DX10 TIFORM Object Installation

Part No. 2250373-9701 *D
February 1984

Printed in U.S.A.

Contents

READ THIS DOCUMENT BEFORE ATTEMPTING TO USE THIS OBJECT KIT. THIS DOCUMENT DESCRIBES RELEASE LEVEL 3.3.0 OF THE DX10 TIFORM OBJECT INSTALLATION MEDIA, PART NUMBERS 2250327-1601 OR 2250327-1603 AND 2250327-1604.

TEXAS INSTRUMENTS ASSUMES NO RESPONSIBILITY FOR MODIFICATIONS MADE TO THIS OBJECT KIT.

Section 1

Introduction

1.1 GENERAL INFORMATION

Be sure to copy and/or write protect the installation media. For copy procedures, refer to the DX10 Operating System Operations Guide, part number 946250-9702. Also, consult the TIFORM Release Information, part number 2268526-9901 before beginning this installation.

Some System Command Interpreter (SCI) commands in this document are presented in batch format. You can execute them by entering the commands exactly as shown by using interactive prompting from the SCI. For a discussion of the batch command format, refer to the DX10 Operating System Operations Guide.

1.2 MEDIA DEFINITION

Product shipments are made in four formats:

* Hard Disk -- A disk pack that contains the object.

* Diskettes -- Three double-sided, double density (DSDD) diskettes that contain the object:

  TIFRMXF1 Contains the TIFORM object directories.

  TIFRMXF2 Contains any patches needed to make TIFORM perform correctly.

  TIFRMXF3 Contains four directories that are not installed: DEMOINS, LINKD, PASCAL, and TESTFORM. These are used for developing and testing TIFORM applications as explained in the Release Information. (On other media, these directories are on the same volume as the object.)

* Magnetic Tape - A magnetic tape that contains the object.

* Add-On - A disk pack that contains the TIFORM object along with one or more other products.

The installation instructions in this document assume that the object files are accessible by a synonym. Section 2 describes how to prepare the media so that the files can be accessed by a synonym.

1.3 INSTALLATION PROCEDURE

Before you can install TIFORM you must prepare the media and assign the synonym TIFRMINS to the volume or directory that contains the object directories and installation batch streams. The installation itself involves the following steps:

1. Install the TIFORM object by executing the ITIFORM command.

2. Patch the TIFORM object by executing the PTIFORM command.

3. Verify the installation by testing the FDL Compiler, Form Executor, and Interactive Screen Generator/Editor.

1.4 SYSTEM REQUIREMENTS

To successfully perform this installation procedure, you must have a functioning DX10 system, version 3.6 or later.

Section 2

Preparing for Installation

2.1 INTRODUCTION

Before you install the TIFORM object, you must install the object media and assign the synonym TIFRMINS to the volume or directory that contains the object. The following paragraphs describe how to prepare each type of media.

2.2 DISK FORMAT

The name of the TIFORM object disk is TIFRMXH. It contains all the object modules needed to run TIFORM, a file of TIFORM patches, and some additional directories used for developing and testing TIFORM applications. To prepare for the installation, perform the following steps:

1. Load the disk in an available drive on a functioning DX10 system, version 3.6 or later.

2. Install the disk by executing the following command:

   ```
   IV UNIT=DSxx, VOLUME=TIFRMXH
   ```

   where:

   DSxx is the device name of the drive where the disk has been loaded.

3. Enter the following command to assign the synonym TIFRMINS to the object installation disk:

   ```
   AS SYN=TIFRMINS, VALUE=TIFRMXH
   ```

Now proceed to Section 3 for instructions for installing the object.

2.3 DISKETTE FORMAT

The names of the TIFORM object diskettes are TIFRMXF1, TIFRMXF2, and TIFRMXF3. TIFRMXF1 contains all the object modules needed to run TIFORM. TIFRMXF2 contains the file of TIFORM patches. TIFRMXF3 contains some additional directories used for developing and testing TIFORM applications. To prepare for the installation, perform the following steps:

1. Load the diskette labeled TIFRMXF1 in an available drive on a functioning DX10 system, version 3.6 or later.

2. Install the disk by executing the following command:

   IV UNIT=DSxx, VOLUME=TIFRMXF1

   where:

   DSxx is the device name of the drive where the diskette has been loaded.

3. Enter the following command to assign the synonym TIFRMINS to the object installation diskette:

   AS SYN=TIFRMINS, VALUE=TIFRMXF1

Now proceed to Section 3 for instructions for installing the object.

2.4 MAGNETIC TAPE FORMAT

When your receive the TIFORM object on a magnetic tape reel or cartridge, you must first move the object files and directories to a disk before you begin the installation process. To prepare for the installation, perform the following steps:

1. Enter the following command to assign the synonym TIFRMINS to the pathname of a scratch directory:

   AS SYN=TIFRMINS, VALUE=<volume>.TAPECOPY

   In this command, <volume> must be the volume name of the disk that is to contain the scratch directory.

2. Enter the following command to create a scratch directory for the installation:

   CFDIR PATHNAME=TIFRMINS, M=50

3. Load the magnetic tape reel or cartridge in an available drive on a functioning DX10 system, version 3.6 or later.

4. Enter the following command to move the contents of the magnetic tape reel or cartridge to the scratch directory you created:

   RD SEQ=MTxx, DIR=TIFRMINS, LIST=<pathname>

   where:

MTxx	is the name of the tape drive containing the TIFORM release tape.
<pathname>	is the pathname for the listing of the directory restored from the magnetic tape. You can examine this file by executing a Show File (SF) or Print File (PF) command.

5. Unload the magnetic tape.

Now proceed to Section 3 for instructions for installing the object.

2.5 ADD-ON FORMAT

In an add-on package, the TIFORM object is in the directory TIFRMXH on the installation disk. The other directories on the disk contain other products. To prepare for installation, perform the following steps:

1. Load the add-on disk in an available drive on a functioning DX10 system, version 3.6 or later.

2. Install the disk using the following command:

   IV UNIT=DSxx, VOLUME=<volume>

   where:

   DSxx — is the drive where the add-on disk is loaded.

   <volume> — is the volume name of the add-on disk. You can find the volume name marked on the disk or you can execute a Show Volume Status (SVS) command to obtain the volume name.

3. Enter the following command to assign the synonym TIFRMINS to the directory that contains the TIFORM object:

   AS SYN=TIFRMINS, VALUE=<volume>.TIFRMXH

Now proceed to Section 3 for instructions for installing the object.

Section 3

Installing the Object

This section describes the procedure for installing the TIFORM object on a DX10 system. The installation process deletes any previously installed version of TIFORM and installs the new TIFORM components on the system disk. To install the TIFORM object, perform the following steps:

1. First, enter the following SCI command to gain access to the TIFORM installation menu and command library:

   ```
   .USE TIFRMINS,.S$PROC
   ```

2. Assign the synonym DSC to the volume name of the DX10 system disk:

   ```
   AS SYN=DSC, VALUE=<volume>
   ```

   where:

   <volume> is the volume name of the system disk where you want to install TIFORM.

3. Enter the Install TIFORM (ITIFORM) command and respond to its prompts as described below:

   ```
   [ ]ITIFORM

   INSTALL TIFORM
    TARGET SYSTEM VOLUME NAME: <volume>
           LISTING ACCESS NAME: <pathname>
   ```

   where:

   <volume> is the volume name of the system disk where you want to install TIFORM. The initial value of this prompt is the pathname that you assigned to the synonym DSC.

   <pathname> is the pathname of the file where you want to receive the listings for the installation process.

If ITIFORM detects no errors, the following message appears:

TIFORM OBJECT INSTALLATION IN PROGRESS

This process takes about eight to twenty minutes to execute. During this time you can check the progress of the installation by entering the Show Background Status (SBS) or Wait (WAIT) command.

4. When the execution has completed, you receive the following message:

   n ERRORS INSTALLING TIFORM

   If the error count is not zero, the listing file indicates the cause of the error. If the installation is error-free, the listing file contains a disk map of the .S$TIFORM directory showing the files installed. The installation process also installs the following tasks on the program file .SSDS: EXECT911, FDLC, ISGE, FDLBUILD, and EXECT820.

Now proceed to Section 4 for instructions for patching the installed object.

Section 4

Patching the Object

4.1 INTRODUCTION

Before you can use TIFORM, you must apply patches to the object. To apply the patches, follow the instructions in this section.

4.2 PATCHING AFTER INSTALLATION

When you install TIFORM from disk, tape, or add-on, your patches are included with the TIFORM object. When you install from diskettes, you must perform these steps to unload the object diskette and load the diskette that contains the patches.

1. Enter the following command to release the TIFORM installation command library:

   ```
   .USE
   ```

2. Enter the following command to unload the object diskette:

   ```
   UV VOLUME=TIFRMXF1
   ```

3. Unload TIFRMXF1 and load TIFRMXF2. Then, enter the following command to install TIFRMXF2:

   ```
   IV UNIT=DSxx, VOLUME=TIFRMXF2
   ```

   where:

   DSxx is the drive where TIFRMXF2 is loaded.

4. Enter the following command to assign the synonym TIFRMINS to TIFRMXF2:

   ```
   AS SYNONYM=TIFRMINS, VALUE=TIFRMXF2
   ```

5. Enter the following command to access the TIFORM installation command library on TIFRMXF2:

   ```
   .USE TIFRMINS, .S$PROC
   ```

To apply the TIFORM patches, enter the Patch TIFORM (PTIFORM) command from the TIFORM installation menu. Respond to the prompts as described.

```
[ ]PTIFORM

PATCH TIFORM
 TARGET SYSTEM VOLUME NAME: <volume>
TIFORM PATCH FILE PATHNAME: <patchfile>
  TIFORM COMMAND DIRECTORY: <commands>
       LISTING ACCESS NAME: <listfile>
```

where:

<volume> is the volume name of the disk where TIFORM is installed.

<patchfile> is TIFRMINS.PT.MTASK, the pathname of the TIFORM patchfile located on the object installation disk. If you receive a patch update and copy the patch file to a new location, use the pathname of the new copy.

<commands> is the command library where the TIFORM commands (such as XFDLC) are installed. Usually this is .S$PROC.

<listfile> is the pathname of a file to receive listings from the patch process.

If PTIFORM detects no errors, the following message appears:

```
TIFORM PATCHING IN PROGRESS
```

After the patch procedure has completed, you receive the following message:

```
n ERRORS ON TIFORM MULTI-TASK PATCH STREAM
```

If patch error count is not zero, examine the listing file to find and correct the error. If the completion message reports no errors, then the patches have been applied successfully and you can proceed to Section 5 to verify the installation.

4.3 APPLYING PATCHES AT A LATER DATE

In addition to any patches you receive with the TIFORM object, you can also use the PTIFORM command to apply any TIFORM patches you receive at a later date. To do so, you need access to the PTIFORM command, which is currently in TIFRMINS.PTIFORM. Paragraph 5.5 provides instructions for copying PTIFORM and other components of TIFORM included with the object.

Section 5

Verifying the Installation

5.1 INTRODUCTION

Before you begin using TIFORM, you must run three tests to verify the success of a TIFORM installation. If you have just completed the object installation, enter the following command to return to your usual SCI main menu:

```
.USE <libraries>
```

where:

<libraries> is your list of SCI command libraries. One of these must be the library that contains the TIFORM commands--usually .S$PROC.

The object media contains everything you need to run the tests. When you install TIFORM from disk, tape, or add-on, your test materials are included with the TIFORM object. When you install from diskettes, you must perform these steps to unload the patch diskette and load the diskette that contains the test materials.

1. Enter the following command to unload the object diskette:

   ```
   UV VOLUME=TIFRMXF2
   ```

2. Unload TIFRMXF2 and load TIFRMXF3. Then, enter the following command to install TIFRMXF3:

   ```
   IV UNIT=DSxx, VOLUME=TIFRMXF3
   ```

   where:

   DSxx is the drive where TIFRMXF3 is loaded.

3. Enter the following command to assign the synonym TIFRMINS to TIFRMXF3:

   ```
   AS SYNONYM=TIFRMINS, VALUE=TIFRMXF3
   ```

5.2 TEST 1: FDL COMPILER VERIFICATION

Enter the following command to compile the test program and test the FDL compiler:

```
XFDLC SOURCE=TIFRMINS.TESTFORM.TEST2,
      OBJECT=.S$TIFORM.PROG,
      LIST=.LISTING
```

This command executes for approximately one minute on a quiet system. Enter the Wait (WAIT) command to wait for completion.

At the end of a successful compilation, you receive the following message:

```
FDL ERROR COUNTS:  000 000 000 000/000 000 000 000 000 :
```

If this message does not appear, or any of the error counts is nonzero, refer to Appendix C of the TIFORM Reference Manual for an explanation and corrective action.

5.3 TEST 2: FORM EXECUTOR VERIFICATION

Enter the following command to execute the test program and test the Form Executor:

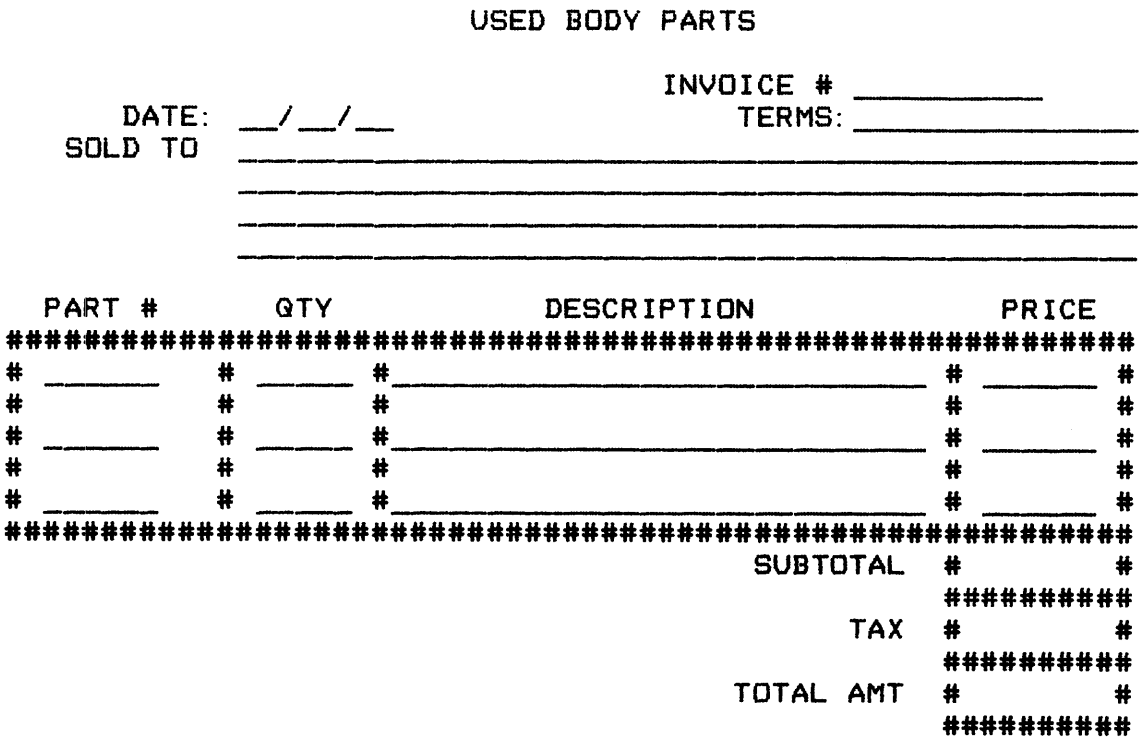
```
[ ] FORMTSTR
```

When the Form Tester menu appears, perform the following tests:

1. Enter 01 and press the Return key to open a form. Specify a program file of .S$TIFORM.PROG, a form name of FLAB01, and a terminal of ME. Press the Return key in response to the SURE? prompt. When the cursor reappears, press the Return key again.

2. Enter 20 and press the Return key to display the status of the Form Tester session. The FORM STATUS field and the OS STATUS field should be 00. Press the Return key to respond.

3. Enter 02 and press Return to prepare a segment. Specify a segment name of SLAB01 and a group name of SLAB01. Press the Return key in response to the SURE? prompt. The following image appears on the screen.



The box is displayed in graphic characters and the cursor is positioned in the INVOICE # field.

4. Press the Print key. A printout of the figure above is printed on the device assigned to TIFORM and a confirmation message appears at the bottom of the screen. Press the Return key to acknowledge the message and return the cursor to the INVOICE # field.

5. Press the Previous Field key. Then, press the Return key to return to the Form Tester main menu.

6. Enter 20 and press the Return key to display the new status of the Form Tester session. The FORM STATUS field is 01, the TEXT LENGTH is 200, and the GROUP LENGTH is 408. All other fields have a value of 0. Press Return to go back to the Form Tester main menu.

7. Enter 22 and press Return. Respond Y to the SURE? prompt to exit the FORMTSTR.

This completes the verification of the Form Executor using the Form Tester. If any of the STATUS fields contain values other than those specified in the preceding, refer to Appendix C of the TIFORM Reference Manual for an explanation of the error.

5.4 TEST 3: ISGE VERIFICATION

To verify the installation of TIFORM's Interactive Screen Generator/Editor, you need to initialize a new segment and create the FDL from that segment. Refer to the ISGE tutorial in Section 4 of the TIFORM Reference Manual.

5.5 CONCLUDING THE INSTALLATION PROCESS

Once you have verified that the installed TIFORM performs correctly, you are ready to conclude the installation process. Before you unload the object media or delete the installation directory, you might wish to copy certain components of TIFORM that are included with the object media. If you decide not to save them, you can still access them later after preparing the object media for installation as described in Section 2. To conclude the installation process, perform the following steps:

1. Enter the appropriate commands from the following list to save the TIFORM components you wish to keep for later use:

   For removing TIFORM from the system:

   CC I=TIFRMINS.REMOVE, O=<pathname>.REMOVE

   For patching TIFORM at a later date:

   CC I=TIFRMINS.PTIFORM, O=<pathname>.PTIFORM

   For creating a linkable version of TIFORM:

   CD I=TIFRMINS.LINKD, O=<pathname>.LINKD

   where:

   <pathname> is a directory to hold the TIFORM parts.

2. If you have installed from tape, enter the following command to delete the scratch directory:

   DD PATHNAME=TIFRMINS, ARE YOU SURE?=YES

   Otherwise, enter the following command to unload the installation disk:

   UV VOLUME=TIFRMINS

3. Remove the installation disk, diskette, or tape from its drive.

4. Enter the following commands to delete the remaining synonyms used in the installation process:

```
AS SYNONYM=TIFRMINS, VALUE=""
AS SYNONYM=DSC, VALUE=""
```

This completes the installation of TIFORM.

Section 6

Removing TIFORM

If you wish to delete the installed TIFORM from your system, use the following procedure:

1. Assign the synonym DSC to the disk where TIFORM is installed using the following command:

   AS SYNONYM=DSC, VALUE=<volume>

   where:

   <volume> is the disk where TIFORM is installed.

2. Execute the batch stream named REMOVE, which is supplied on the installation media, by executing the following command:

   XB INPUT=<directory>.REMOVE, LISTING=<pathname>

   where:

   <directory> is the directory that contains the REMOVE batch stream.

   <pathname> is the pathname of the listing file for the operation.