

sysfs-gpio..txt

What: /sys/class/gpio/  
Date: July 2008  
KernelVersion: 2.6.27  
Contact: David Brownell <dbrownell@users.sourceforge.net>  
Description:

As a Kconfig option, individual GPIO signals may be accessed from userspace. GPIOs are only made available to userspace by an explicit "export" operation. If a given GPIO is not claimed for use by kernel code, it may be exported by userspace (and unexported later). Kernel code may export it for complete or partial access.

GPIOs are identified as they are inside the kernel, using integers in the range 0..INT\_MAX. See Documentation/gpio.txt for more information.

```
/sys/class/gpio
/export ... asks the kernel to export a GPIO to userspace
/unexport ... to return a GPIO to the kernel
/gpioN ... for each exported GPIO #N
    /value ... always readable, writes fail for input GPIOs
    /direction ... r/w as: in, out (default low); write: high, low
    /edge ... r/w as: none, falling, rising, both
/gpiochipN ... for each gpiochip; #N is its first GPIO
    /base ... (r/o) same as N
    /label ... (r/o) descriptive, not necessarily unique
    /ngpio ... (r/o) number of GPIOs; numbered N to N + (ngpio - 1)
```