DANSK DATA ELEKTRONIK

ID-7036 PROM WRITER MODULE

for the

SPC-1 MICROCOMPUTER SYSTEM

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1. Introduction.

The module enables the SPC/1 computer to write EPROMS type 2516, 2716, and 2532. The module is controlled by the MIKADOS utility program PROM.

2. Description.

The module contains the following registers and flip flops:

AR(11:0): a twelve bit register which drives the address pins of the prom during prom reading and writing.

DO(7:0): an eight bit register which drives the data pins of the prom during prom writing.

W: a flip flop which tells the module to read or write in the prom.

T: a flip flop which selects the type of the prom.

READY: a status bit.

2. Prom Writing.

The address register, AR(11:0), and the data register, DO(7:0), is loaded by the computer. The prom type is selected by setting or clearing the T flip flop and a write command is issued by setting W. The write command connects pin 21 of the prom to 25 v. This voltage is generated on the module by converting 5 v. A new command is send to the module and generates a 50 ms programming pulse. The READY status from the module tells when the programming pulse is finished.

3. Prom Reading.

The address register AR(11:0) is loaded and the W flip flop is cleared by the program. The program can now read the addressed byte from the prom.

4. Addressing.

The base address of the module is default strapped to 14 hex which is the address used by the program PROM. In the following description BA means the base address of the module and ACC means the accumulator in the 8085.

OUT BA:

AR(7:0) is loaded with the content of ACC(7:0).

OUT BA+1:

AR(11:8) is loaded with the content of ACC(3:0). The write flip flop, W, is loaded with ACC(7). If W is set pin 21 of the prom is connected to 25 v. If W is cleared pin 21 of the prom is connected to 5 v. The type flip flop T is loaded with ACC(6). If T is set type 2532 is selected. If T is cleared type 2516/2716 is selected.

OUT BA+2:

The data output register DO(7:0) is loaded with the content of ACC(7:0).

OUT BA+3:

Generates a 50 ms programming pulse. The content of ACC is not used.

IN BA: Not used.

IN BA+1: Not used.

IN BA+2:

ACC(7:0) is loaded with the output data from the prom.

IN BA+3:

ACC(6:0) is cleared and ACC(7) is loaded with the content of the READY flip flop. If READY = 0 the programming pulse to the prom is on. If READY = 1 the programming pulse is finished and a new one may be generated.

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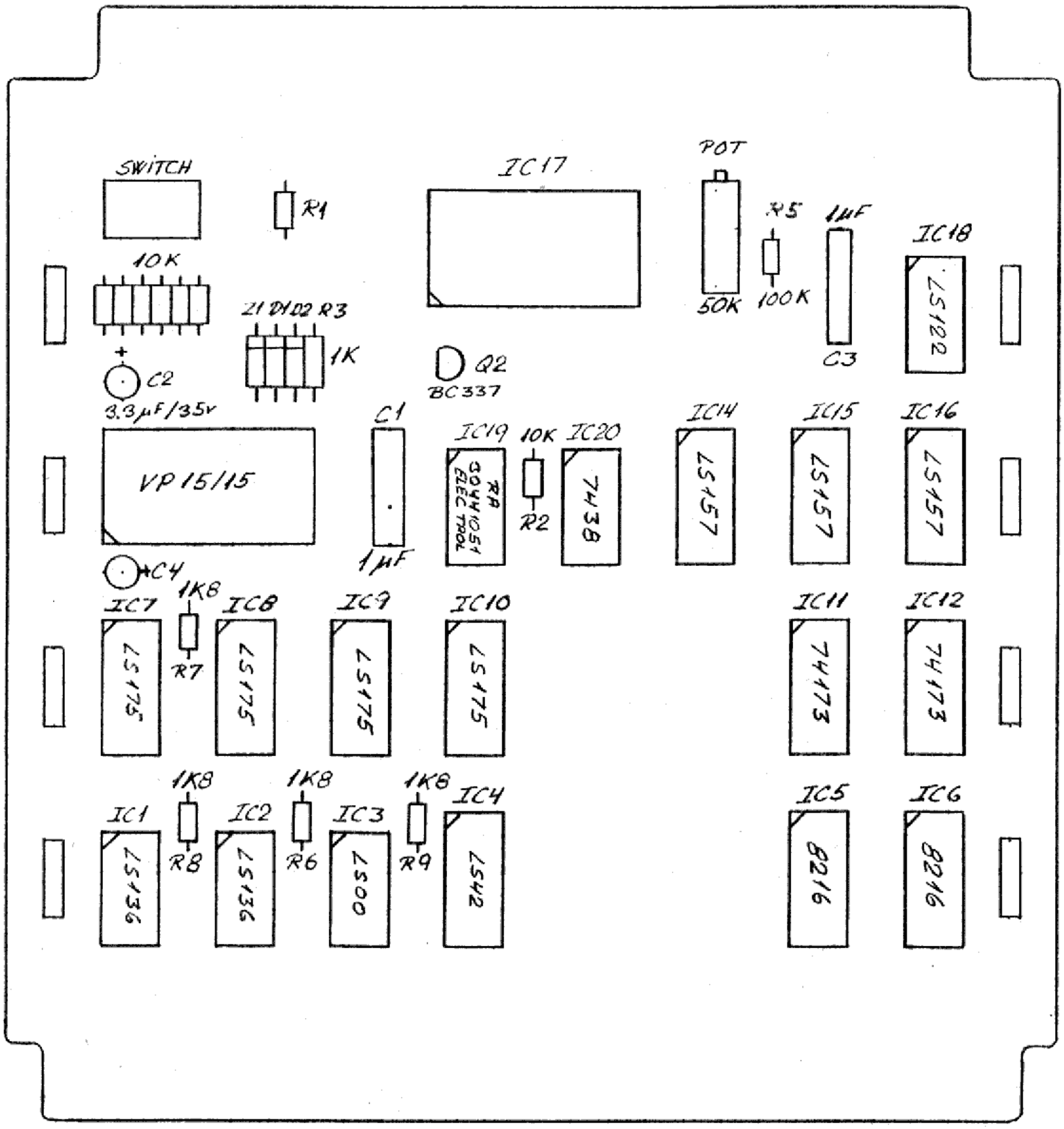
Initialer/dato	Side
Revideret	Projekt

7036 811211



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Prom Programmer Module 7036
211211

Initialer/dato	Side
EFH 81-05-20	
Revideret	Projekt
KHN 220211	

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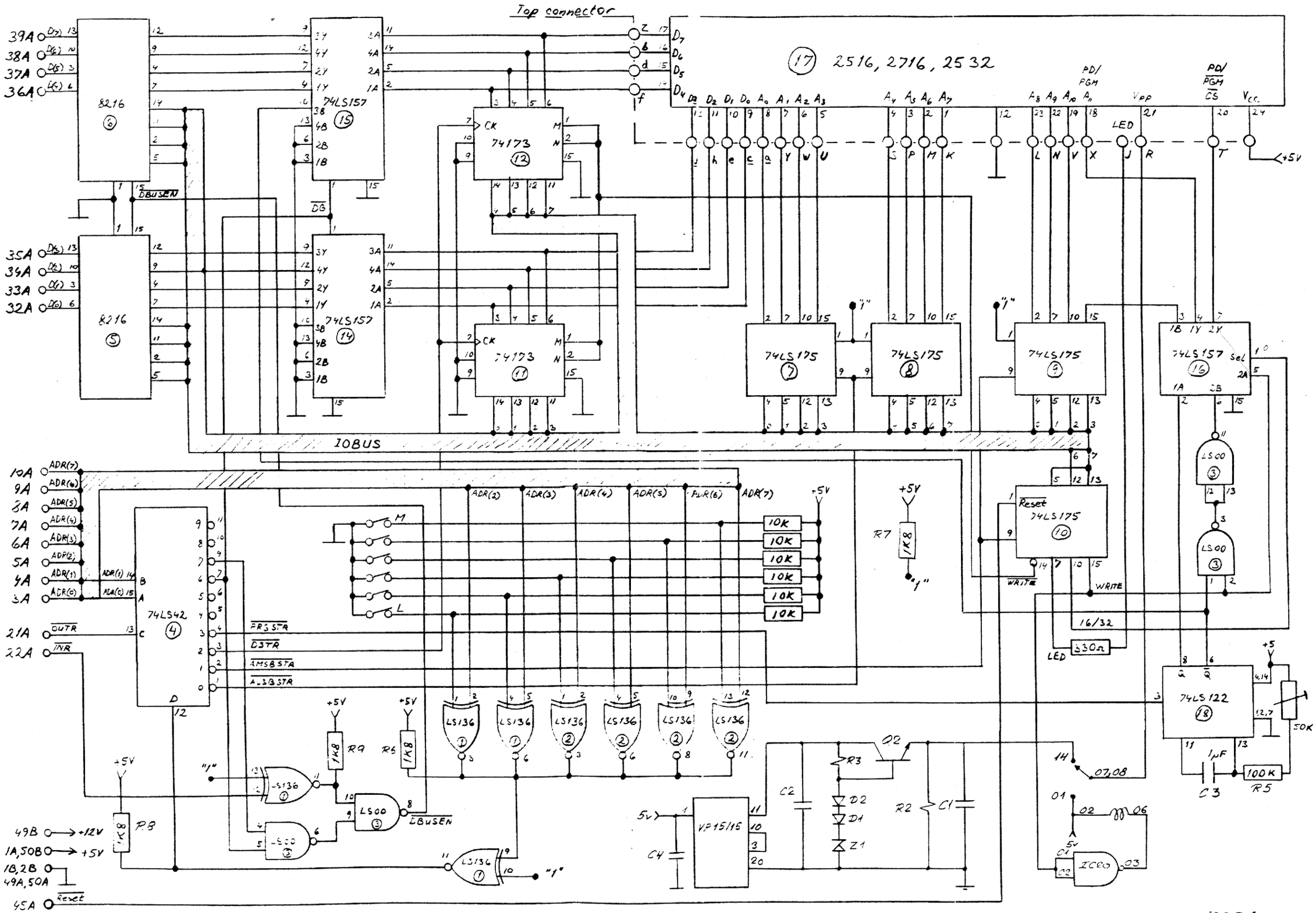
Initialer/dato	Side
Revideret	Projekt



PROM PROGRAMMER MODULE 7036