

P/N 99103221

RCSL No: 30-M300

Edition: October 1981

Author: Jan Nielsen
Bo Bagger Laursen

Title:

RC3502 PROM Blasting Program
User's Guide

Keywords:

RC3502, TES202, PROM Blasting Program, English language.

Abstract:

This is a short description of how to blast application programs (e.g. the testsystem TOP80) into PROMs on a TES202.

(12 printed pages)

**Copyright © 1981, A/S Regnecentralen af 1979
RC Computer A/S
Printed by A/S Regnecentralen af 1979, Copenhagen**

Users of this manual are cautioned that the specifications contained herein are subject to change by RC at any time without prior notice. RC is not responsible for typographical or arithmetic errors which may appear in this manual and shall not be responsible for any damages caused by reliance on any of the materials presented.

TABLE OF CONTENTS PAGE

1. INTRODUCTION 1

2. PREPERATION FOR BLASTING 2

3. PROGRAM PARAMETERS 3

APPENDIX:

A. REFERENCES 5

1. INTRODUCTION

1.

This manual describes how you can blast your own applications into PROMs on the TES202 module. The requirements for the program to operate is an RC3502 with as many RAM memory modules as required by the application you want to blast (plus one for the blasting program) and an FPA connection to an RC8000.

The program is written in Real Time Pascal (RC3502 implementation). The program was developed by Bo Bagger Laursen.

2. PREPERATION FOR BLASTING

2.

The binary files of your application must be linked by the utility program `CROSSLINK` with the modifications `bind.yes`, `start.h00FA.0002`. The hexadecimal address is an example, but must be a PROM address (range for base addr. `00E4-00FE`), ref. [1], ref. [2].

The bootfile is generated by the following `fp-command`:

`<bootfile> = punch16 mode.crc16 coreimage`, where `coreimage` is the output from `crosslink`.

When blasting is wanted, autoload the RC3502 with the bootfile `boottes202`, containing the blasting program. Note: If you want to blast more than one copy of your application, at most one set of TES202 modules can have `module-no.` as the start addresses from crosslinking.

When the autoloading is finished the command to `opsys` to start the program is `RUN TES202`.

3. PROGRAM PARAMETERS

3.

The program will ask some questions before requesting your application. These are:

<fpa 100 receiver channel?>: Must be the level of the receiving channel in decimal notation.

<no of application modules?>: Number of TES202 modules your application will occupy.

<no of copies?>: no of TES202 images of the application, you want to produce.

<first TES202 modulno?>: module no in decimal (29 for the above example OOFA.0002).

<relative module distance?>: if more than one copy, this is the distance between the first module of the first copy and the first module of the next copy. The distance should be kept if many copies.

<check for all ones, yes or no?>: If yes, a complete check is performed. If an error occurs the address where it was discovered is printed.

<PROM>: is the read value from the PROM.

<RAM>: is not initialized yet.

The rest of the PROM is skipped if an error has been detected.

<first program name> and <last program name>: must be taken from the crosslink table.

When these questions are answered, the blasting program will wait for an autoload of your application.

Whilst autoloading, the program will identify each module by its name. When the autoloading is finished the program will write <load OK>. <application module: <no> too big> will be written if your specifications do not follow the limitations of the cross-link-table, or if there was no room for checksums. It is so that at the end of a module there will be written one word containing -1 and 32 words of checksum for every 2 K bytes blasted.

<blasting wanted, yes or no?>: The blasting will start after a "yes", and when you have connected the external power and typed "go".

The PROMs are checked for each cell after each blast and if a PROM fails more than 5 times, it will be skipped.

An errortext will be written where <PROM> is received and <RAM> is expected.

If a PROM fails, a new one can be installed without having to blast all the others again. (The total procedure must be repeated).

When blasting is finished, your application can be run by turning the kind switch (upper switch on front of the CPU) to kind 6, and push the autoloading button.

Note: TES202 modules where module no. do not match the start addresses from crosslinking must be removed.

A. REFERENCES

A.

- [1] RCSL No 52-AA988:
PASCAL80 on the RC3502 Computer. How to Use the RC3502
- [2] RCSL No 52-AA1021:
General Information for TES201/202 EPROM MODULES Rev. 0
- [3] RCSL No 52-AA1022:
Technical Description for TES201/202 EPROM MODULES Rev. 0
- [4] RCSL No 52-AA1032:
Technical Description for POW205 Power Supply Rev. 0
- [5] RCSL No 52-AA1016:
RC3502, Operating Guide



RETURN LETTER

Title: RC3502 PROM Blasting Program
User's Guide

RCSI No.: 30-M300

A/S Regnecentralen af 1979/RC Computer A/S maintains a continual effort to improve the quality and usefulness of its publications. To do this effectively we need user feedback, your critical evaluation of this manual.

Please comment on this manual's completeness, accuracy, organization, usability, and readability:

Do you find errors in this manual? If so, specify by page.

How can this manual be improved?

Other comments?

Name: _____ Title: _____

Company: _____

Address: _____


Date: _____

Thank you

..... **Fold here**

..... **Do not tear - Fold here and staple**

**Affix
postage
here**

 **REGNECENTRALEN**
af 1979
Information Department
Lautrupbjerg 1
DK-2750 Ballerup
Denmark