 111010 \\ \hline 001110 \\ \hline 010001 \\ \hline 100010 \\ \hline \\ Datele \\ D_5D_4D_3D_2D_1D_0 \\ \hline 001011 \\ \hline 110010 \\ \hline 011001 \\ \hline 100010 \\ \hline \end{array}$	
	Mo	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0110 0111 1000  Adresa A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline 001101 \\ 111010 \\ \hline 001110 \\ \hline 010001 \\ 100010 \\ \\ \hline \\ Datele \\ D_5D_4D_3D_2D_1D_0 \\ \hline 001011 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline \\ 001101 \\ 110010 \\ \hline \end{array}$	
	Mo	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0111 1000  Adresa A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0011 0010 0011 0110 0110	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ \hline 110010 \\ \hline 011001 \\ \hline 100010 \\ \hline 001101 \\ \hline 111010 \\ \hline 001110 \\ \hline 011001 \\ \hline 100010 \\ \hline \\ Datele \\ D_5D_4D_3D_2D_1D_0 \\ \hline 001011 \\ \hline 110010 \\ \hline 011001 \\ \hline 100010 \\ \hline \\ 001101 \\ \hline 110010 \\ \hline \\ 001110 \\ \hline \end{array}$	
	Mo	A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101 0110 0111 1000  Adresa A <sub>3</sub> A <sub>2</sub> A <sub>1</sub> A <sub>0</sub> 0000 0001 0010 0011 0100 0101	$\begin{array}{c} D_5D_4D_3D_2D_1D_0 \\ \hline 001001 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline 001101 \\ 111010 \\ \hline 001110 \\ \hline 010001 \\ 100010 \\ \\ \hline \\ Datele \\ D_5D_4D_3D_2D_1D_0 \\ \hline 001011 \\ 110010 \\ \hline 011001 \\ 100010 \\ \hline \\ 001101 \\ 110010 \\ \hline \end{array}$	

9				
	Γ	Locația	Adresa	Datele
		memorie		
	-	$M_0$	0000	001001
	-	$M_1$	0000	110110
	-	$\frac{\mathbf{M}_1}{\mathbf{M}_2}$	0010	011001
	-	$\frac{\mathbf{M}_2}{\mathbf{M}_3}$	0010	100010
	-	-	0100	001101
	-	$M_4$	0100	
	-	$M_5$		111010
	-	$M_6$	0110	001010
	-	$M_7$	0111	110001
1.0		$M_8$	1000	101010
10				
		Locația	Adresa	Datele
	m			$D_5D_4D_3D_2D_1D_0$
		$M_0$	0000	001001
		$M_1$	0001	110010
		$M_2$	0010	010001
		$M_3$	0011	100010
		$M_4$	0100	001101
		$M_5$	0101	111010
		$M_6$	0110	001110
		$M_7$	0111	010001
		$M_8$	1000	101011
11				
		Locația	Adresa	Datele
		nemoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$
		$M_0$	0000	001001
		$M_1$	0001	110010
		$M_2$	0010	011001
		$M_3$	0011	101010
		$M_4$	0100	001101
		$M_5$	0101	111010
		$M_6$	0110	101110
		$M_7$	0111	010001
		$M_8$	1000	111010
12		-0		
		Locația	Adresa	Datele
		nemoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$
		$\frac{M_0}{M_0}$	$\frac{A_3A_2A_1A_0}{0000}$	001001
		$\frac{\mathbf{M}_0}{\mathbf{M}_1}$	0000	110110
	<del> </del>	•	0001	011001
	<u> </u>	$\frac{M_2}{M}$	0010	100010
		$M_3$		
	_	$M_4$	0100	001101
	<u> </u>	$M_5$	0101	111010
		$M_6$	0110	011110
		$M_7$	0111	010011
1		$M_8$	1000	101010

13			
	Logatio	A duaga	Dotala
	Locația	Adresa	Datele
	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$
	$M_0$	0000	001001
	$\mathbf{M}_1$	0001	110010
	$M_2$	0010	011001
	$M_3$	0011	100010
	$M_4$	0100	001101
	$M_5$	0101	111010
	$M_6$	0110	001110
	$M_7$	0111	010001
	$M_8$	1000	101110
14			
	Locația	Adresa	Datele
	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$
	$M_0$	0000	101010
	$M_1$	0001	110010
	$M_2$	0010	011001
	$M_3$	0011	101110
	$M_4$	0100	001101
	$M_5$	0101	101010
	$M_6$	0110	001111
	$M_7$	0111	010001
	$M_8$	1000	110010
15	1418	1000	110010
13	Lagatia	A dua a a	Datala
	Locația	Adresa	Datele
	memoriei		$D_5D_4D_3D_2D_1D_0$
	$M_0$	0000	101001
	$M_1$	0001	010010
	$M_2$	0010	011101
	$M_3$	0011	100010
	$M_4$	0100	011001
	$M_5$	0101	111010
	$M_6$	0110	001010
	$M_7$	0111	010101
	$M_8$	1000	001011
16	<b>-</b>		
	Locația		Datele
	memorie	$\dot{a}$ $A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$
	$M_0$	0000	111001
	$M_1$	0001	010010
	$M_2$	0010	111001
	$M_3$	0011	101010
	$M_4$	0100	001001
	$M_5$	0101	111010
	$M_6$	0110	001100
	$M_7$	0111	010001
	$M_8$	1000	101001
	1418	1000	101001

17			
1 /	Locatio	Adresa	Datele
	Locația memoriei	Auresa $A_3A_2A_1A_0$	
		$A_3A_2A_1A_0$ 0000	$\frac{D_5D_4D_3D_2D_1D_0}{101001}$
	$\frac{M_0}{M_1}$	0000	010010
	$M_2$	0010	011101
	$M_3$	0011	100010
	$M_4$	0100	011101
	$M_5$	0101	111110
	$M_6$	0110	001010
	$M_7$	0111	010001
	$M_8$	1000	011010
18			
	Locația	Adresa	Datele
	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$
	$\mathbf{M}_0$	0000	111001
	$M_1$	0001	100010
	$M_2$	0010	111001
	$M_3$	0011	100010
	$M_4$	0100	011001
	$M_5$	0101	111010
	$M_6$	0110	001100
	$M_7$	0111	010011
	$M_8$	1000	101011
19			
	Locația	Adresa	Datele
	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$
	$M_0$	0000	101001
	$M_1$	0001	110010
	$M_2$	0010	010101
	$M_3$	0011	100010
	$M_4$	0100	011101
	$M_5$	0101	110010
	$M_6$	0110	001010
	$M_7$	0111	110001
	$M_8$	1000	001010
20	*		
	Locația	Adresa	Datele
	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$
	M <sub>0</sub>	0000	111001
	$M_1$	0001	110010
	$M_2$	0010	111001
1 I		0010	
		0011	100010
	$M_3$	0011	100010
	M <sub>3</sub> M <sub>4</sub>	0100	001001
	M <sub>3</sub> M <sub>4</sub> M <sub>5</sub>	0100 0101	001001 110010
	$M_3$ $M_4$ $M_5$ $M_6$	0100 0101 0110	001001 110010 101100
	M <sub>3</sub> M <sub>4</sub> M <sub>5</sub>	0100 0101	001001 110010

mem   N	riei A <sub>3</sub> A <sub>2</sub> A 0000 000 0010 0010	$\begin{array}{c c} A_1A_0 & D_5 \\ \hline 0 & \end{array}$	
memori   M <sub>0</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>6</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>1</sub>   M <sub>1</sub>   M <sub>1</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>1</sub>	riei A <sub>3</sub> A <sub>2</sub> A 0000 000 0010 0010	$\begin{array}{c c} A_1A_0 & D_5 \\ \hline 0 & \end{array}$	Datele
M <sub>0</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>1</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>1</sub>   M <sub>1</sub>   M <sub>1</sub>   M <sub>1</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>1</sub>	0000 0000 0010 0011	0	$_{5}D_{4}D_{3}D_{2}D_{1}D_{0}$
M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>6</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>1</sub>	000 001 001 010		100001
22    Local memori   Mo	0010 0011 0100	1	110010
22    M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>1</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>9</sub>	001		011101
22    Cocatimemori   May	0100		100010
22    Locatimemori   Mo			011101
M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>	010		111010
22    Locate memori			001010
M <sub>8</sub>   Locate memori   M <sub>0</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>			010011
Locatimemori   Mode			001011
memori   M <sub>0</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>1</sub>   M <sub>9</sub>   M <sub>1</sub>   M <sub>9</sub>   M <sub>1</sub>	•	·	
memori   M <sub>0</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>1</sub>   M <sub>9</sub>   M <sub>1</sub>   M <sub>9</sub>   M <sub>1</sub>	ația Adre	esa	Datele
M <sub>1</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>1</sub>   M <sub>9</sub>   M <sub>1</sub>	,		$O_5D_4D_3D_2D_1D_0$
M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>1</sub>   M <sub>9</sub>   M <sub>1</sub>			111001
M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>8</sub>   M <sub>9</sub>   M <sub>1</sub>   M <sub>9</sub>   M <sub>1</sub>	1 000	01	110010
M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>     23	2 001	10	111011
M <sub>5</sub>   M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>   Loc mem   M <sub>0</sub>   M <sub>1</sub>   M <sub>1</sub>   M <sub>2</sub>   M <sub>2</sub>   M <sub>2</sub>   M <sub>3</sub>   M <sub>4</sub>   M <sub>5</sub>   M <sub>6</sub>   M <sub>1</sub>	3 001	11	100010
M <sub>6</sub>   M <sub>7</sub>   M <sub>8</sub>     M <sub>8</sub>   Loc mem   M			001001
M <sub>7</sub>   M <sub>8</sub>     23			111010
M <sub>8</sub>   Loc mem   M   M   M   M   M   M   M   M   M			011100
Loc mem   M   M   M   M   M   M   M   M   M	·		010001
mem   M   M   M   M   M   M   M   M   M			101111
M   M   M   M   M   M   M   M   M   M	,	dresa	Datele
M   M   M   M   M   M   M   M   M   M			$D_5D_4D_3D_2D_1D_0$
M   M   M   M   M   M   M   M   M   M		000	001011
M   M   M   M   M   M   M   M   M   M	•	001	110010
M   M   M   M   M   M   M   M   M   M	VIa I O	010	011001
M   M   M   M   M   M   M   M   M   M		011 1	100010
Mag	$M_3$ 00		101101
Mag	$M_3$ 00 $M_4$ 0	100	101101
$\begin{array}{c c} & & & M \\ \hline 24 & & & \\ & & & \\ & & & \\ & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ & & & \\ \hline & & & \\ \hline & & & \\ & & & \\ \hline & & \\ \hline & & \\ \hline & & & \\ \hline \\ \hline$	$     \begin{array}{cccc}         & M_3 & 00 \\         & M_4 & 00 \\         & M_5 & 0     \end{array} $	100 101	111010
Locații memori $M_0$ $M_1$	$ \begin{array}{cccc} M_3 & 00 \\ M_4 & 0 \\ M_5 & 0 \\ M_6 & 0 \end{array} $	100 101 110	111010 001110
$\begin{array}{c} \text{Locații} \\ \text{memori} \\ \hline M_0 \\ \hline M_1 \end{array}$	$\begin{array}{cccc} M_3 & 00 \\ M_4 & 0 \\ M_5 & 0 \\ M_6 & 0 \\ M_7 & 0 \\ \end{array}$	100 101 110 111	111010 001110 010001
$egin{array}{c} {\sf memori} \ {\sf M}_0 \ {\sf M}_1 \ \end{array}$	$\begin{array}{cccc} M_3 & & 00 \\ M_4 & & 0 \\ M_5 & & 0 \\ M_6 & & 0 \\ M_7 & & 0 \\ \end{array}$	100 101 110	111010 001110
$\begin{array}{c c} M_0 \\ \hline M_1 \end{array}$	$\begin{array}{c cccc} M_3 & 00 \\ M_4 & 0 \\ M_5 & 0 \\ M_6 & 0 \\ M_7 & 0 \\ M_8 & 10 \\ \end{array}$	100 101 110 111 000	111010 001110 010001 101011
$M_1$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	100 101 110 111 000	111010 001110 010001 101011
	$ \begin{array}{c cccc} M_3 & 00 \\ M_4 & 0 \\ M_5 & 0 \\ M_6 & 0 \\ M_7 & 0 \\ M_8 & 10 \\ \end{array} $ ia Adres	100 101 110 111 000 sa <sub>1</sub> A <sub>0</sub> D <sub>5</sub>	111010 001110 010001 101011 Datele D <sub>4</sub> D <sub>3</sub> D <sub>2</sub> D <sub>1</sub> D <sub>0</sub>
	$ \begin{array}{c cccc} M_3 & 00 \\ M_4 & 0 \\ M_5 & 0 \\ M_6 & 0 \\ M_7 & 0 \\ M_8 & 10 \end{array} $ ia Adres	100 101 110 111 000 sa <sub>1</sub> A <sub>0</sub> D <sub>5</sub>	$\begin{array}{c} 111010 \\ 001110 \\ 010001 \\ \hline 101011 \\ \\ \\ \\ Datele \\ D_4D_3D_2D_1D_0 \\ \hline 101001 \\ \\ \end{array}$
$M_3$	$\begin{array}{c cccc} M_3 & 00 \\ M_4 & 0 \\ M_5 & 0 \\ M_6 & 0 \\ M_7 & 0 \\ M_8 & 10 \\ & & $	100 101 110 111 000 sa <sub>1</sub> A <sub>0</sub> D <sub>5</sub>	111010 001110 010001 101011 Datele D <sub>4</sub> D <sub>3</sub> D <sub>2</sub> D <sub>1</sub> D <sub>0</sub> 101001 110010
	M <sub>3</sub> 00 M <sub>4</sub> 0 M <sub>5</sub> 0 M <sub>6</sub> 0 M <sub>7</sub> 0 M <sub>8</sub> 10 ia Adres iei A <sub>3</sub> A <sub>2</sub> A 0000 0001	100 101 110 111 000 sa <sub>1</sub> A <sub>0</sub> D <sub>5</sub> 0	111010 001110 010001 101011 Datele D <sub>4</sub> D <sub>3</sub> D <sub>2</sub> D <sub>1</sub> D <sub>0</sub> 101001 110010 011001
	M <sub>3</sub> 00 M <sub>4</sub> 0 M <sub>5</sub> 0 M <sub>6</sub> 0 M <sub>7</sub> 0 M <sub>8</sub> 10  ia Adres riei A <sub>3</sub> A <sub>2</sub> A 0000 0001 0010	100 101 110 111 000 sa <sub>1</sub> A <sub>0</sub> D <sub>5</sub> 0 1	111010 001110 010001 101011 Datele D <sub>4</sub> D <sub>3</sub> D <sub>2</sub> D <sub>1</sub> D <sub>0</sub> 101001 110010 011001 100010
	M <sub>3</sub> 00 M <sub>4</sub> 0 M <sub>5</sub> 0 M <sub>6</sub> 0 M <sub>7</sub> 0 M <sub>8</sub> 10 ia Adres iei A <sub>3</sub> A <sub>2</sub> A 0000 0001	100 101 110 111 000 sa 11 000 11 000	111010 001110 010001 101011 Datele D <sub>4</sub> D <sub>3</sub> D <sub>2</sub> D <sub>1</sub> D <sub>0</sub> 101001 110010 011001 100010 001001
$M_7$	M <sub>3</sub> 00 M <sub>4</sub> 0 M <sub>5</sub> 0 M <sub>6</sub> 0 M <sub>7</sub> 0 M <sub>8</sub> 10  ia Adres iei A <sub>3</sub> A <sub>2</sub> A 0000 0001 0010 0010	100 101 110 111 000 sa <sub>1</sub> A <sub>0</sub> D <sub>5</sub> 0 1 0 1	111010 001110 010001 101011 Datele D <sub>4</sub> D <sub>3</sub> D <sub>2</sub> D <sub>1</sub> D <sub>0</sub> 101001 110010 011001 100010
$M_8$	M <sub>3</sub> 00 M <sub>4</sub> 0 M <sub>5</sub> 0 M <sub>6</sub> 0 M <sub>7</sub> 0 M <sub>8</sub> 10  ia Adres iei A <sub>3</sub> A <sub>2</sub> A 0000 0001 0010 0110	100   101   110   111   110   111   110   111   110	111010 001110 010001 101011 Datele D <sub>4</sub> D <sub>3</sub> D <sub>2</sub> D <sub>1</sub> D <sub>0</sub> 101001 110010 011001 100010 001001 111010
$\begin{array}{c c} M_4 \\ M_5 \\ M_6 \end{array}$	M <sub>3</sub> 00 M <sub>4</sub> 0 M <sub>5</sub> 0 M <sub>6</sub> 0 M <sub>7</sub> 0 M <sub>8</sub> 10 ia Adres iei A <sub>3</sub> A <sub>2</sub> A 0000 0001	100 101 110 111 000 sa <sub>1</sub> A <sub>0</sub> D <sub>5</sub> 0	111010 001110 010001 101011 Datele D <sub>4</sub> D <sub>3</sub> D <sub>2</sub> D <sub>1</sub> D <sub>0</sub> 101001 110010 011001

25				
	Locația	Adresa	Datele	
	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$	
	$M_0$	0000	001111	
	$M_1$	0001	110110	
	$\frac{\mathbf{M}_1}{\mathbf{M}_2}$	0010	011001	
	$\frac{\mathbf{M}_2}{\mathbf{M}_3}$	0010	100010	
	$\frac{N_{13}}{M_4}$	0100	001001	
		0100	111011	
	$\frac{M_5}{M}$		001110	
	$M_6$	0110		
	$M_7$	0111	010001	
	$M_8$	1000	001010	
26		•		_
	Locația	Adresa	Datele	
	memoriei			
	$\mathbf{M}_0$	0000	011001	1
	$\mathbf{M}_1$	0001	110010	]
	$M_2$	0010	011001	
	$M_3$	0011	111010	
	$M_4$	0100	001101	
	$\mathbf{M}_{5}$	0101	111000	
	$M_6$	0110	001010	
	$M_7$	0111	010001	
	$M_8$	1000	101111	
27				
	Locația	Adresa	Datele	
	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$	
	$M_0$	0000	101001	
	$M_1$	0001	110110	
	$M_2$	0010	011001	
	$M_3$	0011	100110	
	$M_4$	0100	001101	
	M <sub>5</sub>	0101	111010	
	$M_6$	0110	001010	
	$M_7$	0111	010001	
	$M_8$	1000	101110	
28	0	~~~		
	Locația	Adresa	Datele	
	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$	
	$\mathbf{M}_0$	$\frac{A_3A_2A_1A_0}{0000}$	001111	
	$\mathbf{M}_{1}$	0000	110010	
		0010	011011	
	$M_2$	0010	000010	
	$M_3$			
	$M_4$	0100	001101	
	$M_5$	0101	101010	
	$M_6$	0110	001110	
	$egin{array}{c} \mathbf{M}_7 \ \mathbf{M}_8 \end{array}$	0111 1000	010001 101011	
l l			1/11/11	

29			
	Locația	Adresa	Datele
	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$
	$M_0$	0000	001001
	$M_1$	0001	110110
	$M_2$	0010	011001
	$M_3$	0011	000110
	$M_4$	0100	100101
	$M_5$	0101	111011
	$M_6$	0110	001011
	$M_7$	0111	010001
	$M_8$	1000	111010
30			
	Locația	Adresa	Datele
	memoriei	$A_3A_2A_1A_0$	$D_5D_4D_3D_2D_1D_0$
	$M_0$	0000	101191
	$\mathbf{M}_1$	0001	101010
	$M_2$	0010	010010
	$M_3$	0011	000010
	$M_4$	0100	101101
	$M_5$	0101	101010
	$M_6$	0110	011110
	$M_7$	0111	110101
	$M_8$	1000	101010