

SHARE PROGRAM LIBRARY AGENCY



PROGRAM NUMBER

036025

University of Miami

1365 MEMORIAL DRIVE - CORAL GABLES, FLORIDA
(305) - 284-6257

SHARE PROGRAM LIBRARY SUBMITTAL FORM

SHARE PROGRAM LIBRARY AGENCY
Triangle Universities Computation Center
Post Office Box 12076
Research Triangle Park, North Carolina
27709 USA

SPLA CONTROL NUMBER:

This form should be completed and submitted with the program package to the SHARE Program Library Agency at the address shown above. Standards and instructions for submitting programs are in the "SHARE Reference Manual".

- (1) Program Number (to be filled in by SPLA)..... 360D-03.6.025
- (2) System Type (machine)..... S/360 (Developed On M65)
- (3) Search Key.....
MAP/II MACRO PRE-PROCESSOR
- (4) Programming Systems/Languages..... OS ASSEMBLER (F)
- (5) Author's Name and Address.....
Norm Casselman
Department 522
THE MAGNAVOX COMPANY
- (6) Direct Technical Inquiries to Name & Address (if different than Author) 4624 Executive Blvd.
Fort Wayne, Indiana 46808
- (7) Title of Program.....
MAP/II MACRO PRE-PROCESSOR
- (8) Submitter's Installation Membership Code..... MAG
- (9) Submitter's Own Program Identification and Suffix(Optional)..
- (10) Primary Subject Code..... 03-6 (Also 03-3, 03-7)
- (11) Minimum System Requirements 360-OS
- (12) New or Revision Code (if revision, show prior Program Number in Item 1) N
- (13) Year Completed..... 1974
- (14) Date of Submittal..... May 23, 1975
- (15) Documentation (number of original pages submitted)..... 5
- (16) Abstract (should contain sufficient information for a reader to determine the value of the program). Listed on the reverse side of this form are subjects which may serve as a guide for a descriptive abstract.

SHARE PROGRAM LIBRARY SUBMITTAL FORM

Subject Guide:

- a. Purpose
- b. Programming Language used
- c. Version and modification level or release number
- d. Field of application
- e. Type of routine (main program, subroutine, etc.)
- f. Specific description of machine requirements

ABSTRACT

MAP/II is a macro-driven pre-processor used to process input data sets consisting of 80 byte logical records under control of user-supplied macro routines. These macro routines may be provided with the source input or stored in a standard OS PDS in source form. Although MAP/II may be used in a number of different applications, it is specifically designed to pre-process FORTRAN source programs. The macro routines themselves are written in a modified FORTRAN language and are interpretively executed by MAP/II. All macro routines have decision-making instructions and branching capability.

MAP/II only recognizes macro commands from the source input - all other records are ignored and directly passed to an output data set. When macro commands are detected, control is transferred to the appropriate macro routine which generates the desired expanded records.

DISCLAIMER

~~Triangle Universities Computation Center (TUCC)~~
serves solely as the distribution agent for contributed programs and does not test or maintain them. They are distributed essentially in the original form submitted by the author. Neither TUCC nor SHARE, INC., makes any warranty, expressed or implied, as to the documentation, function, or performance of the contributed programs.

(Please attach additional pages if necessary).....Total pages attached 0

Permission to Publish

"I hereby give the SHARE Program Library Agency permission to reprint, reproduce, and distribute this program."

- (17) Signature of Submitter and Date Norman G. Casselman MAY 23 1975
- (18) Signature of Installation Addressee James E. Loucky 5/27/75

MAP/II INSTALLATION GUIDE

The distribution tape reel provided contains the MAP/II Pre-processor in both object and source (assembler) forms, two sample programs, the MAP/II User's Manual, cataloged procedure MAP2, Assembler macros to assemble the source form of MAP/II, and six sets of JCL to accomplish the retrieval and storage of the above items.

STEP 1

Punch the first file on cards. This file contains the JCL necessary to complete the remaining steps. The following JCL may be used to retrieve this file:

```
//PNCHMAP2 JOB .....
//PUNCHJCL EXEC PGM=IEBPTPCH,REGION=60K
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD UNIT=TAPE,VOL=SER=MAPTWO,DISP=OLD,
// LABEL=(1,NL,,IN),DCB=(RECFM=FB,LRECL=80,BLKSIZE=800)
//SYSUT2 DD SYSOUT=B
//SYSIN DD *
PUNCH MAXFLDS=1
RECORD FIELD=(80)
/*
//
```

The remaining steps refer to sets of JCL punched in this step. Each step title corresponds to a comment card preceding the JCL set to be used.

STEP 2

LINK EDIT MAP/II INTO SYS1.LINKLIB

The load module is placed into SYS1.LINKLIB. If this library is not acceptable to your installation, the SYSLMOD DD card must be modified.

STEP 3

CREATE MAP/II SYMBOLIC MACRO LIBRARY SYS1.MAPLIB

This data set must be present to run the sample programs. The DCB BLKSIZE, UNIT, and Volume Serial number parameters must be specified before running this step.

STEP 4

STORE MAP/II PROCEDURE IN SYS1.PROCLIB

This procedure may require the addition of a STEPLIB DD card if the library in STEP 2 was changed.

STEP 5

PUNCH SAMPLE PROGRAMS TO CARDS

The JCL necessary to execute both sample programs is also included in this file. The MAP2 cataloged procedure is required as well as the symbolic macro library created in STEP 3. JOB cards must be supplied.

STEP 6

PRINT MAP/II USER'S MANUAL

The user's manual should be printed at 6 lines per inch. The finished manual can be bursted and cut to 8½ by 11 inches. The JCL, as provided, produces one copy of the user's manual.

The printer on which the manual is generated should be equipped with print chain "PN", "QN", "SN", or "TN". A 3780 should be equipped with the 63 EBCDIC typebar. In any case, the following special characters appear in the manual:

* : ; _ ' " = & < () . , / | # \$ - +

THE FOLLOWING STEPS ARE REQUIRED ONLY IF MAP/II IS TO BE GENERATED FROM THE ASSEMBLER SOURCE.

STEP A

LOAD MAP/II ASSEMBLY MACROS INTO PDS MAP2.MACROS

This step creates a source library to store macro definitions to be used during assembly of every MAP/II module. The DCB BLKSIZE, UNIT, and Volume Serial number parameters must be specified before running this step.

STEP B

ASSEMBLE MAP/II MODULES

A procedure is provided which may be run in-line or stored in SYS1. PROCLIB (JCL not included). The symbolic parameter LABEL may be coded on the EXEC card to define the position of the file on the tape. Only code the file number - other label information is contained within the procedure. For example, to assemble the documentation module code:

```
// EXEC MAP2ASM,LABEL=6
```

The output of the assembler is directed towards a card punch. After all modules have been assembled, the object decks may be included in the job run under STEP 2. MAP/II consists of 17 object decks, the first of which should be the object deck with ID MAP2. NOTE - - the documentation module is not needed for the MAP/II load module. It is provided only for reference, documentation, and modification purposes.

Should any questions, problems, or suggestions arise, please direct them to:

Norm Casselman (Installation, coding, applications)
or (219) 482-4411 Extension 5109 or 5124

Max Buckles (Applications)
(219) 482-4411 Extension 5185 or 5195

THE MAGNAVOX COMPANY (MAG)
Department 522
4624 Executive Blvd.
Fort Wayne, Indiana 46808

MAGNETIC TAPE KEY

All files are EBCDIC and have a character constant in record positions 73-76. Each record within a character constant group is numbered in ascending order starting with one(1) and incrementing by one(1). This numerical sequence occupies positions 77-80. Any exceptions are noted below.

<u>LABEL</u>	<u>RECFM/BLKSIZE/LRECL</u>	<u>IDENTIFICATION</u>	<u>CONTENTS</u>
1	FB/800/80	"JCL"	Job Control Language
2	F/80	"MAP2","\$M01"- "\$M16"	MAP/II Object Deck
3	FBA/900/90	"USER" (position 83-86)sequence in 87-90	MAP/II User's Manual
4	FB/800/80	"SAM1","SAM2"	Sample Programs
5	FB/800/80	"MACR"	MAP/II Assembly Macros
6	FB/800/80	"DOCU"	MAP/II Documentation Module (Assembler source)
7	FB/800/80	"MAP2"	CSECT "MAP2XEQ" (Assembler source)
8-23	FB/800/80	"CS01"- "CS16"	CSECTs "\$MAP01" thru "\$MAP16" (Assembler source)

A tape mark appears at the end of each file for a total of 23 tape marks.

MAGNETIC TAPE RECORD COUNTS

<u>LABEL</u>	<u>COUNT</u>
1	82
2	493
3	2026
4	103
5	711
6	909
7	2090
8	184
9	105
10	50
11	61
12	138
13	83
14	71
15	178
16	86
17	125
18	63
19	166
20	563
21	248
22	320
23	76
<hr/>	
8931 total records	