

APPLICATION

REVISIONS

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RELEASE INFORMATION, DX10 POLLER, RELEASE 1.0.0-990

TEXAS INSTRUMENTS  
 INCORPORATED  
 DIGITAL SYSTEMS

drawing number  
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REV. \*\* SHEET 1 OF 11

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SECTION 1  
INTRODUCTION

1.1 GENERAL INFORMATION

The DX10 Poller application software contained in this package requires the following supporting DX10 software:

- o DX10 Operating System (Release 3.4 or later)
  - o DX 3780/2780 Emulator (Release 4.0 or later)
- and/or
- o DX10 Bubble Memory Terminal Support (BMTS-990)  
(Release 1.0 or later)

Before attempting to use the Poller application software, the user's system must be properly configured (via SYSGEN) to include the communication hardware to be utilized by the Poller software. The communications subsystem operation should then be verified using the respective support package, either DX3780 or BMTS-990, before executing the Poller software.

1.2 POLLER TEST DATABASES

The Poller software installation procedure generates sample databases on the user's system in the directory '.TESTPOLL'. These databases may be tailored to the user's particular configuration to test the poller installation. The file '.TESTPOLL.GUIDE' describes the changes which need to be made to use these sample databases. The files in this directory are not required for poller software operation; therefore, the user may delete the directory from the system disk after initial testing has been completed.

## SECTION 2

### OPERATING SYSTEM CONSIDERATIONS

#### 2.1 ASSIGNED SYNONYMS AND LUNOS

The DX10 Poller application software assigns the following synonyms:

'V' - assigned to the directory containing the Poller software.

The DX10 Poller software assigns the following Global Lunos:

>81 - assigned to 'V.P\$PROGA' (the Poller program file)

>82 - assigned to '.S\$COMMPF' (the DX3780 program file)

These synonyms and lunos are not released even when the Poller software is not executing.

## SECTION 3

### POLLER RUN-TIME CONSIDERATIONS

#### 3.1 POLLER SOFTWARE DIRECTORIES

The DX10 Poller application software uses a directory on the the system disk named `^POLLER^`. This directory is used by the Poller software to store information relative to the current execution, as well as temporary files by a few of the poller operation utilities. The files contained in the `^POLLER^` directory are as follows:

- `.POLLMSG` - contains Poller error messages; must never be deleted; is Delete and Write protected.
- `.TOCCUR` - contains information pertaining to the current or most recent occurrence of the Poller.
- `.PWDSxx` - contains the latest status for each terminal in the Terminal List for the particular occurrence (xx) of the Poller.
- `.PSDAXx` - contains the latest status for each line in the Poller Database for the particular occurrence (xx) of the Poller.
- others - temporary files created by the Poller operation utilities: RLS, RPS, RTS, LLF.

The `^POLLER^` directory is created with room for 400 files by the installation process. Whenever the Poller is executed, it creates a `^PWDSxx^` file and a `^PSDAXx^` file, where `^xx^` is replaced by the Run-time ID (or Occurrence number) of the Poller task. To avoid the problems which will result if the directory is allowed to become full, the user is advised to periodically clean out the directory. This cleaning must be done when the Poller is not currently executing and may be accomplished by using a Delete Directory (DD) command; since the `^POLLMSG^` file is protected against deletion, only those files which should be deleted will be.

## SECTION 4

### POLLER OPERATIONS

#### 4.1 3780 NOTES

##### 4.1.1 PS3780 OPERATIONS

The Presentation Service task for 3780 (PS3780) bids the 3780 Emulator (EM3780) for device CM0x associated with terminal ST0x but using the TCA for terminal 4x. For example, PS3780 would bid up EM3780 for device CM05 associated with station ST05 and using TCA 45. The reason for this is to give the PS3780, EM3780 and any tasks INVOKEd for the user a clean TCA with which to communicate and to avoid collision with ST0x Poller lines.

Therefore, even in a Poller system where only 3780 communication will be done, the user must still provide an ST0x for every CM0x in his system, even if there is no physical hardware to support the ST0x terminal.

##### 4.1.2 3780 POLLING WITH MORE THAN 4 LINES

Normal DX10 SYSGEN and 3780 BCD procedures do not permit the user to configure a system with enough System Table area to allow more than 4 lines to operate simultaneously using the 3780 emulator. When more than 4 lines are running, the SVC error '000E' is returned by DX10 when all lines are attempting concurrent sends or receives.

For users of the Poller software who require more than 4 lines, a patch is available which needs to be applied to the DX10 system to allow the system to handle up to 8 lines simultaneously. This information is available through the Customer Support Line.

##### 4.1.3 ENABLING EM3780 JOURNAL FILES WITH THE POLLER

An optional patch to the Poller software (Patch 1437) is provided to cause the PS3780 task to bid up EM3780 with an associated 3780 Journal file. Since these Journal files would be rather large for normal polling activity, the patch should only be enabled if the user's needs to debug the operation on a Poller CM0x line. The Journal file created is named '.JOURxx' for line CMxx.

This Poller patch requires that Patch 1413 for DX3780 also be applied, or the Journal file(s) will not be created.

## 4.2 TTY NOTES

### 4.2.1 MODIFIED BMTS-990 PARAMETERS

The Poller software, in particular the Presentation service routine (PSTTY765), modifies a few of the parameters associated with a TPD line; these are as follows:

- IN SERVICE - set to YES, when the line is activated.  
          - set to NO, when the line is deactivated.
- TERMINAL TYPE - set to 765.
- DUPLEX/ECHO - set to 1.
- BAUD - set according to settings in Terminal Database.

## 4.3 MISCELLANEOUS NOTES

- 4.3.1 If an ABM is specified in the Terminal Database, the PS task will request the ABM from the remote terminal. If the ABMs do not match, a Poller error (>5600) is returned, and the CALL or ANSWER log entry will show the ABM received (if any).

If no ABM is specified in the Terminal Database, the PS task still request the ABM from the remote terminal, but will not perform any checking on the received ABM.

SECTION 5

KNOWN 1.0 PROBLEMS

- 5.1 If the Poll Master Task (PMT) is terminated unexpectedly, via a system IPL, the Poller status commands (RPS, SPA, etc.) will show the previous occurrence as still being active.
  
- 5.2 The Poller can become inoperative if insufficient Intertask Communication space is provided in the SYSGEN. Refer to section 5 of the Poller Operations Manual for details.



## SECTION 6

### WARNINGS

- 6.1 The IDLE patch for 3780 (patch 1226) is R E Q U I R E D, or else a Receive (and other) commands will fail to complete if the file to be received does not exist or is empty. If the patch is installed, the operation will timeout and a '1011' error will be returned for the command.
- 6.2 In TTY mode, the DX10 MEMRES patch (P1317) is R E Q U I R E D, or else APO/ALD operations will appear to hang if the command is issued while the Poller is dialing a remote terminal. This patch is included in the DX10 3.4.2 patches.
- 6.3 Multiple 'ANSWER' from a single terminal may be enabled via the PIN command. This capability assumes that the user has designed his application such that the operations performed through the Activity Template and Terminal Procedure file will not destroy any files containing critical data.
- 6.4 If only TTY protocol is to be used by the Poller, then the user should execute the PATCH procedure and select the appropriate response. If the 3780 program file (.S\$COMMPF) is not in the system, an error will be generated when the 'POLL' command attempts to assign the Global Luno (>82) to that file.
- 6.5 The Poller installation cannot be applied to a system disk other than the system disk currently being used without modification of the installation batch file.

SECTION 7

NOTES TO USERS

- .1 In ANSWER mode, if the Answerback Memory (ABM) received from a terminal is less than 3 bytes, the terminal number displayed in the log file will be shown as '???'.
- 7.2 The TEST command bids the PS tasks and ERRLOG, and performs all other operations, similar to SPD; the difference is that no data is transferred over the communications line(s). This command should be used whenever new databases are used and before going 'live' with SPD.
- 7.3 The SPD and TEST commands write their completion messages directly to the screen on which the command was issued to prevent the message from getting lost if the TCA is full. Because of this, the user must press <RETURN> instead of <CMD> to continue.
- 7.4 The pathnames of DX10 disk files used by the Poller software
  - must not exceed 40 bytes in length
  - cannot include synonyms
  - cannot include dollar signs (\$)
- 7.5 Although not explicitly mentioned in the Poller manual, 3780 communication via the FCCC interface board is supported.
- 7.6 Wide Area Telephone Service (WATS) bands are supported through the Poller software. If not required, the default responses for WATS inputs in the Terminal Database and the Poller Database should be used.
- 7.7 The Poller software supports the Vadic MACS chassis. This chassis allows for multiple communications lines to be handled by a single Auto Call Unit (ACU). An optional patch is required to support this chassis (see PATCH command).
- 7.8 If the user patches the Poller at a later date without executing the PIN procedure, the user should make sure that the synonym 'PLINES' is set to the maximum number of lines for which the Poller is configured. The default for this value is 4 and will only have changed if a PIN command has been executed. The PATCH procedure will assume a 4-line configuration if PLINES is not set. For example, if the user's system is configured for 7 lines, the AS command should be as follows:

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AS SYNONYM=PLINES, VALUE=7

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