ioctl-decoding.txt

To decode a hex IOCTL code:

Most architectures use this generic format, but check include/ARCH/ioctl.h for specifics, e.g. powerpc uses 3 bits to encode read/write and 13 bits for size.

- bits meaning
- 00 no parameters: uses _IO macro 10 read: _IOR 01 write: _IOW 31 - 30

 - 11 read/write: _IOWR
- 29 16size of arguments
- 15 8ascii character supposedly unique to each driver
- 7-0function #

So for example 0x82187201 is a read with arg length of 0x218, character 'r' function 1. Grepping the source reveals this is:

#define VFAT IOCTL READDIR BOTH IOR('r', 1, struct dirent [2])