parallel

COLLABORATORS

	TITLE : parallel		
ACTION	*NAME*	*DATE*	*SIGNATURE*
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REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

parallel

1.1 parallel.doc

1.2 parallel.device/CMD_CLEAR

```
                NAME
    Clear -- clear the parallel port buffer

FUNCTION
    This command just RTS's (no buffer to clear)

IO REQUEST
    io_Message      mn_ReplyPort initialized
    io_Device       set by
                OpenDevice
                    io_Unit         set by
                OpenDevice
```

io_Command CMD_CLEAR (05)

1.3 parallel.device/CMD_FLUSH

NAME
Flush -- clear all queued I/O requests for the parallel port

FUNCTION
This command purges the read and write request queues for the
parallel device.

IO REQUEST
io_Message mn_ReplyPort initialized
io_Device set by
OpenDevice
io_Unit set by
OpenDevice
io_Command CMD_FLUSH (08)

1.4 parallel.device/CMD_READ

NAME
Read -- read input from parallel port

FUNCTION
This command causes a stream of characters to be read from the
parallel I/O register. The number of characters is specified in
io_Length.
The parallel.device has no internal buffer; if no read request has
been made, pending input (i.e. handshake request) is not
acknowledged.

IO REQUEST
io_Message mn_ReplyPort initialized
io_Device set by
OpenDevice
io_Unit set by
OpenDevice
io_Command CMD_READ (02)
io_Flags If IOF_QUICK is set, driver will attempt Quick IO
io_Length number of characters to receive.
io_Data pointer where to put the data.

RESULTS
io_Error -- if the Read succeded, then io_Error will be null.
If the Read failed, then io_Error will contain an error code.

SEE ALSO

parallel.device/PDCMD_SETPARAMS

1.5 parallel.device/CMD_RESET

```
                NAME
    Reset -- reinitializes the parallel device

FUNCTION
    This command resets the parallel device to its freshly initialized
    condition. It aborts all I/O requests both queued and current and
    sets the devices's flags and parameters to their boot-up time
    default values.

IO REQUEST
    io_Message      mn_ReplyPort initialized
    io_Device       set by
                OpenDevice
                    io_Unit         set by
                OpenDevice
                    io_Command      CMD_RESET (01)

RESULTS
    Error -- if the Reset succeded, then io_Error will be null.
        If the Reset failed, then the io_Error will be non-zero.
```

1.6 parallel.device/CMD_START

```
                NAME
    Start -- restart paused I/O over the parallel port

FUNCTION
    This command restarts the current I/O activity on the parallel
    port by reactivating the handshaking sequence.

IO REQUEST
    io_Message      mn_ReplyPort initialized
    io_Device       set by
                OpenDevice
                    io_Unit         set by
                OpenDevice
                    io_Command      CMD_START (07)

SEE ALSO

                parallel.device/CMD_STOP
```

1.7 parallel.device/CMD_STOP

```
                NAME
    Stop -- pause current activity on the parallel device

FUNCTION
    This command halts the current I/O activity on the parallel
    device by discontinuing the handshaking sequence.

IO REQUEST
    io_Message      mn_ReplyPort initialized
    io_Device       set by
                OpenDevice
                    io_Unit         set by
                OpenDevice
                    io_Command      CMD_STOP (06)

SEE ALSO

                parallel.device/CMD_START
                BUGS
     Using any other parallel.device command will restart IO.
```

1.8 parallel.device/CMD_WRITE

```
                NAME
    Write -- send output to parallel port

FUNCTION
    This command causes a stream of characters to be written to the
    parallel output register. The number of characters is specified in
    io_Length, unless -1 is used, in which case output is sent until
    a zero byte in the data: note that this is independent of setting
    EOFMODE in io_ParFlags and using the PTermArray to terminate the
    write.

IO REQUEST
    io_Message      mn_ReplyPort initialized
    io_Device       set by
                OpenDevice
                    io_Unit         set by
                OpenDevice
                    io_Command      CMD_WRITE (03)
    io_Flags        If IOF_QUICK is set, driver will attempt Quick IO
    io_Length       number of characters to transmit, or if set
                    to -1 send until zero byte encountered
    io_Data         pointer to block of data to transmit

RESULTS
    io_Error -- If the Write succeded, then io_Error will be null.
         If the Write failed, then io_Error will contain an error code.

SEE ALSO

                parallel.device/PDCMD_SETPARAMS
```

1.9 parallel.device/OpenDevice

```
NAME
    Open -- a request to open the parallel port

SYNOPSIS
    error = OpenDevice("parallel.device", unit, ioExtPar, flags)
    D0                 A0                 D0    A1        D1

FUNCTION
    This is an exec call that starts up the parallel.device.

    This function allows the requestor software access to the parallel
    device.  Unless the shared-access bit (bit 5 of io_ParFlags) is
    set, exclusive use is granted and no other access is allowed
    until the owner closes the device.  The PTermArray of the ioExtPar
    is initialized only if the EOFMODE bit is set in io_ParFlags.

INPUTS
    "parallel.device" - a pointer to literal string "parallel.device"
    unit - Must be zero for future compatibility
    ioExtPar - pointer to an IO Request block of structure IOExtPar
      to be initialized by the Open routine.  (see devices/parallel.h for
      definition)
      The io_ParFlags field must be set as desired (see shared-access
      description, above).  Note that this is not a standard IO Request
      structure.
    flags - Must be zero for future compatibility

RESULTS
     d0 -- same as io_Error
    io_Error -- if the Open succeded, then io_Error will be null.
        If the Open failed, then io_Error will be non-zero.

SEE ALSO
    exec/CloseDevice
```

1.10 parallel.device/PDCMD_QUERY

```
                NAME
    Query -- query parallel port/line status

FUNCTION
    This command return the status of the parallel port lines and
    registers.

IO REQUEST
    io_Message      must have mn_ReplyPort initialized
    io_Device       set by
                OpenDevice
```

```
                    io_Unit         set by
                OpenDevice
                    io_Command      PDCMD_QUERY (09)

RESULTS
    io_Status        BIT  ACTIVE  FUNCTION

                      0     high   printer busy toggle (offline)
                      1     high   paper out
                      2     high   printer selected on the A1000
                                   printer selected & serial "Ring
                                   Indicator" on the A500/A2000
                                   Use care when making cables.
                      3      -     read=0,write=1
                     4-7           reserved

BUGS
    In a earlier version of this AutoDoc, BUSY and PSEL were reversed.
    The function has always been correct.
```

1.11 parallel.device/PDCMD_SETPARAMS

```
                NAME
    SetParams -- change parameters for the parallel device

FUNCTION
    This command allows the caller to change parameters for the
    parallel port device. It will disallow changes if any reads or
    writes are active or queued.  The PARB_EOFMODE bit of io_ParFlags
    controlls whether the io_PTermArray is to be used as an additional
    termination criteria for reads and writes.  It may be set directly
    without a call to SetParams, setting it here performs the
    additional service of copying the PTermArray into the device
    default array which is used as the initial array for subsequent
    device opens. The Shared bit can be changed here, and overrides the
    current device access mode set at
                OpenDevice
                 time.

IO REQUEST
    io_Message      mn_ReplyPort initialized
    io_Device       preset by
                OpenDevice
                    io_Unit         preset by
                OpenDevice
                    io_Command      PDCMD_SETPARAMS (0A)
                     NOTE that the following fields of your IORequest
                    are filled by Open to reflect the parallel device's
                    current configuration.
    io_PExtFlags    must be set to zero, unless used
    io_ParFlags     see definition in parallel.i or parallel.h
                     NOTE that x00 yields exclusive access, termarray
                    inactive.
    io_PTermArray   ASCII descending-ordered 8-byte array of
```

```
                    termination characters. If less than 8 chars
                    used, fill out array w/lowest valid value.
                    Terminators are used only if EOFMODE bit of
                    io_Parflags is set. (e.g. x512F040303030303 )
                    This field is filled on
                OpenDevice
                 only if the
                    EOFMODE bit is set.

RESULTS
    io_Error -- if the SetParams succeded, then io_Error will be null.
        If the SetParams failed, then io_Error will be non-zero.
```