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Title:

CPU821/CPU822 To CPU823/CPU824 Update
Technical Manual.

Keywords:

RC8006-MP, CPU823, CPU824

Abstract:

This manual is a supplement to:
CPU820 Technical Manual
RCSL No.: 30-M282.

(24 printed pages)

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1. INTRODUCTION

This manual is a supplement to:

CPU820 Technical Manual

RCSL No: 30-M282

It describes the differences between CPU821/CPU822 and the corresponding upgraded versions: CPU823/CPU824.

The CPU821 and the CPU822 CPU boards have been upgraded with the following features:

New microprogram, which supports multiprocessor systems.

A bus lock feature, which allows a bus master to perform indivisible bus operations, e.g. a test-and-set operation.

The baud rate generator for the Technicians Console Interface has been replaced with a new design because the old one is no longer in production.

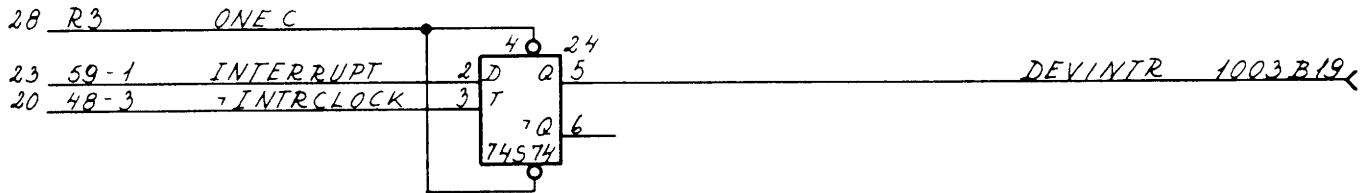
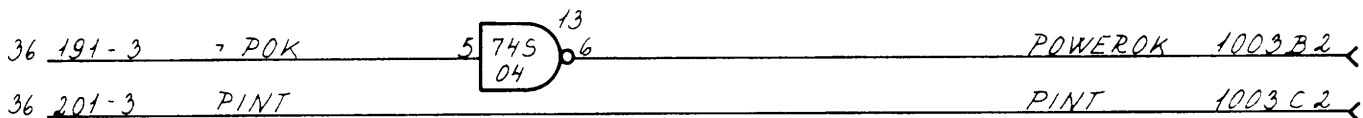
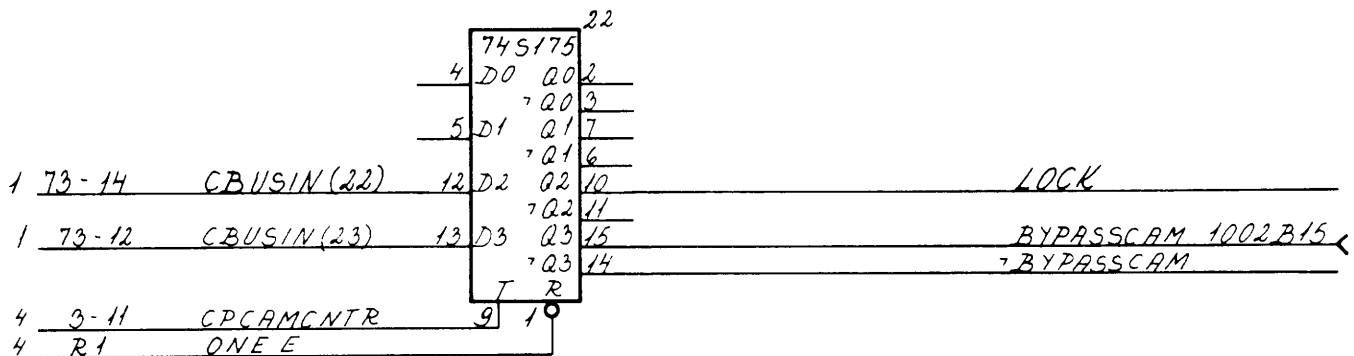
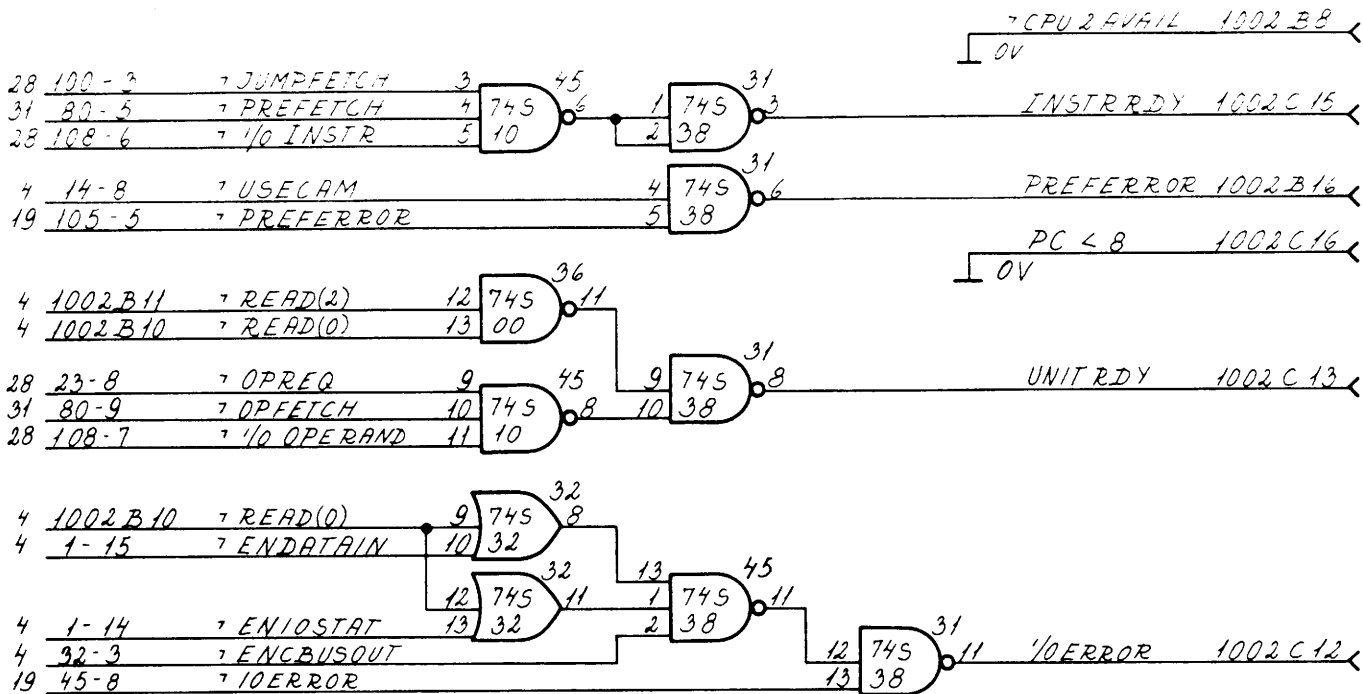
The numbering of the chapters in this manual comply with the numbering of the corresponding chapters in the CPU820 Technical Manual. Only chapters, which has been modified are included.

4. LOGIC DIAGRAMS

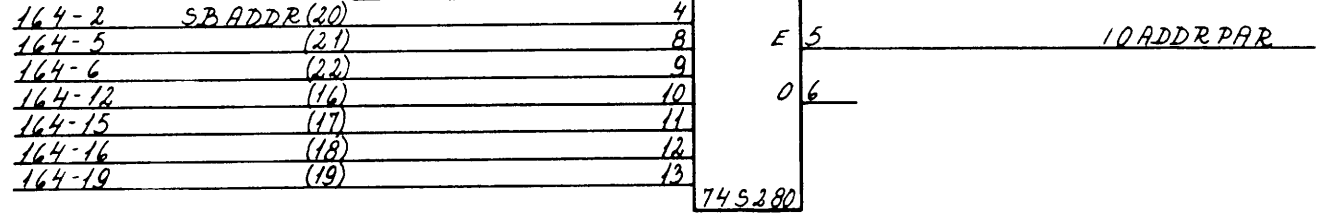
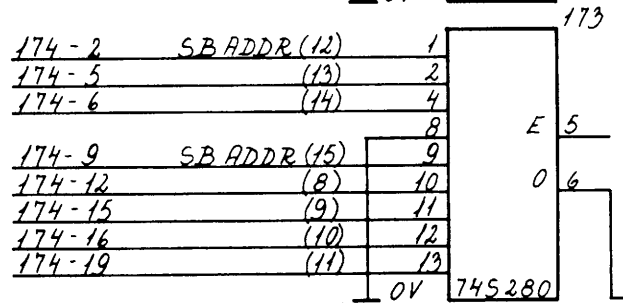
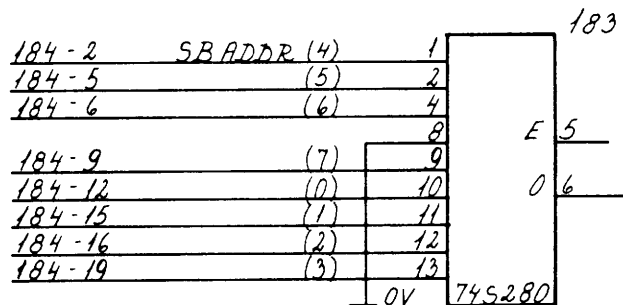
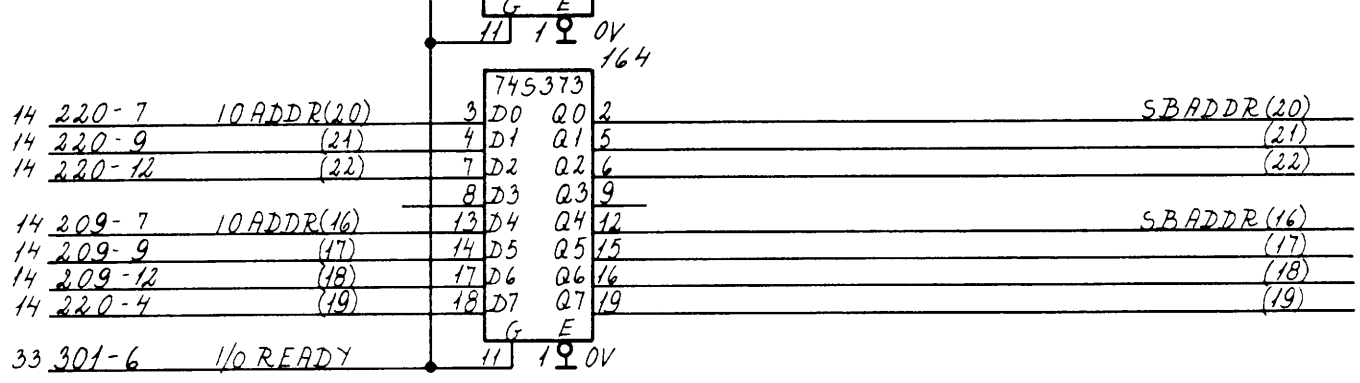
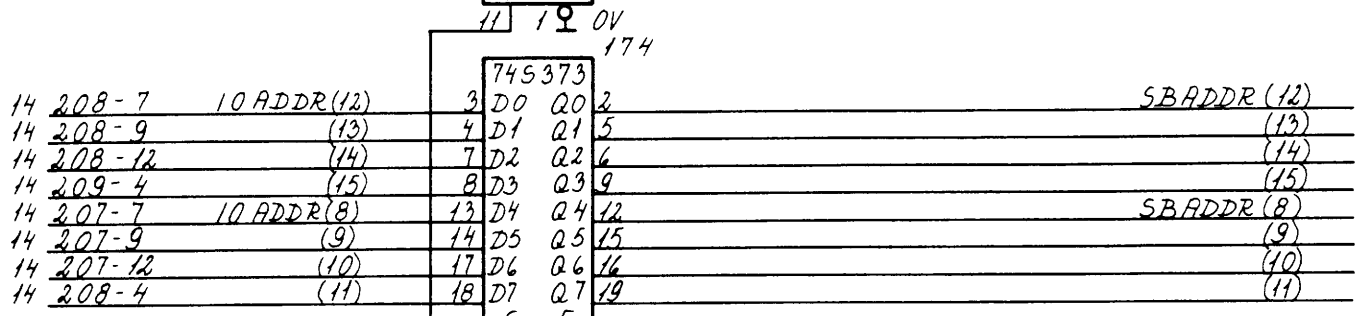
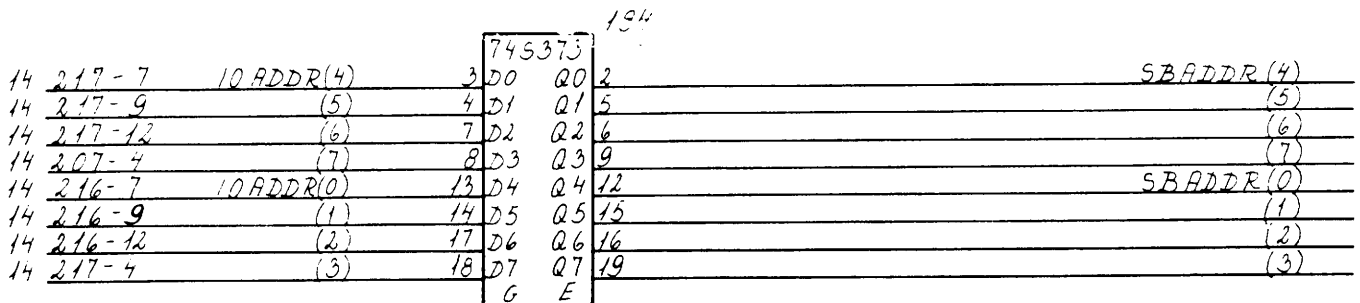
4.2 CPU824 Logic Diagrams

The CPU824 logic diagrams are identical to the CPU822 logic diagrams except for the following diagram pages.

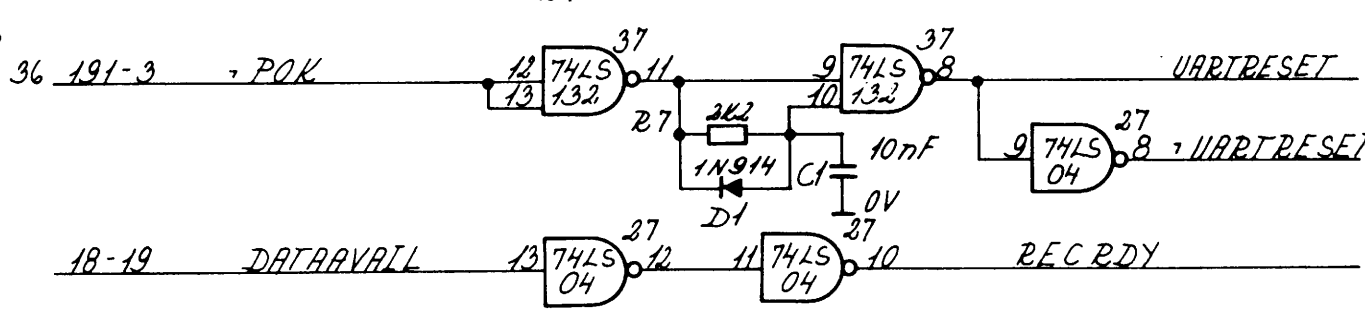
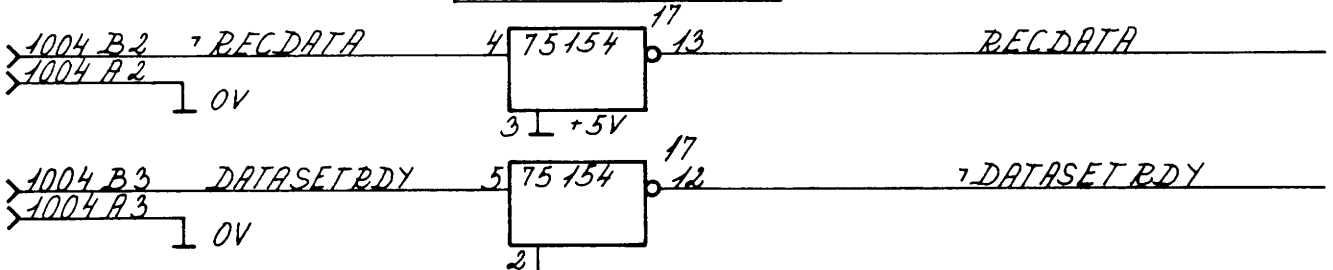
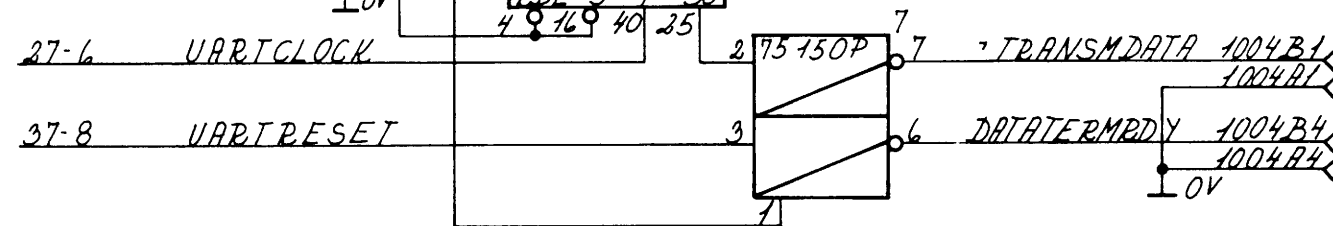
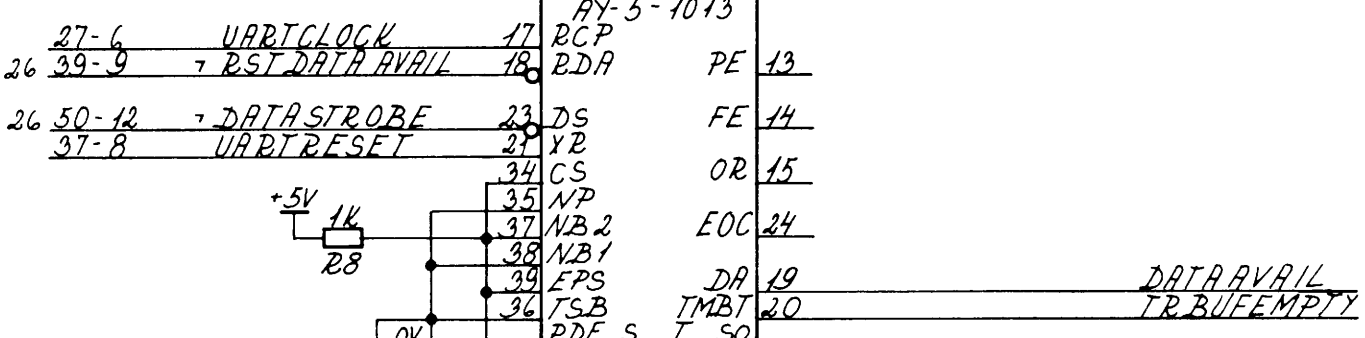
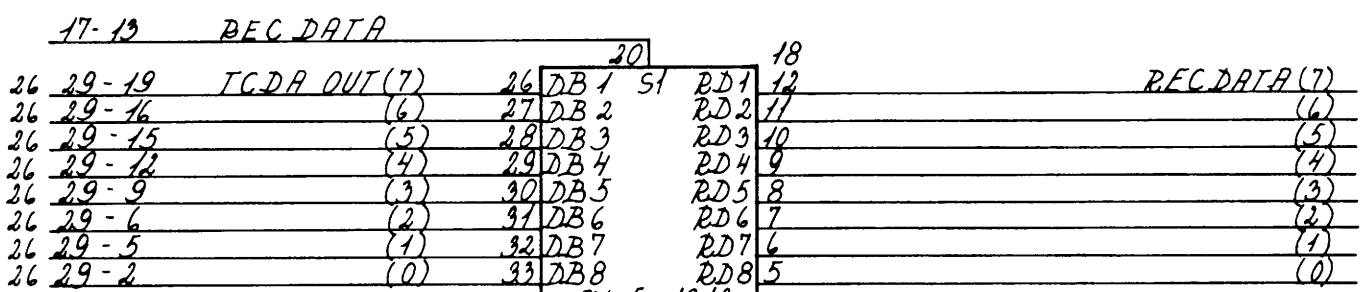
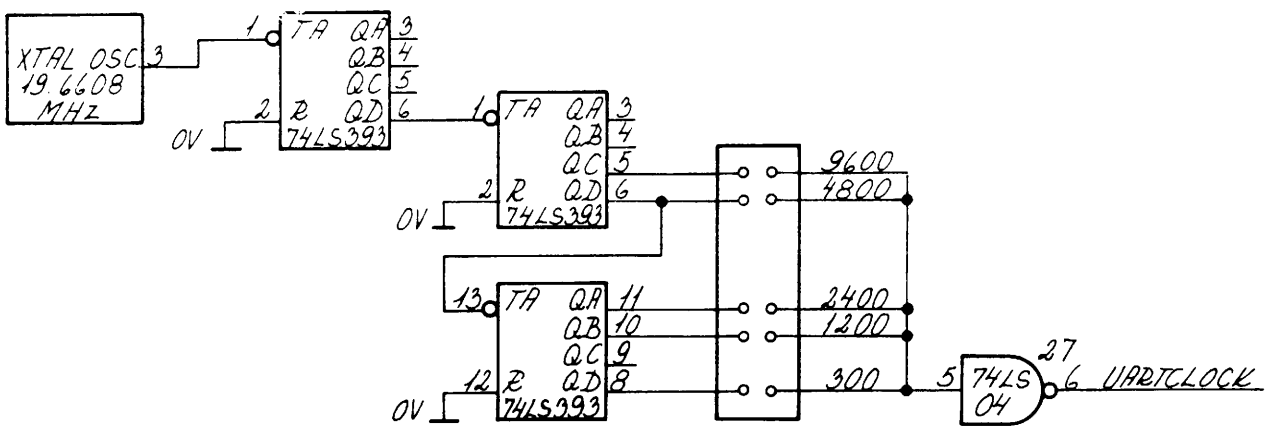
<u>PAGE</u>	<u>TEXT</u>
5	CONTROL SIGNALS FROM CPU824
15	SYSTEM BUS ADDRESS REGISTER & ADDRESS PARITY GENERATOR
27	TECHNICIANS CONSOLE INTERFACE
28	CACHE MEMORY & I/O CONTROL
31	CACHE MEMORY & I/O CONTROL
33	BUS MASTER SELECTION LOGIC
36	TRANSCEIVERS FOR SYSTEM BUS CONTROL SIGNALS



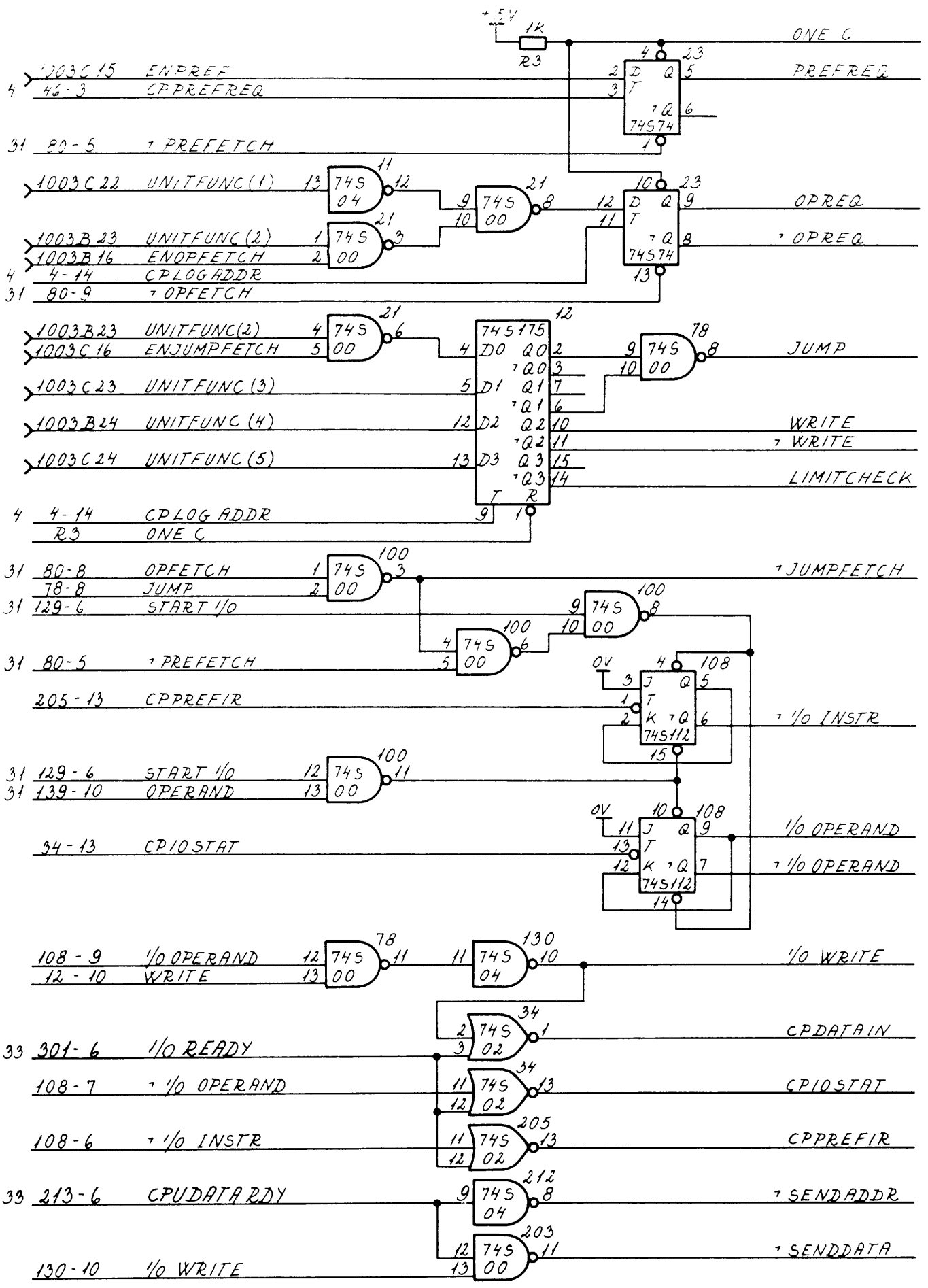
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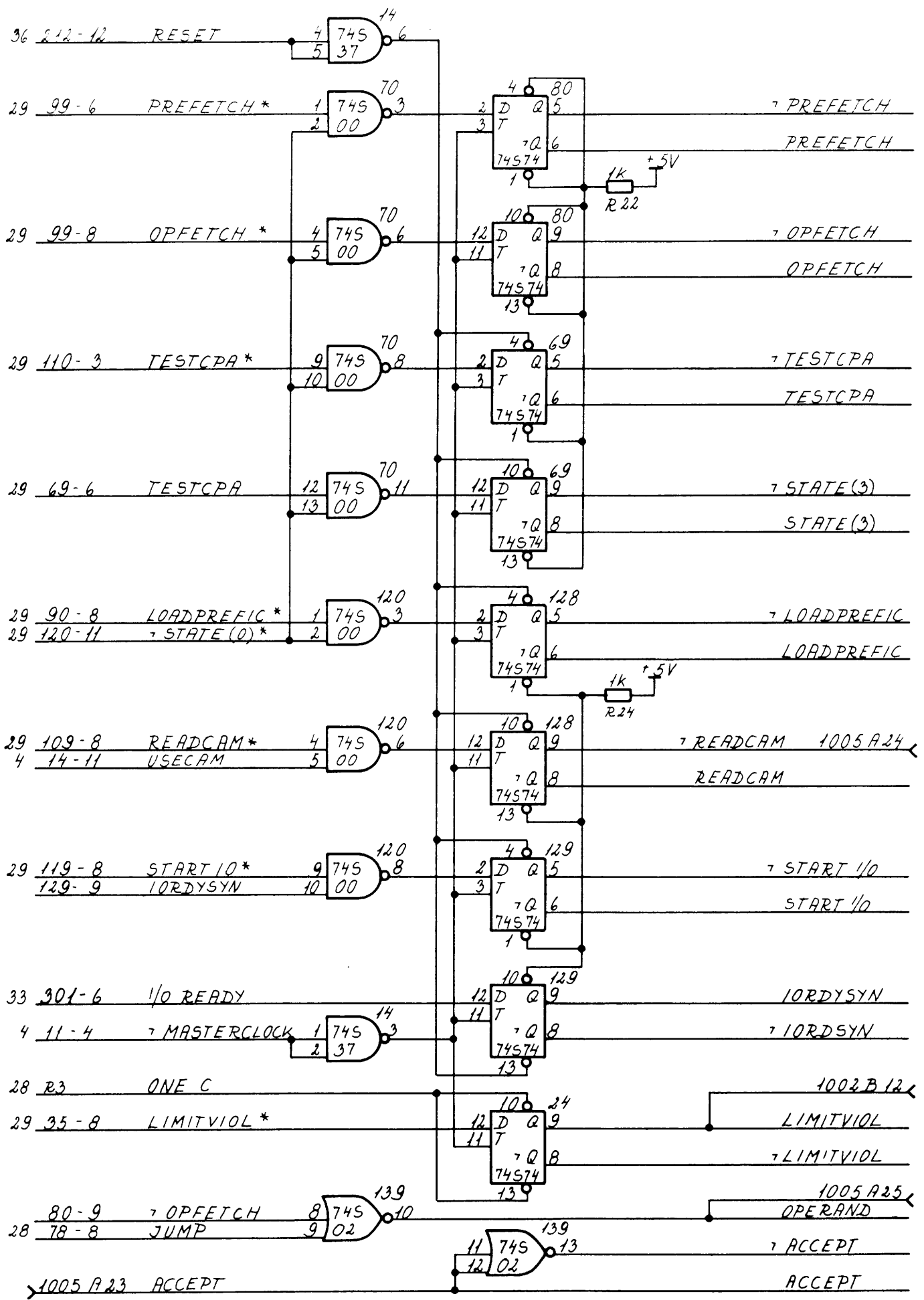
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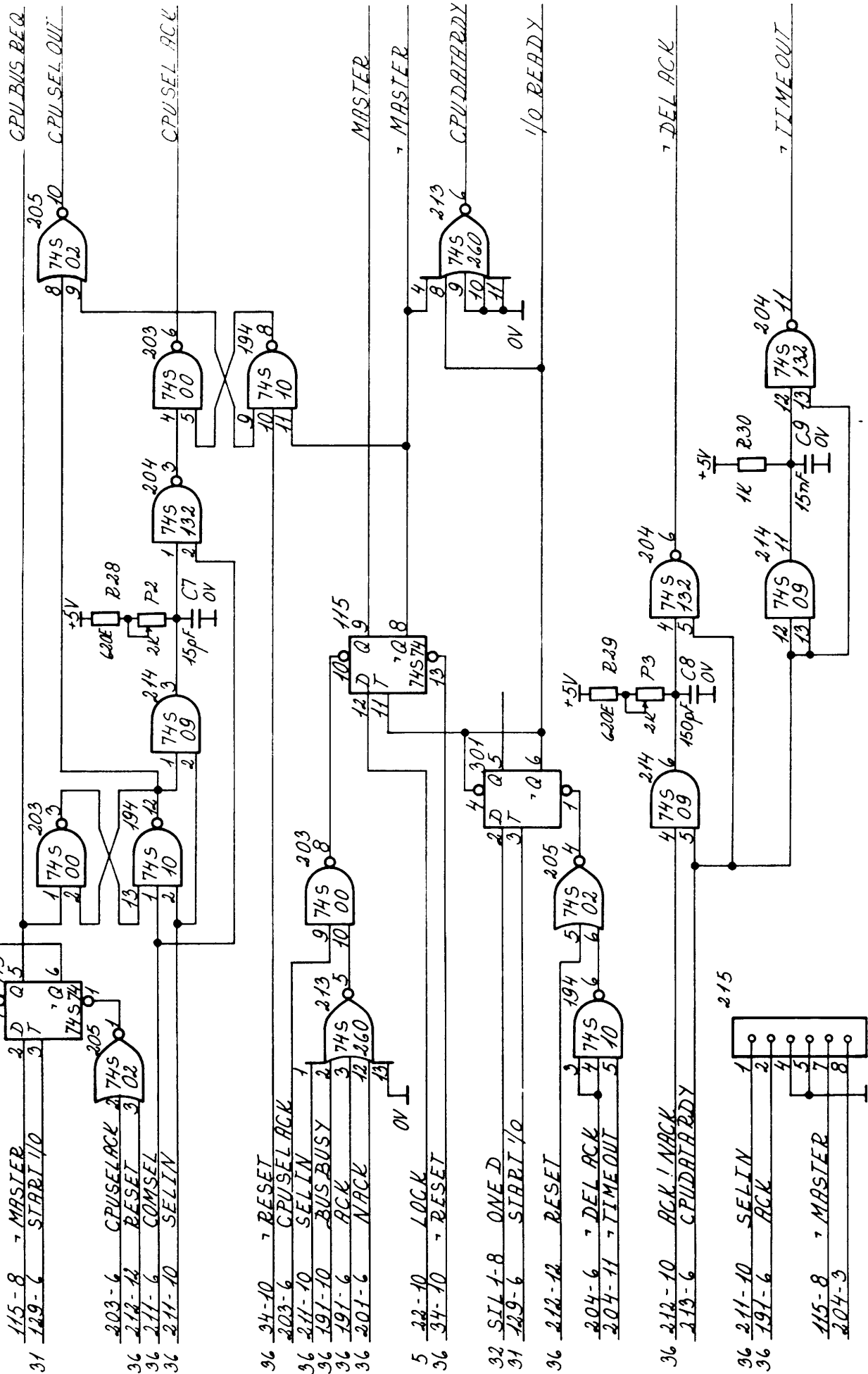
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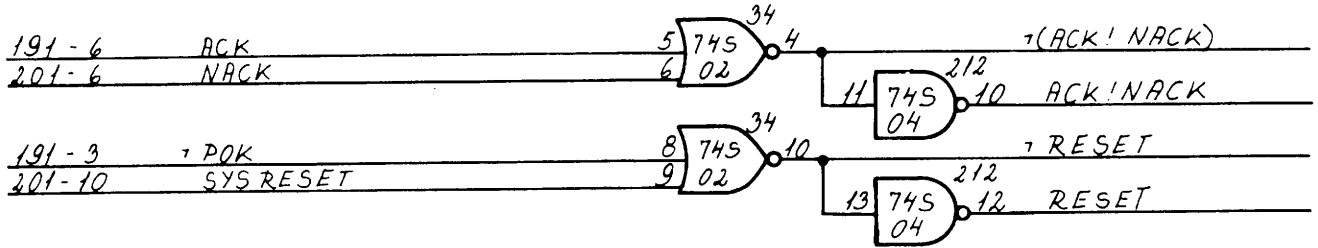
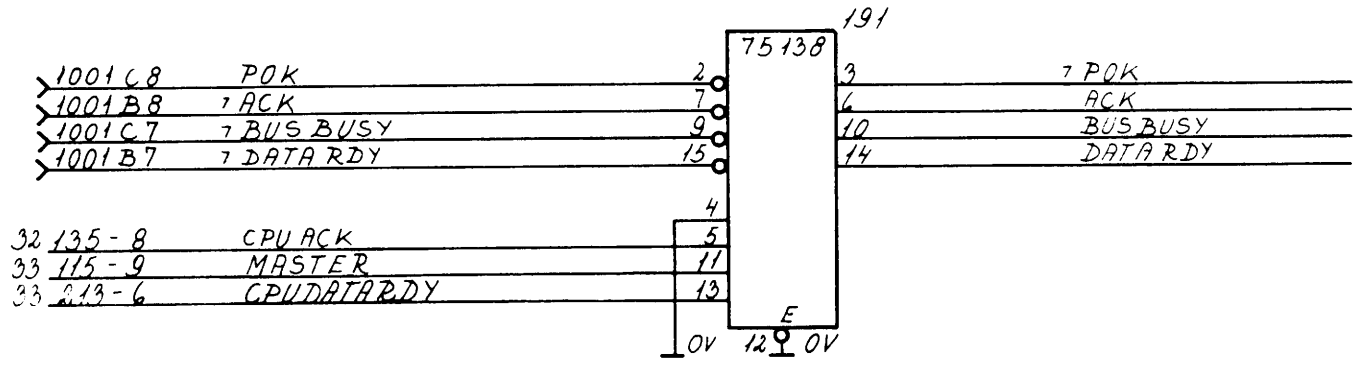
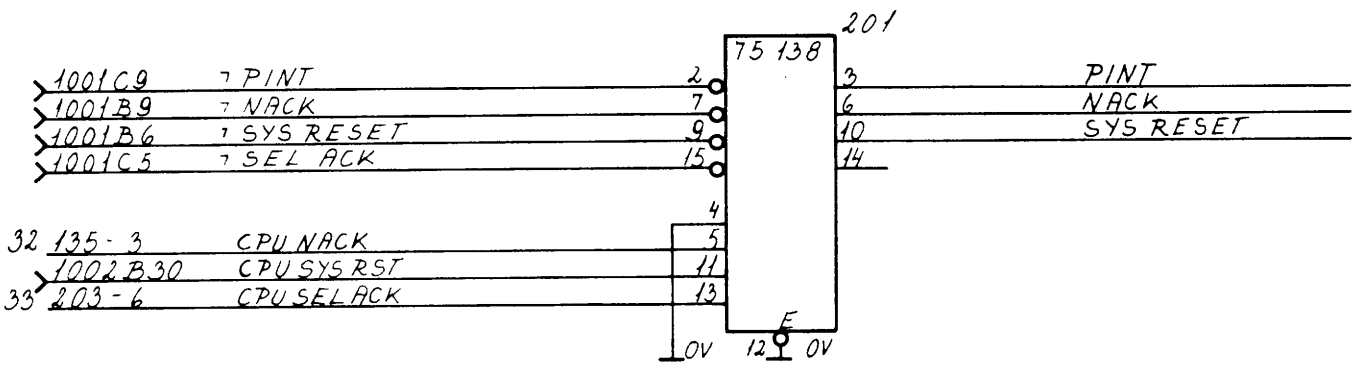
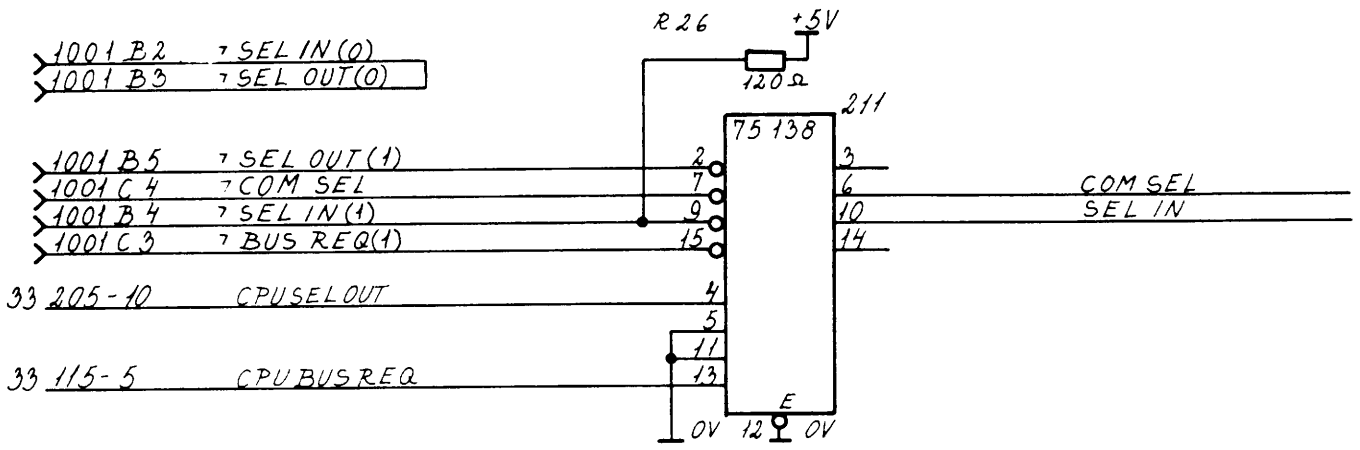
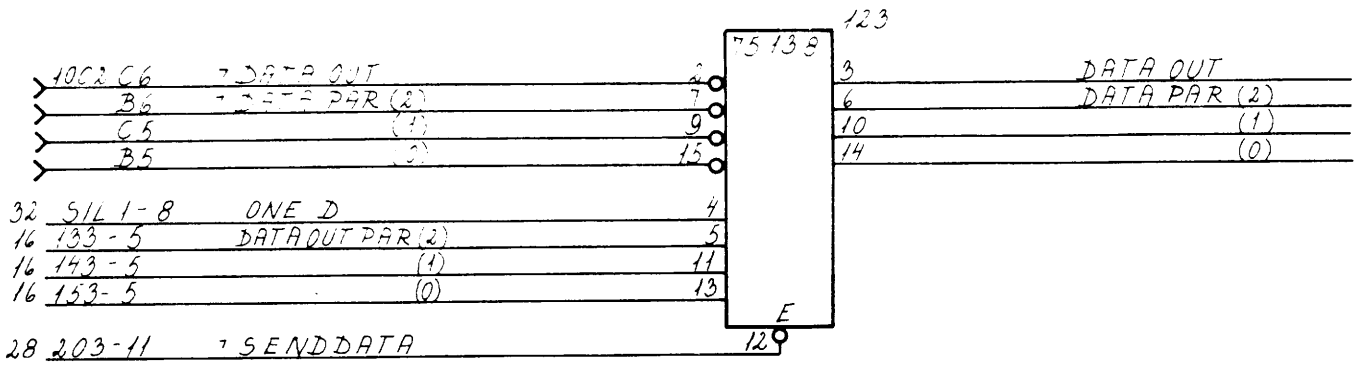
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800318
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BUS MASTER SELECTION LOGIC



AGA
 ARJ
 8003 18 850128

6. PROMs6.1 Microprogram PROM Position List

<u>PROM NO</u>	<u>POSITION</u>	<u>TYPE</u>	<u>PROM NO</u>	<u>POSITION</u>	<u>TYPE</u>
ROC482	345	6353-1	ROD007	347	6353-1
483	341	-	008	343	-
484	337	-	009	339	-
485	333	-	010	335	-
486	329	-	011	331	-
487	325	-	012	327	-
488	321	-	013	323	-
489	317	-	014	319	-
490	313	-	015	315	-
491	309	-	016	311	-
492	305	-	017	307	-
493	301	-	018	303	-
ROC494	346	6353-1	ROD019	348	6353-1
495	342	-	020	344	-
496	338	-	021	340	-
497	334	-	022	336	-
498	330	-	023	332	-
499	326	-	024	328	-
ROD001	322	-	025	324	-
002	318	-	026	320	-
003	314	-	027	316	-
004	310	-	028	312	-
005	306	-	029	308	-
006	302	-	030	304	-
ROD031	105	6306-1	ROD034	101	6353-1
032	104	-	035	91	-
033	103	-	036	81	-
ROD037	111	6306-1			

RETURN LETTER

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