

NORD SOFTWARE LIBRARY DISKETTE

CONTAINING : TEST-PROGRAMS NO.1 FOR
ND-10, ND-12 AND ND-100.

DIRECTORY NAME : ND-10324C
USER NAME : FLOPPY-USER

FILE 0 : (ND-10324C:FLOPPY-USER)BIG-RAND-1876C:BPUN;1
FILE 1 : (ND-10324C:FLOPPY-USER)BIGFUNC-1824J:BPUN;1
FILE 2 : (ND-10324C:FLOPPY-USER)BIMS-1871C:BPUN;1
FILE 3 : (ND-10324C:FLOPPY-USER)CONFI-INV-1672M:BPUN;1
FILE 4 : (ND-10324C:FLOPPY-USER)DIMS-1453F:BPUN;1
FILE 5 : (ND-10324C:FLOPPY-USER)DISC-TEMA-B:BPUN;1
FILE 6 : (ND-10324C:FLOPPY-USER)EXTEN-ONE-1519B:BPUN;1
FILE 7 : (ND-10324C:FLOPPY-USER)FLOPP-FORM-1990B:BPUN;1
FILE 8 : (ND-10324C:FLOPPY-USER)FLOPPY-RAN-1988B:BPUN;1
FILE 9 : (ND-10324C:FLOPPY-USER)HDLC-2-2370A:BPUN;1
FILE 10 : (ND-10324C:FLOPPY-USER)LF-TEST-1878C:BPUN;1
FILE 11 : (ND-10324C:FLOPPY-USER)MEMORY-A:BPUN;1
FILE 12 : (ND-10324C:FLOPPY-USER)MOVER-1863C:BPUN;1
FILE 13 : (ND-10324C:FLOPPY-USER)MULTI-1820N:BPUN;1
FILE 14 : (ND-10324C:FLOPPY-USER)SUPER-RAND-2222C:BPUN;1
FILE 15 : (ND-10324C:FLOPPY-USER)TANB-MAG-1559F:BPUN;1
FILE 16 : (ND-10324C:FLOPPY-USER)TERMINAL-ASYNC-A:BPUN;1

18 JANUARY 1982

PRODUCT	NAME	ND-NUMBER	CATEGORY
	TEST-PROGRAMS No. 1 for ND-10, ND-12 and ND-100.	10324C	T
		ND-NUMBER FOR SOURCE	10327C
ISSUED	DATE: 15 JANUARY 1982	BY (INITIALS)	DG
COMPUTERS	X 10 ! X 12 ! 50 ! X 100!	500!	
INSTR.SET	48 BIT FL.!	32 BIT FL.!	COMMERCIAL!
OP.SYSTEM	SIN III VS!	SIN III RT!	X ALONE
DOCUMENTATION	NUMBER: ND-30.005.1 TITLE: Testprogram description. Vol. 1.		
PURPOSE	Testprograms for CPU, memory, discs and peripherals.		
PROGRAMS (FILES)	PROG.NUMB	NAME	TYPE CONTAINING
	HAR-1876C	BIG-RAND	BPUN Random test for big disc
	HAR-1824J	BIGFUNC	BPUN Function test for big disc
	HUT-1871C	BIMS	BPUN Utility program big disc
	HUT-1672M	CONFI-INV	BPUN Checks configuration
	HUT-1453F	DIMS	BPUN Utility program 10MB disc
	203134B	DISC-TEMA	BPUN Utility program discs
	HAR-1519B	EXTEN-ONE	BPUN Instruction check
	HUT-1990B	FLOPP-FORM	BPUN Discette formatting
	HAR-1988B	FLOPPY-RAN	BPUN Random test floppy disc.
	HAR-2370A	HDLC-2	BPUN HDLC testprogram
	HAR-1878C	LP-TEST	BPUN Line printer testprogram
	203396A	MEMORY	BPUN Memory test program
	HAR-1863C	MOVER	BPUN Memory testprogram
	HAR-1820N	MULTI	BPUN Memory test program
	HAR-2222C	SUPER-RAND	BPUN Random test for discs
	HAR-1559F	TANB-MAG	BPUN Tandberg tape testprogram
	203198A	TERMINAL-ASYNC	BPUN Terminal testprogram

LOADING PROCEDURE:

Place floppy in FLoppy Disc Controller 1, Unit 0.
Press Master Clear, Type 1560& and LOAD <program>.

PRODUCT	NAME	ND-NUMBER
	TEST-PROGRAMS No. 1	10324C
	for ND-10, ND-12 and ND-100.	

BIG-RAND

Date: 78.05.30 (DG) Boundaries: 0<4000
Start address: 0 Restart address: 20

The test can only be run on Disc System 1. Unit numbers are given as a sequence of numbers (0-7) separated by space, terminated by CR.

Status appears as two words. The first word is the hardware status reg. The upper four bits in the second word have the following meaning:

- Bit 12: Seek error.
- Bit 13: Core Address Reg. not as expected.
- Bit 14: Block Address out of range.
- Bit 15: Illegal device operation code.

Bit 12-15 all ones: Controller not active after activate.

BIGFUNC

Date: 82.01.15 (DG) Boundaries: 0<32261
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441E.

BIMS

Date: 76.08.04 (DG) Boundaries: 20<12637
Start address: 20 Restart address: 40

CONFI-INV

Date: 80.09.08 (PVDV) Boundaries: 0<27640
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441B.

DIMS

Date: 81.02.01 (DG) Boundaries: 0<20033
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441C.

PRODUCT	NAME	ND-NUMBER
	TEST-PROGRAMS No. 1 for ND-10, ND-12 and ND-100.	10324C

DISC-TEMA Date: 82.01.15 (DG) Boundaries: 0<36572
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441E.

EXTEN-ONE Date: 77.09.15 (PVDV) Boundaries: 0<4064
Start address: 20 Restart address: 20

Runs ONE-CHECK on levels 1-15.

Location 0432 contains SAT 1 (171001)
Is wanted on the Punch, change to 171003.
Is wanted on the Line-Printer, " 171005.
Is wanted on the Terminal 2, " 171007.

FLOPP-FORM Date: 82.01.15 (SUP) Boundaries: 0<5042
Start address: 20 Restart address: 20

FLOPPY-RAN Date: 82.01.15 (SUP) Boundaries: 0<10600
Start address: 0 Restart address: 20

HDL-2 Date: 79.06.06 (SUP) Boundaries: 0<17434
Start address: 20 Restart address: 20

See appendix for informations.

LP-TEST Date: 82.01.15 (SUP) Boundaries: 0<21322
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441E.

EMORY Date: 82.01.15 (PVDV) Boundaries: 0<35546
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-1441E.

PRODUCT	NAME	ND-NUMBER
	TEST-PROGRAMS No. 1 for ND-10, ND-12 and ND-100.	10324C

MOVER Date: 77.04.29 (PVDV) Boundaries: 0<2736
Start address: 400 Restart address: None

Self-documenting.

MULTI Date: 82.01.15 (PVDV) Boundaries: 0<25642
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441E.

MULTI may be used to test memory on ND-10 and ND-100.
MULTI reads from DMA-devices in test mode.
It should not be necessary to turn off the
disc/drum, but it may be the best.

SUPER-RAND Date: 79.11.30 (DG) Boundaries: 0<13276
Start address: 20 Restart address: 20

Qualitative read/write/seek test for disc and controller.

ANB-MAG Date: 79.09.11 (DG) Boundaries: 0<7553
Start address: 20 Restart address: 20

TERMINAL-ASYNC Date: 82.01.15 (SUP) Boundaries: 0<31113
Start address: 0 Restart address: 20

Includes the TEST-MONITOR-2441E.

NORSK DATA A/S		NORD SOFTWARE LIBRARY		PAGE 1 OF 1	
		REVISION LOG			
PRODUCT	NAME			ND-NUMBER	
	TEST PROGRAM NO. 1			ND-10324C	
ISSUED	DATE 15 JAN 1982	BY (INITIALS)	DG		
REASON	ERROR CORRECTION			DIFFERENT ENVIRONMENT	
	* CHANGE/ADDITION				
FILES	PROG.NUMB.	NAME			
CHANGED	203396A	MEMORY			
OR NEW	203198A	TERMINAL-ASYNC			
FILES					

Two new programs have been added:

- 1) MEMORY which replaces T4KMOS, T8KMOS, T32KMOS and MPM-MAINT.
- 2) TERMINAL-ASYNC which replaces TTEST.

Two programs have been suppressed:

- 1) GREMS (replaced by DISC-TEMA).
- 2) TTEST (replaced by TERMINAL-ASYNC).

PFAIL and FLOPPY-FU have been moved to TEST PROGRAM NO. 2 (ND-10325B).

MPM-MAINT and T32KMOS have been moved to TEST PROGRAM NO. 3 (ND-10326B).

PRODUCT	NAME	ND-NUMBER
	BIGFUNC	10324C
ISSUED	DATE 82.01.15	BY (INITIALS) DG
REASON	ERROR CORRECTION * CHANGE/ADDITION	DIFFERENT ENVIRONMENT
FILES CHANGED OR NEW FILES	PROG. NUMB. NAME HAR-1824J BIGFUNC	

The I-version of BIGFUNC did not handle the 2-75MB (150MB) discs. The J-version of BIGFUNC does.

The J-version of BIGFUNC includes the E-version of the TEST PROGRAM MONITOR.

NORSK DATA A/S		NORD SOFTWARE LIBRARY		PAGE 1 OF 1	
REVISION LOG					
PRODUCT	NAME			ND-NUMBER	
	DISC-TEMA			10324C	
ISSUED	DATE 82.01.15			BY (INITIALS) DG	
REASON	* ERROR CORRECTION			DIFFERENT ENVIRONMENT	
	* CHANGE/ADDITION			NEW PROGRAM	
FILES	PROG.NUMB.	NAME			
CHANGED	203134	DISC-TEMA			
OR NEW					
FILES					

The following errors have been reported on DISC-TEMA-A:

- i) The command ALIGN does not work properly.
- ii) Only one error within each block is detected.
- iii) When using the commands, SEEK or FORMAT unit 0 must be ready even if it is not used.
- iv) On Phoenix Discs, errors on the fixed surfaces are reported with a surface number which is 20 too big.
- v) Errors might be reported on cylinder 1465 and 1466 on 150MB discs(DISC-2-75).
- vi) If the question DISC AREAS OVERLAP EACH OTHER. OK ? is answered with NO the program goes crazy.

They are all corrected on the B-version.

A new version of the SINTRAN ECC disc driver has been released, the B-version. This new disc driver is improved concerning ECC. The B-version of DISC-TEMA includes this new disc driver.

The B-version of DISC-TEMA includes the E-version of the Test Program Monitor.

NORSK DATA A/S		NORD SOFTWARE LIBRARY		PAGE 1 OF 1	
REVISION LOG					
PRODUCT	NAME	ND-NUMBER			
	FLOPP-FORM	10324C			
ISSUED	DATE 82.01.15	BY (INITIALS) SUP			
REASON	ERROR CORRECTION	DIFFERENT ENVIRONMENT			
	X CHANGE/ADDITION				
FILES	PROG.NUMB. NAME				
CHANGED					
OR NEW	HUT-1990B FLOPP-FORM				
FILES					

A new driver for the new floppy controller with double side/double density has been included.

! NORSK DATA A/S		! NORD SOFTWARE LIBRARY		! PAGE 1 OF 1	
! REVISION LOG					
! PRODUCT	! NAME			! ND-NUMBER	
	! FLOPPY-RAN			! 10324C	
! ISSUED	! DATE 82.01.15	! BY (INITIALS)	! SUP		
! REASON	! ERROR CORRECTION	! DIFFERENT ENVIRONMENT			
	! X CHANGE/ADDITION				
! FILES	! PROG.NUMB.	! NAME			
! CHANGED					
! OR NEW	! HAR-1988B	! FLOPPY-RAN			
! FILES					

A new driver for the new floppy controller with double side/double density has been included.

! NORSK DATA A/S		! NORD SOFTWARE LIBRARY		! PAGE 1 OF 1	
! REVISION LOG					
! PRODUCT	! NAME			! ND-NUMBER	
	! LP-TEST			! 10324C	
! ISSUED	! DATE 82.01.15	! BY (INITIALS)	! SUP		
! REASON	! X ERROR CORRECTION	! DIFFERENT ENVIRONMENT			
	! X CHANGE/ADDITION				
! FILES	! PROG.NUMB. NAME				
! CHANGED					
! OR NEW	! HAR-1878C LP-TEST				
! FILES					

Errors have been corrected in the INTERFACE-TEST.

The program now includes the E-version of the Test Program Monitor.

A new command STRESS-BUSY-TEST has been added. This command makes the printer go busy by doing many line-feeds and form-feeds, and only printing one number on each line. Usable if problems with missing characters.

! PRODUCT	! NAME	! ND-NUMBER
!	! MEMORY	! 10324C
! ISSUED	! DATE 15 JAN 1982	! BY (INITIALS) PVDV
! REASON	! ERROR CORRECTION	! DIFFERENT ENVIRONMENT
!	! CHANGE/ADDITION	! * NEW PROGRAM
! FILES	! PROG.NUMB. NAME	
! CHANGED	! 203396A MEMORY	
! OR NEW	!	
! FILES	!	

The program permits to test systems with non correcting local memory, error correcting local memory and big (N10) multiport memory and it includes a simple "Service Program" which acts upon the multiport error log in order to print the contents of the "Error Log" and to scan the "Port Status". Also is it possible to run one DMA device in test mode, in parallel with the actual memory test. The DMA device can be either a "Small Disc Interface" (device no. 500) or a "Big Disc Interface" (device no. 1540).

! NORSK DATA A/S		! NORD SOFTWARE LIBRARY		! PAGE 1 OF 1	
! REVISION LOG					
! PRODUCT	! NAME			! ND-NUMBER	
	! TERMINAL-ASYNC			! 10324C	
! ISSUED	! DATE 82.01.15	! BY (INITIALS)	! SUP		
! REASON	! ERROR CORRECTION	! DIFFERENT ENVIRONMENT			
	! CHANGE/ADDITION	! X NEW PROGRAM			
! FILES	! PROG.NUMB. NAME				
! CHANGED					
! OR NEW	! 203198A	! TERMINAL-ASYNC			
! FILES					

This program substitutes TTEST-1206A and TERMBUF-1751A that will not be valid from now on.

The program can test terminals and all asynchronous interfaces. In addition to DISPLAY-TEST and KEYBOARD-TEST it is possible to SET- and FIND-SPEED on the interface, and to VERIFY-TERMINAL-SPEED.

The program is capable of running some tests on several devices at the time. Then DEFINE-DEVICE-TABLE has to be used.

The command TRANSLATE gives crossreference between device number, ident code, logical number and background program for terminals.

! NORSK DATA A/S			! NORD SOFTWARE LIBRARY			! PAGE 1 OF 1		
! REVISION LOG								
! PRODUCT	! NAME				! ND-NUMBER			
!	! MULTI				! 10324C			
! ISSUED	! DATE	! 15 JAN 1982	! BY (INITIALS)	! PVDV				
! REASON	! * ERROR CORRECTION				! DIFFERENT ENVIRONMENT			
	! * CHANGE/ADDITION							
! FILES	! PROG.NUMB.	! NAME						
! CHANGED	! HAR-1820N	! MULTI						
! OR NEW								
! FILES								

An error concerning Memory Out of Range when running DMA transfers in testmode has been corrected.

The program now includes the E-version of the Test Program Monitor.