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INCORPORATED
Equipment Group   Dallas, Texas

PD, INTRODUCTION TO TX990/TXDS PACKAGE-990

TI-0023-C

THIS MANUAL CONTAINS DOCUMENTATION FOR THE TX990/TXDS PACKAGE,
P/N 937863-0003. THE VERSION NUMBER OF THE SOFTWARE IS 2.1.
WHENEVER CONTACTING TEXAS INSTRUMENTS ABOUT THIS SOFTWARE, IT
IS NECESSARY TO HAVE THE PART NUMBER AND VERSION AVAILABLE TO
UNIQUELY IDENTIFY THE MATERIALS BEING USED.

LIST OF MATERIALS

THE FOLLOWING MATERIALS ARE INCLUDED IN THIS PACKAGE:

1.   THIS DOCUMENTATION MANUAL.

2.   MODEL 990 COMPUTER TERMINAL EXECUTIVE DEVELOPMENT
     SYSTEM (TXDS) PROGRAMMER'S GUIDE - P/N 946258-9701

3.   MODEL 990 COMPUTER TX990 OPERATING SYSTEM
     PROGRAMMER'S GUIDE - P/N 946259-9701

4.   TMS990 MICROPROCESSOR ASSEMBLY LANGUAGE GUIDE
     P/N 943441-9701

5.   5 DISKETTES.

    A.   TX990 PARTS - P/N 937803-0001
         THIS DISKETTE CONTAINS THE TX990 OBJECT
         MODULES AND UTILITIES.   THE OBJECT MODULES
         ARE REQUIRED DURING SYSTEM GENERATION OF
         A TX990 OPERATING SYSTEM.   SEE P/N
         937803-9901 FOR A DETAILED DESCRIPTION
         OF THE DISKETTE CONTENTS.

    B.   913VDT TXDS SYSTEM - P/N 937803-0002
         THIS DISKETTE CONTAINS TXDS SOFTWARE
         DEVELOPMENT UTILITIES AND A TX990 OPERATING SYSTEM
         WITH THE FOLLOWING FEATURES:

        1.   913 VDT IS THE SYSTEM CONSOLE

        2.   2 DISKETTE DRIVES

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3. LINE PRINTER

4. COMPLETE TX990 FILE MANAGEMENT SUPPORT

5. PARTIAL OCP — EX, LP, AL, AND RL VERB SUPPORT

6. SYSGENED TO SUPPORT FORTRAN

SEE P/N 937803-9902 FOR A DETAILED DESCRIPTION

OF THE DISKETTE CONTENTS.

C. 733 ASR TXDS SYSTEM — P/N 937803-0003

THIS DISKETTE CONTAINS TXDS SOFTWARE DEVELOPMENT

UTILTIES AND A TX990 OPERATING SYSTEM WITH THE

FOLLOWING FEATURES:

1. 733 ASR IS THE SYSTEM CONSOLE

2. 2 DISKETTE DRIVES

3. COMPLETE TX990 FILE MANAGEMENT SUPPORT

SEE P/N 937803-9903 FOR A COMPLETE DESRIPTION

OF THE DISKETTE CONTENTS.

D. 911 VDT SYSTEM P/N 937803-0006

THIS DISKETTE CONTAINS TXDS SOFTWARE DEVELOPMENT
UTILTIES AND A TX990 OPERATING SYSTEM WITH THE
FOLLOWING FEATURES:

1. 911 VDT IS THE SYSTEM CONSOLE

2. 2 DISKETTE DRIVES

3. LINE PRINTER

4. COMPLETE TX990 FILE MANAGEMENT SUPPORT

5. PARTIAL OCP - EX, LP, AL, AND RL VERB SUPPORT

6. SYSGENED TO SUPPORT FORTRAN

SEE P/N 937803-9906 FOR A DETAILED DESCRIPTION OF
THE DISKETTE CONTENTS.

E. TXDS UTILITIES - P/N 937803-0005

THIS DISKETTE CONTAINS ADDITIONAL TXDS UTILITIES.
SEE P/N 937803-9905 FOR A COMPLETE DESCRIPTION OF
THE CONTENTS.

RELEASE 2.1 MODIFICATIONS

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THE FOLLOWING IS A LIST OF THE MODULES CHANGED IN THE TX990/TXDS
RELEASE 2.1.   EACH CHANGE LISTS THE MODULE NAME, REVISION NUMBER,
MODULE TITLE, AND GIVES A BRIEF DESCRIPTION OF THE CHANGE.

1. FMFBSP, *A, FMP FORWARD AND BACKSPACE PROCESSOR

        FIXES BUGS IN BACKSPACE OF RELATIVE RECORD AND SEQUENTIAL

        FILES.

2. FMOPEN, *A, FMP OPEN PROCESSOR

        FIXES OPEN OF RELATIVE RECORD FILES WITH SHARED ACCESS

        AND CHANGES ACCESS FLAGS TO BE DX10 3.0 COMPATABLE.

3. FMCLOS, *A, FMP CLOSE PROCESSOR

        A) UNUSED DISKETTE ALLOCATION UNITS WILL BE RETURNED

            AFTER WRITE-EOF/CLOSE SEQUENCE.

        B) FCB IS WRITTEN CORRECTLY AFTER DISC FULL ERROR.

            SOLVES AU LOSS PROBLEM.

4. OCPTBL, *B, OCP TABLES

        MODIFIED TO OUTPUT ERROR CODE INSTEAD OF "UNDEFINED ERROR".

5. OCPPRC, *B, OCP PROCEDURE

        A) MODIFIED TO OUTPUT ERROR CODE INSTEAD OF "UNDEFINED ERROR"

        B) MODIFIED TO RETURN EOF MESSAGE WHEN EOF ENCOUNTERED WHILE

            FORWARD SPACING.

6. OCPLRT, *B, OCP LOAD PROGRAM

        MODIFIED TO RELEASE LUNO 2 AFTER LOADING PROGRAM.

7. OCPIOU, *B, OCP REWIND, FORWARD AND BACK SPACE

        MODIFIED TO FIX REWIND PROBLEM WHICH CAUSED A SYSTEM CRASH

        AFTER A SECOND REWIND OPERATION.

8. LPDSR, *B, LINE PRINTER DSR

        THE DSR NOW SUPPORTS THE WRITE DIRECT OPCODE WHICH IS USED

        TO ACCESS THE 810 LINE PRINTER CARRIAGE CONTROL CAPABILITIES.

9. IOSUPR, *B, I/O SUPERVISOR

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HAS BEEN MODIFIED TO ALLOW A SYSTEM TO BE DEFINED WITH NO LUNOS.

ALSO, CHANGES WERE MADE SUCH THAT UNDEFINED REFERENCES DO NOT

OCCUR IF FURSVC IS NOT INCLUDED IN THE SYSTEM.

10. FPYDSR, *A, FLOPPY DSR

DSR NOW ALLOWS ACCESS TO THE LAST PARTIAL

ALLOCATION UNIT ON THE DISKETTE.

11. TXROOT, *B, TX990 KERNAL

ADDED ENTRY TO THE SYSTEM TABLE TO POINT AT THE NAME OF

THE DEFAULT LINE PRINTER DEFINED DURING SYSTEM GENERATION.

12. TXEND, *B, DUMMY DEFINITION MODULE

ADDED DUMMY ENTRY FOR ASSIGN AND RELEASE LUNO FOR

CASE WHERE FURSVC NOT PRESENT IN THE SYSTEM.

13. SVC913, *B, 913 VDT UTILITY PROCESSOR

MODIFIED TO ALLOW OPEN AND OTHER FUNCTIONS DURING

THE SAME $1A_{16}$ SVC.

14. SVC911, *A, 911 VDT UTILITY PROCESSOR

MODIFIED TO ALLOW OPEN AND OTHER FUNCTIONS DURING

THE SAME $1A_{16}$ SVC.

15. CNTROL, *A, CONTROL PROGRAM

A) FIXED ERROR IN OUTPUTTING TIME AND DATE WHEN TIME

AND DATE HAVE NOT BEEN INITIALIZED.

B) THE NAME OF THE DISC DRIVE FROM WHICH A PROGRAM IS

LOADED IS NOW SAVED IN THE PROGRAM PROMPT FIELD IN

COMMON.

C) A SLASH IN A FILE PATHNAME NOW INDICATES THAT A DEFAULT

EXTENSION IS TO BE APPLIED.   NO SLASH INDICATES A BLANK

EXTENSION IS TO APPLIED.

16. FILESV, *A, FUR SVC PROCESSOR

A) ADDED THE RESTRICTION THAT AN OPENED FILE CANNOT BE

COMPRESSED OR DELETED

    B) ERROR CODE IS RETURNED ON AN ATTEMPT TO DELETE A

       NON-EXISTENT FILE.

17. OBJMGR, *C , OBJECT MANAGER UTILITY
    GENTX, *B, SYSTEM GENERATION PROGRAM
    IBMUTL, *A, IBM CONVERSION UTILITY
    UTILITY FLAGS IN ASSIGN CALLS CHANGED TO ALLOW EXECUTION

    ON DX10 3.0.

18. DXOBJM, **, DX10 2.2 OBJECT MANAGER

    AN OBJMGR MODIFIED TO RUN ON DX10 R2.2 HAS BEEN CREATED.

19. GNTXDX, **, DX10 R2.2 GENTX

    A GENTX MODIFIED TO RUN ON DX10 R2.2 HAS BEEN CREATED.

20. SYSUTL, *A, SYSTEM UTILITY

    A) SET SYSTEM FILE VERB ERROR WHICH CAUSED A SYSTEM CRASH

       IF AN INVALID PARAMETER WAS ENTERED HAS BEEN FIXED.

    B) DEFAULT OUTPUT DEVICE PROCESSING HAS BEEN MODIFIED

       TO ENHANCE ITS OPERATION.

21. INITDS, *A, INITIALIZE DISKETTE

    INITDS NOW COPIES THE TXBOOT TO THE DISKETTE BEING

    INITIALIZED.

22. TXPROM, **, PROM PROGRAMMER

    TXPROM IS A NEW UTILITY. ALSO, A SET OF STANDARD PROM

    PROGRAMMING FILES HAS BEEN SUPPLIED.

23. BNPFHL, **, BNPF - HIGH/LOW UTILITY

    BNPFHL IS A NEW UTILITY.

24. ALUNIT, *A, FUR ALLOCATE AU

    ERROR FIXED THAT PROHIBITED EXTENDING A FILE WHICH

    HAD BEEN ALLOCATED AU 333.

25. FLPDSR, **, FAST LINE PRINTER DSR

    NEW DSR TO SUPPORT THE 2230 AND 2260 LINE PRINTERS

    HAS BEEN SUPPLIED.

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26. EMUDSR, **, AMPL TMS9900 EMULATOR DSR
    TRADSR, **, AMPL LOGIC-STATE TRACE MODULE DSR
    EVENTK, **, AMPL EVENT KEY PROCESSOR

    THE MODULES REQUIRED TO SUPPORT THE AMPL MIRCOPROCESSOR

    PROTOTYPING LAB HAVE BEEN INCLUDED IN THE TX990 PACKAGE.

    THESE MODULES WILL ONLY BE USED IF AN AMPL PACKAGE IS

    PURCHASED.

PROBLEMS AND PATCHES

    A CURRENT LIST OF KNOWN PROBLEMS AND/OR PATCHES IS INCLUDED

    AS PART OF THIS DOCUMENTATION.   PLEASE REFER TO THE PROBLEM

    NOTIFICATION DOCUMENT BEFORE USING THE SOFTWARE.

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