Content of ROM MEGA module for PMD-85 -1
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- 4th working version #4 (binary #9) 11/2013

The content is divided into individual pages of 32KB. In the current version, one 512KB memory (29F040, 27C040, etc.) is enough. Page addressing is absolute within the entire memory. The address of the JOB command is already related to the given page and the module must be **switched to this page.** After reset, the module is always set to page 0 and thus it is possible to start Basic directly. The length of the stretched data in the JOB command is already increased by 100h. For some programs, JOBem loads and starts only the loading routine, which loads and starts the game itself.

Attention! Enter the data after the JOB command without spaces!!
I put spaces there just for better orientation! JOB loads the program into RAM and runs it.

Page 0 absolute addresses 00000-07FFFh

program	launch
BASIC-G v.1.0	BASIC-G
DEMO1	**description** original BASIC from PMD-85-1 original graphic demo (B/W) from Basic ROM 0 + RUN
CATALOG2 - NEF!	catalog of programs in the module from Basic ROM 1 + RUN robot
ZENIT ROBOT3	ZENIT – control program from Basic ROM 2 + RUN game from Fr.
WURMI4	Fuky from Basic ROM 6 + RUN own BASIC program tests BASIC 1 in
CATALOG2 – NEF!	ext. module tests RAM from 4800h to max 64FFh
TEST BASIC19	48KB tests monitor v.1 JOB 6500 0387 0000
RAM TEST 48	JOB 6800 0500 0000
TEST MON17	JOB 6C00 1500 0000

Page 1 absolute addresses 08000-0FFFFh

program	startup description
MANIC	Manic Miner (Libovicky, Jenne) JOB 7F00 0130 7F00

Page 2 absolute addresses 10000-17FFFh

program	startup
SACH15	**description** Chess (included with the emulator) JOB 0000 3100
KILL	0000 game Frogs (control K4, K9, K10, K11) JOB 3000 0C00 1500
WALL	demolishing a wall (control Shift, JOB 3B00 0560 1000
CAR	V, K0) driving a toy car (control JOB 4000 05E4 2000
INVADERS	Shift, V) control sipky, JOB 4500 0700 0100
CHICKEN	mezernik, EOL JOB 4B00 17C1 0000
PUZZLE	chicken on the JOB 6200 0B7B 0000
TANKS	pyramid rather "fifteen" tank battle for two players JOB 6D00 0F50 2000

Page 3 **absolute addresses 18000-1FFFFh**

program	description	launch
HORACE		JOB 0000 0130 0000
WALL	Horace and spiders Picking	JOB 0D00 2556 0000
PAMPUCH	fruit in the garden	JOB 3200 1190 0100
JERRY	classic Pacman ??	JOB 4300 10FF 1100
COBRA	Fly through the	JOB 5300 1D7E 5B00
AIR-RAID	cave Some stiletto	JOB 7000 0D8E 1000

Page 4 **absolute addresses 20000-27FFFh**

program	description	launch
PONTRIS	nice	JOB 0000 0130 0000
CATEGORIES	variation of Tetris variation on Invaders	JOB 1900 1A00 1000
CANCAN	? Maybe a demo?	JOB 3200 1C00 0000
GLUTTON	a kind of multi-screen Pacman JOB 5000 0130 0000 controls: E, Y,<-, ->, EOL	

Page 5 **absolute addresses 28000-2FFFFh**

program	description	launch
A ROBOT	from the Tomas jester cycle	JOB 0000 7100 0000

Page 6 **absolute addresses 30000-37FFFh**

program	description	launch
HOUSES	from the Tomas the Jester cycle	JOB 0000 7100 0000

Page 7 **absolute addresses 38000-3FFFFh**

program	description	launch
THE OLD MAN	from the Tomas jester cycle	JOB 0000 7100 0000

Page 8 **absolute addresses 40000-47FFFh**

program	description	launch
SAXONY	from the Tomas jester cycle	JOB 0000 7100 0000

Page 9 **absolute addresses 48000-4FFFFh**

program description		launch
ROBOT CITY	Cult text book - the	JOB 0000 0130 0000

password is LILY OF THE LILY ÿ

Page A absolute address 50000-57FFFh program

description		launch
EXHAUST	PAMPUCH with music	JOB 0000 0130 0000

Page B of absolute address 58000-5FFFFh run description

program		
DATA512	test data 512 bytes – basically a free page for useful SW for testing transfer routines	

Page C absolute addresses 60000-67FFFh

program	description	launch
JETPAC6	Classic game from ZX Spectra	JOB 0000 3900 0000
PSST [6]	Classic game from ZX Spectra	JOB 4000 4000 0000

Page D of absolute address 68000-6FFFFh

program		launch
TEST BASIC 1-2A9 + BASIC 1, 2 and 2A	**description** tests BASICs in ext. module	JOB 0000 0500 0000

Page E of absolute address 70000-77FFFh

program		launch
ROBOT ZENIT	**description** robot ZENIT – control program from Basic ROM 2 + RUN from page 0!	

Page 15 (F) absolute address 78000-7FFFFh description

program		launch
TEST RAM 48	tests RAM 48KB	JOB 0000 0500 0000
TEST MON17	tests monitor v.1	JOB 1000 1500 0000
TEST MON27	tests monitor v.2	JOB 3000 1500 0000
TEST MON2A7	tests monitor v.2A	JOB 5000 1500 0000
TEST BASIC19	tests BASIC 1 in ext. module	JOB 6400 0387 0000
TEST PORT10	tests APK and GPIO 0 a1	JOB 6800 0560 0000
TEST KEY8	tests keyboard keys - except SHIFT, RST and STOP!	JOB 6D00 01B8 0000

Notes: 1) this
is a black and white (B&W) version. A color version is also included with the emulator.

2) **CATALOG** is not working for now! Still under development. in ROM 1
there is only the bootloader. The actual program is on page 0 of the module from 4800h absolutely!
Note in the end it turned out that it was functional with only one exception - Frogs, who are probably testing something somewhere. Otherwise, everything else probably worked. But I've already covered it so much that it's better to start all over again. But there is no time…

3) in ROM 2 there is only a bootloader. The **ZENIT** program itself is on the E module page from 70000h absolutely! However, it is necessary to start from page 0, switching to E is provided by the bootloader.

4) in **WURMI ,** I modified some text outputs a bit. On PMD v1, for example, when redefining the control keys, it was not nice to overwrite the already printed text. But the game itself is unchanged.

5) **chess** must be in the ROM module from address 0000h. When trying to put them in the second 16KB from 4000h, the program loops. Apparently they are checking something at a fixed address in the ROM module. I also verified it on the emulator with the same result.

6) **Jetpac** and **Psst** are without splash images that were displayed during upload from MGF.

7) The test programs **TEST MON 1-2A** also contain the monitors themselves, which are transferred to the RAM and compared with the contents of the computer's EPROM. It is therefore always necessary to test on the correct computer version!

8) The test program **TEST KEY** prints the internal code of the pressed key of all keys except SHIFT, RESET and STOP. Ends with Reset.

9) **TEST BASIC 1** compares the contents of BASIC from the Megamodule (page 0) with the external module on the APK application connector. It is compared on a kilobyte-by-kilobyte basis. This can be used to determine a faulty Eprom. The program **TEST BASIC 1-2A** gives the choice to test modules 1, 2, or 2A

10) **TEST PORT** requires a connected test tool (RAM 1 byte) on the APK or GPIO!

11) 48KB RAM test for PMD-85 versions 1 to 2A. Modified version of the test Eprom.
The program itself uses the first approx. 220 bytes of RAM, which it does not directly test (only indirectly by the fact that it worksÿ).

In most programs there are explanations or control keys can be redefined. So, where the control is not obvious, I added at least a list of the control keys (what I knew).

I tried everything and everything worked for me (except for the Catalog), but if you find an error, write to **admin@nostalcomp.cz** If you prepare your
own software, let me know too!