pipe

struct sleeplock lock
char data[]
uint nread
uint nwrite
int readopen
int writeopen

file

enum type
int ref
char readable
char writable
struct pipe *pipe
struct inode *ip
uint off

inode

inode struct
uint dev
uint inum
int ref
struct sleeplock lock
int valid
short type
short major
short minor
short nlink
uint size
uint addrs

dinode struct
short type
short major
short minor
short nlink
uint size
uint addrs