
PROGRAMMER'S MANUAL

This is the programmers manual page for the MPX OS Version R1. It contains information necessary to manipulate the code and therefore the system.

This manual will be organized by file. The file name will be the section, and the contents will be the function header, description, parameters, and any returned values.

SERIAL.C

FUNCTION CALL:

serial_poll

DESCRIPTION:

Continuously polls (checks) the LSR (Line Status Register) for data and stores it one bit at a time in to a user-instantiated buffer, until either the buffer is full or a null terminator is encountered

PARAMETERS

device dev - device to read from
char *buffer - the user-provided buffer to write into
size_t len - size of the buffer

RETURN

size_t bytes_read - the amount of bytes read

COMMHAND.C

FUNCTION CALL:

commhand

DESCRIPTION:

Checks buffer from polling function to see if user input matches desired function input. If it does, proceed with command. If not, exit.

PARAMETERS

void

RETURN

void

FUNCTION CALL:

help

DESCRIPTION:

Provides instructions to user upon request on how to operate terminal.

PARAMETERS

void

RETURN

void

FUNCTION CALL:

shutdown

DESCRIPTION:

Exits the loop initiated in the commhand function upon confirmation from the user.
Returns execution to kmain().

PARAMETERS

void

RETURN

void

FUNCTION CALL:

gettime

DESCRIPTION:

Reads the binary coded decimal stored in the Real Time Clock Register 0x71.

PARAMETERS

void

RETURN

void

FUNCTION CALL:

settime

DESCRIPTION:

Disables interrupts, writes a new value to the RTC register 0x71 using outb(), then re-enables interrupts

PARAMETERS

void

RETURN

void

FUNCTION CALL:

getdate

DESCRIPTION:

Reads date value sotred in system register

PARAMETERS

void

RETURN

void

FUNCTION CALL:

setdate

DESCRIPTION:

Writes new value to date value stored in register

PARAMETERS

void

RETURN

void
