DANOSI

INDHOLD AF BRANDSKAB DVBS1
SW2103

Opdateret 92.06.16 / BB

IDENTIFIKATION	DATO	INIT	KOMMENTARER
DVBS1.SW2103.rel.1.8-1	921216	BB	RTP3502 Compiler MS-DOS
DVBS1.SW2103.src.1.8-1	921216	BB	Pascal TOOLS, JTAS
DVBS1.SW2103.rel.1.11-1	921216	BB	RTP3502 Compiler MS-DOS
DVBS1.SW2103.src.1.11-1	921216	BB	RTP3502 Compiler MS-DOS
DVBS1.SW2103.rd.1.14-1	930616	BB	RTP3502 Releasestyringsdokument
DVBS1.SW2103.rel.1.14-1	930616	BB	RTP3502 Compiler MS-DOS (diskette)
DVBS1.SW2103.rel.1.14-2	930616	BB	RTP3502 Pakkebeskrivelse
DVBS1.SW2103.src.1.14-1	930616	BB	RTP3502 Compiler MS-DOS (UNIX)
DVBS1.SW2103.src.1.14-2	930616	BB	RTP3502 Compiler MS-DOS (UNIX)
DVBS1.SW2103.src.1.14-3	930616	BB	RTP3502 Compiler MS-DOS (UNIX)
DVBS1.SW2103.src.1.14-4	930616	BB	RTP3502 Compiler MS-DOS (UNIX)

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Releasestyringsdokument

SW-pakke identifikation		
SW2103, RTP3502 Compiler (MS-DOS Version)		
Release 1.14	Ansvarlig BB	Dato 1992.12.02

Genereringssystem

- RC950 UNIX-maskine ('basis1') leveret af ICL DATA.
- SW95705I.3 386/ix (R) Multi-user, Release 2.2 leveret af ICL DATA.
  (indeholder et UNIX System V/386 Release 3.2 fra INTERACTIVE UNIX).
- SW95707I VP/ix Multi-user, Release 1.2 leveret af ICL DATA.
- SW95728I.1 UNIX Transport/Networking, Release 1.0 leveret af ICL DATA.
- Turbo Pascal, Version 5.0 fra Borland
- SW2103 RTP3502 Compiler, Release 1.14 leveret af DANOSI.

Kildetekster

(Hvor ikke andet er angivet er filer placeret på basis1 under /usr2/sw2103)
Versionsoversigt er placeret i job/release/versions.log.

Generering

Pakkebeskrivelsen skrives med 'Word Perfect' i
'h:\common\swvedl\pakkebsk\software\sw2103.114'
og en ascii kopi flyttes til release/fut/readme21.03.
Pakken dvs. masterdisketten, genereres ved at bruge 'make' i job/release.

Specifikationsdokumenter

PASCAL80 REPORT (PN: 99000484)
PASCAL80 User's Guide (PN: 99104398)
PASCAL80 Driver Conventions (PN: 99103509)
RC3502/2 Real-Time Pascal Reference Manual (PN: 99000994)

Vedligeholdelsesdokumenter

Filen adm/readme indeholder en vejledning til pakkevedligeholdelse.
Notater om compileren er samlet i 10 ringbind.
Nogle dokumenter og pakkejournal er i h:\common\swpakker\sw2103.

Arkivkopi

I brandskabet DVBS1 findes en arkivkopi i form af 4 disketter med følgende mærkning:

DVBS1.SW2103.src.1.14-1
DVBS1.SW2103.src.1.14-2
DVBS1.SW2103.src.1.14-3
DVBS1.SW2103.src.1.14-4

Arkivdisketterne indeholder følgende kataloger (med subkataloger):

/usr2/sw2103
/usr2/swutil
/usr2/sw2114/src/bobs

Arkivdisketterne er lavet med jobbet 'job/arkivjob', der anvender tar til skrivningen af af disketterne.

Arkivdisketterne kan indlæses igen med programmet tar.

Testværktøjer

'test/comp.bat' bruges til oversættelse af en samling test programmer, der er navngivet *.s35.Jobbet

Bemærkninger

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Package Description

RTP3502 Compiler (MS-DOS Version)

SW2103
Release 1.14, 92.12.02
DANOSI

Contents

- 1 Diskette marked "SW2103 Release 1.14"
- 1 PASCAL80 REPORT
- 1 PASCAL80 User's Guide
- 1 PASCAL80 Driver Conventions
- 1 RC3502/2 Real-Time Pascal Reference Manual
- 1 Package Description (this document)

Purpose

The RTP3502 Compiler is a Real-Time Pascal Cross Compiler (Old dialect) running on an MS-DOS PC platform generating code for the RC5000 Network Switch (RC3502).

Reason for Release

This release contains updates from the corresponding SW2101 Real-Time Pascal Compiler (RC8000). Furthermore changes in predefined compiler switches are done coordinated with the other Real-Time Pascal compilers (SW2101, SW2104, SW-2111, SW2114). In the object code compiler identification is inserted.

Requirements

SW2103 requires:

- MS-DOS 3.3 (SW95400I Release 1.0 or later), or
- Concurrent DOS Version 6.0 or later, or
- VP/ix Multi-user (SW95707I Release 1.2 or later)

Identification of Files

Disc: sw2103_1.14

README21	03	8946
RTP35	BAT	404
RTP35022	EN5	3200
RTP35022	ENV	8631
RTP35022	ERR	9344
RTP35022	LIB	8192
RTP35022	TAB	28800
RTP3521	EXE	56128
RTP3523	EXE	54976
RTP3524	EXE	73248
RTP3525	EXE	73216
RTP3526	EXE	57184
COMPRESS	EXE	12256
CROSLINK	EXE	49680
PLIB	EXE	44128
PLIBCONV	EXE	18208
PLIBJOIN	EXE	37888
PLIBLOOK	EXE	25360
CHRCONV	EXE	26032
CHRCONV	HLP	3072
COMPARE	EXE	15008
COMPARE	DOC	8064
COMPARE	HLP	1664
COUNTCH	EXE	25792
COUNTCH	HLP	1792
EXTEND	EXE	10864
EXTSCAN	EXE	4992
FILEDUMP	EXE	22448
FILEDUMP	HLP	1536
PASCFORM	EXE	34176
PASCROSS	EXE	33632
PASCFORM	DOC	18816
PASCROSS	DOC	3456
PASCFORM	HLP	8192
PASCROSS	HLP	3968
INST	BAT	1324

DAS550	I35	99
UTIL	DOC	1943
TOOLS	DOC	6272
CROSS	HLP	2688
INDENT	HLP	2944
BOOTLINK	EXE	49472
42 file(s)		856672 bytes

Documentation

- PASCAL80 REPORT (PN: 9900-0484)

This is a complete description af the programming language Pascal80. Pascal80 extends the programming language Pascal with concurrent programming tools: processes, messages, and queue semaphores.

- PASCAL80 User's Guide (PN: 99104398)

This is a tutorial for the language PASCAL80. The manual contains a description of PASCAL80 and examples of programs and program constructs.

- PASCAL80 Driver Conventions (PN: 99103509)

This manual contains a standard for the interface between a PASCAL80 driver and process(es) using the driver.

- RC3502/2 Real-Time Pascal Reference Manual (PN: 99000994)

This manual contains a description of the implementation of Real-Time Pascal on the RC3502/2 computer. Information of how to use the Real-Time Pascal compiler and related utility programs is included in appendices.

Extension to PN: 99000994:
SW2103 is the MS-DOS equivalent to the SW2101 RTP which is an RC8000 program. The following concentrates mainly on the differences between theese two compilers.

Call of RTP3502

Call of an RC8000 program is made according to the following syntax:

a = program b.c d e.f

In connection with RTP3502/MS-DOS, this call is converted to:

program =a /program b-c d e-f

where:

- left side is simulated by a string beginning with an equal-sign. If there are more than one equal-sign in a call, the last sign indicated is applied
- the name of the called program is simulated by a string beginning with a divisionsign. If there are more than one divisionsign in a call, the last sign indicated is applied
- division of parameters by means of full stop in RC8000, is made in RTP3502/MSDOS by means of a minus sign. The reason for this is that files in RTP3502/MSDOS may contain a full stop.

Besides this general change of the RTP call method, RTP3502/MSDOS has been improved by the following facilities:

- Call parameters can be stored in files. The text string 'paramin' is employed in this connection. After this string and a minus, a file name must be stated, which may contain a path name according to the path syntax of the machine employed. 'Paramin' may be used in the call line itself, but also in a file. In the call line, any succedent parameters will be important, while any succedent parameters in a file is without importance.

Paths may be stated for:

- The compiler directory
- First and second work directory
- Source directory

The compiler directory.
Method 1:
/program-compiler path
Method 2:
set rtppath = compiler path
Method 1 outdoes Method 2. Compiler directory may be stated for all passes. The directory is used by all relevant passes for helpfiles (e.g. RTP35022 .TAB). When the compiler directory is not stated, the directory holding the .EXE files for the passes is used.
First and second RTP work directory
Method 1:
=leftside-workdir1-workdir2
Method 2:
set rtpwork1 = workdir1
set rtpwork2 = workdir2
Work directories may be stated for all passes. Pass 1 will generate intermediate form files in first work directory from which Pass 3 will read and generate its intermediate form file in second work directory etc. If no work directory is stated, the current directory is used.
Source directory
The text string 'sourcepath' is used in this connection. After this string and a minus sign, a source directory must be stated. This directory is used as source directory until any further 'sourcepath' is stated. The source directory is used by Pass 1 and Pass 6. Pass 6 uses the source directory when generating its object file (stated by = object file).
As mentioned above, an RTP3502/MSDOS compilation is performed by execution of 5 programs, one for each pass. The file RTP.BAT is an example of a batch file performing the full compilation job.

Corrections and Enhancements

Pathlength has been changed from 30 to 80 characters.

Programs with more than 6000 definitions of names can now be handled.

A list file is introduced (option: list-"filename").

New $ directives are introduced:
$linenumber=xxx
$roundupline (* to nearest multiple of 1.000 *)

Missing $ENDIF gives an error.

Missing assign between type and (: gives a warning.

Redefinition of an object in an(other) environment gives a warning.

Initialization is not performed on elements on the heap containing system types, if the heap element was not allocated due to lack of memory.

For identification of the target computer the **Target** switch now takes the following predefined values:
- i86
- TA
- RC3502

SW2103 takes the target switch value RC3502.
The target switch values RC5000 and PI3 are removed.

For identification of the language dialects the switch **Language** is now defined and takes the following predefined values:
- RTP
- RTP86
- RTP3502
- RTP2111

SW2103 takes the language switch value RTP3502 .

The switch **Compiler** is removed.

The following boolean switches are now predefined:
- FALSE (value equals 0)
- TRUE (value equals 1)

Limitations and Recommendations

The **include file** option is not implemented.

The size of the constant area for a program must not exceed 32Kb.

Memory requirements for RTP3502:

Code	66,500
Data	8,000
Stack	65,000
Heap	85,000

Above figures in bytes are fixed except the heapsize, which depends on the program compiled. The heap figure applies for a typical 1500 line program. The heap depends among others on the number of names used in the program, and the code size employed. The heap size employed may be written on the list file by means of the option survey-yes.

Installation

The installation of SW2103 is performed by inserting the disk in a drive, selecting that drive and typing:

INST

This batch job will provide a guide for installation of all files on the disc onto a specific disc and directory.