
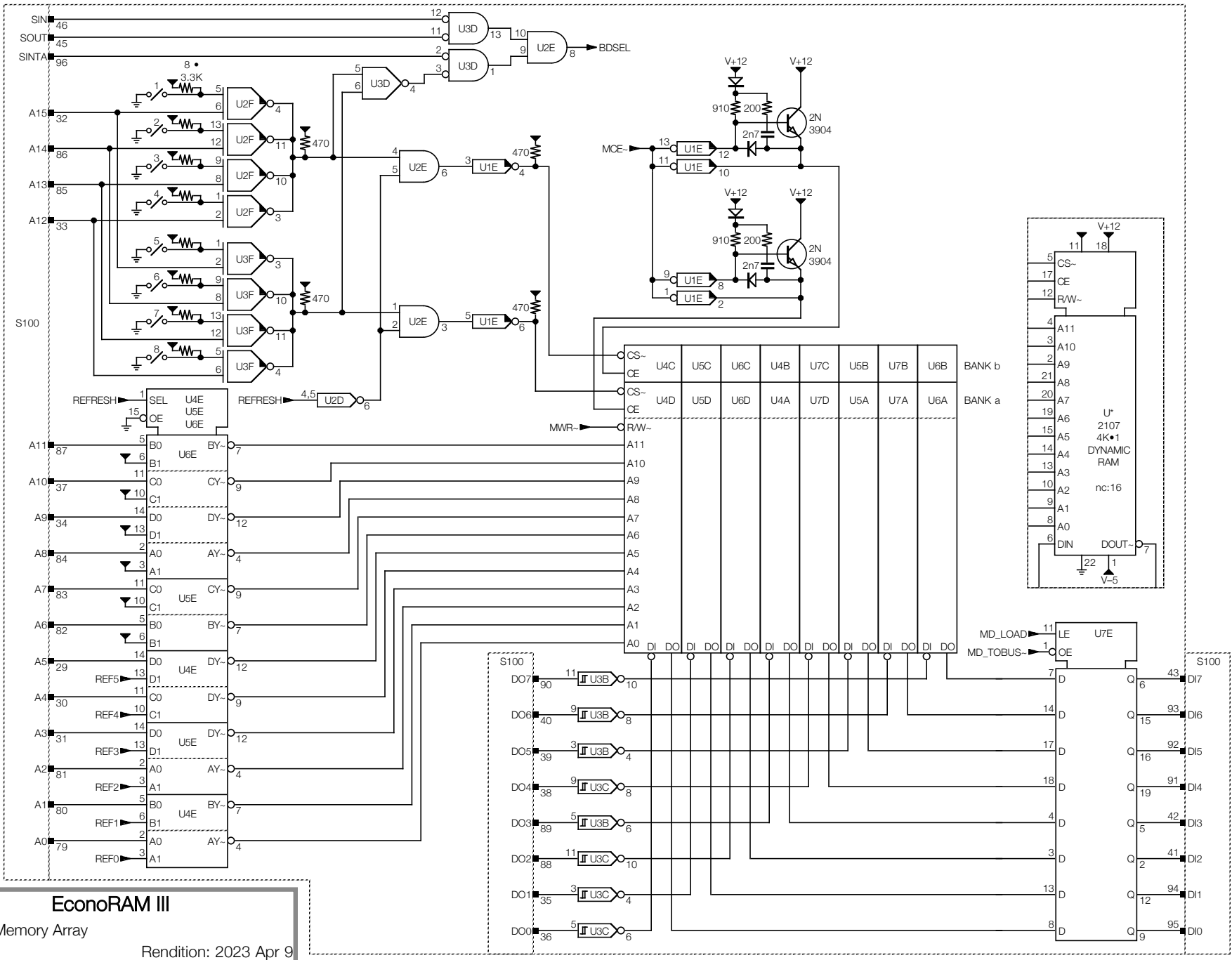


**EconoRAM III
(Thinker Toys Synchrofresh VIII)
S100 8K Dynamic RAM
Schematic**

NOTES

- The symbol  represents a connector pin. The solid black end is the male side, the white-filled end is the female side.
Connector pins are identified by a label of the form:
N <connector> . <pin>
- A small black marker on the upper half of a gate symbol indicates an open-collector output.
- Based on observation of board.
- 2022 Nov: This drawing / bhilpert.

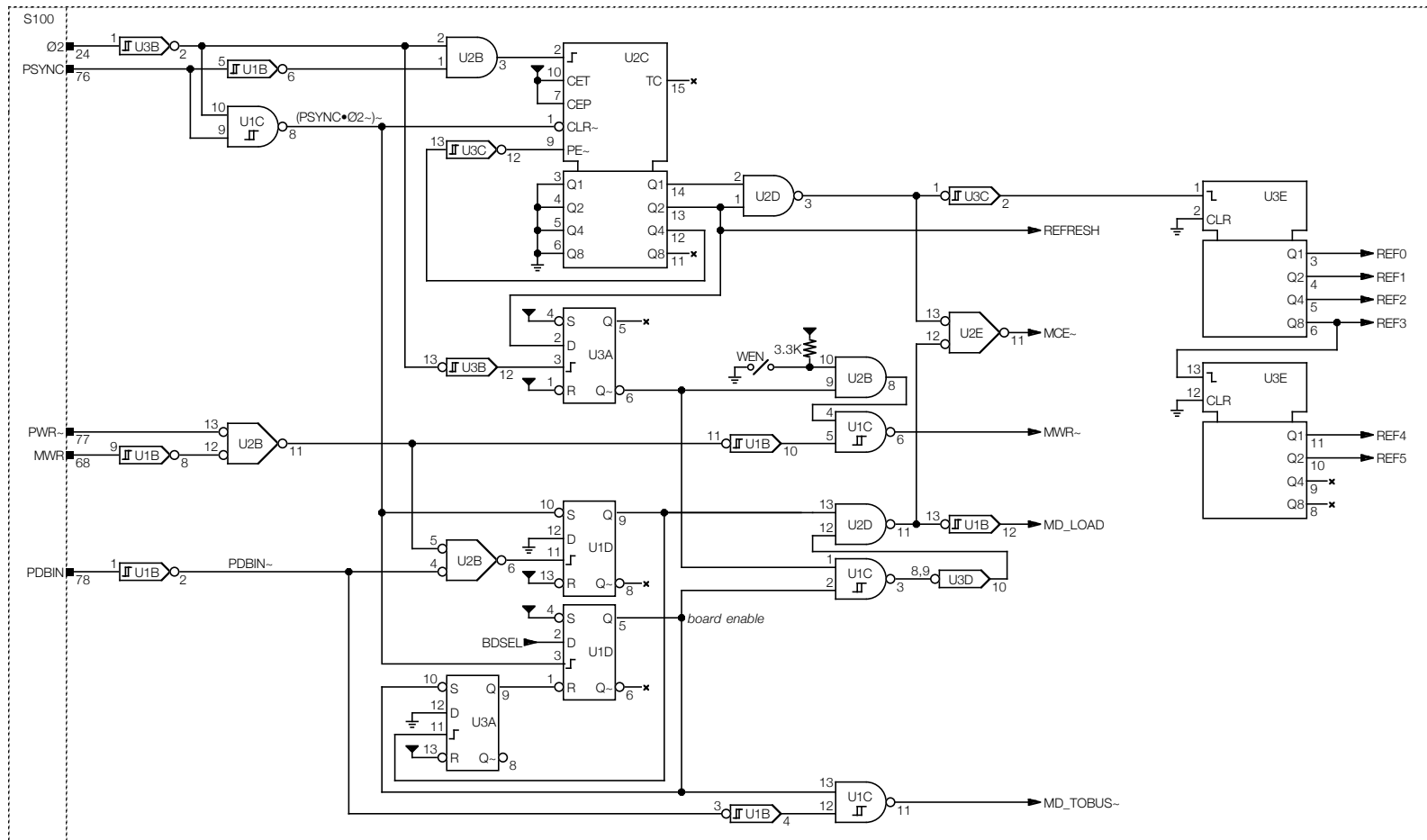


EconoRAM III

Section: Memory Array

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Rendition: 2023 Apr 9



EconoRAM III

Section: Refresh & Control

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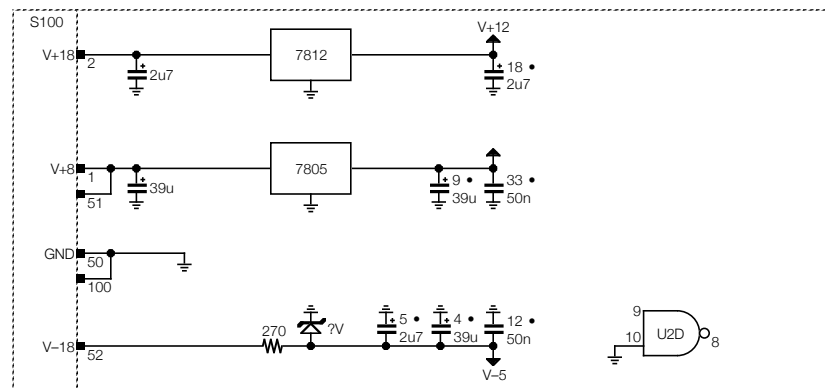
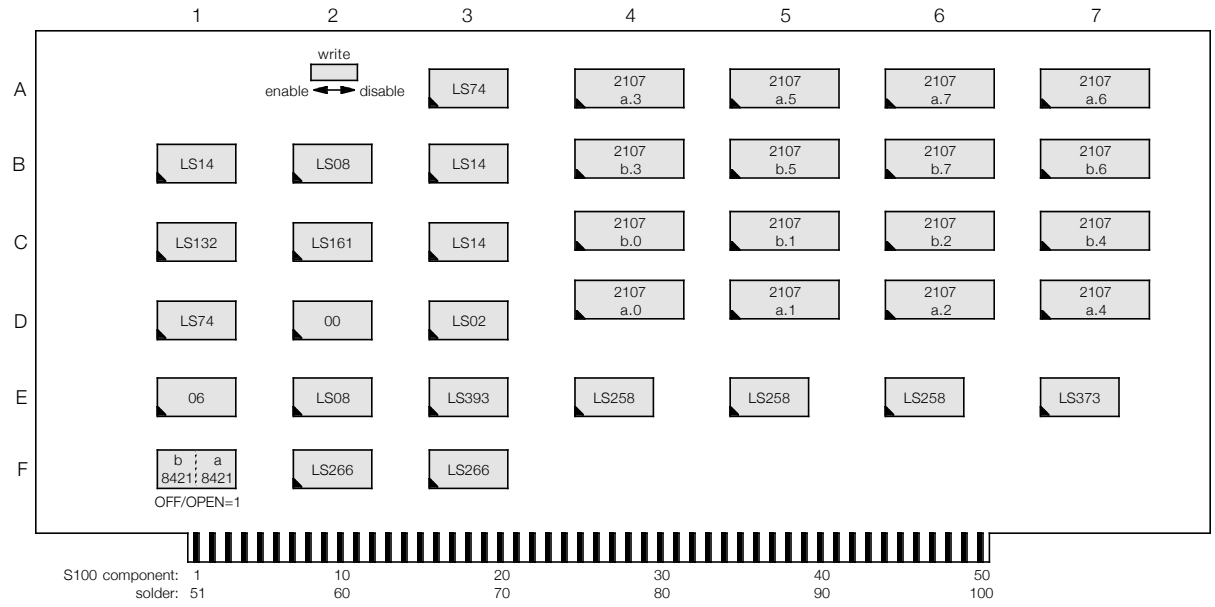
Rendition: 2023 Apr 9

Ux	Type	a	b	c	d	e	f
4ABCD	2107	√					
5ABCD	2107	√					
6ABCD	2107	√					
7ABCD	2107	√					
1B	74LS14	√	√	√	√	√	√
1C	74LS132	√	√	√	√		
1D	74LS74	√	√				
1E	7406	√	√	√	√	√	√
2B	74LS08	√	√	√	√		
2C	74LS161	√					
2D	7400	√	√	√	u		
2E	74LS08	√	√	√	√		
2F	74LS266	√	√	√	√		
3A	74LS74	√	√				
3B	74LS14	√	√	√	√	√	√
3C	74LS14	√	√	√	√	√	√
3D	74LS02	√	√	√	√		
3E	74LS393	√	√				
3F	74LS266	√	√	√	√		
4E	74LS258	√	√	√	√		
5E	74LS258	√	√	√	√		
6E	74LS258	√	√	√	√		
7E	74LS373	√					

Total ICs: 35

Type	Qty	Pins	V+5	GND
2107	16	22	*	*
7400	1	14	14	7
74LS02	1	14	14	7
7406	1	14	14	7
74LS08	2	14	14	7
74LS14	3	14	14	7
74LS74	2	14	14	7
74LS132	1	14	14	7
74LS161	1	16	16	8
74LS258	3	16	16	8
74LS266	2	14	14	7
74LS373	1	20	20	10
74LS393	1	14	14	7

Total: 35

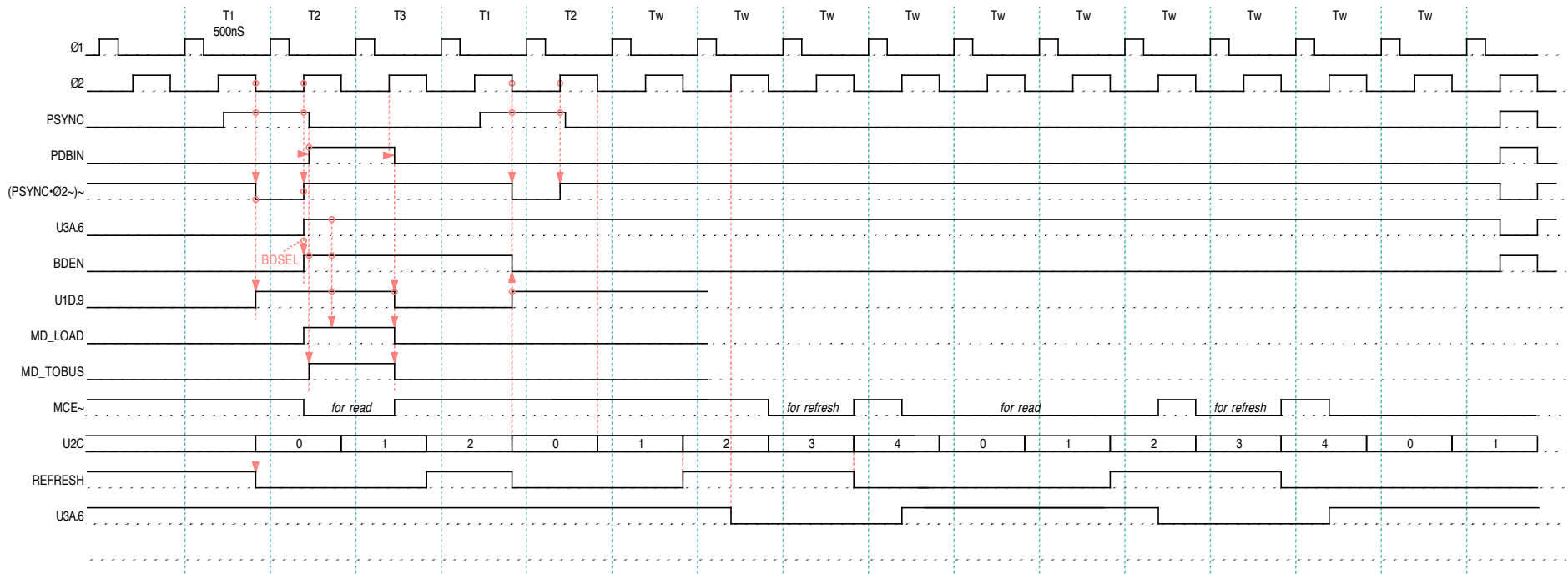
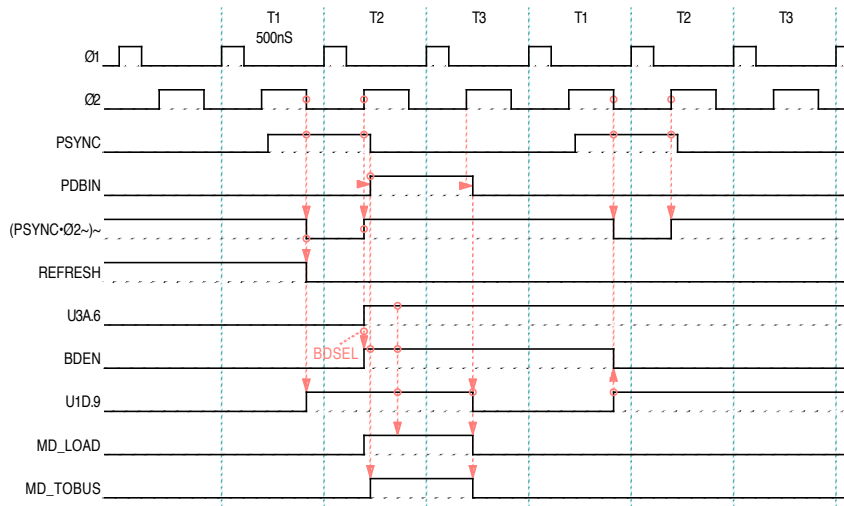


EconoRAM III

Section: Layout & IC Types

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EconoRAM III