NAME

sane-rts8891 - SANE backend for rts8891 based scanners

DESCRIPTION

The sane-rts8891 library implements a SANE (Scanner Access Now Easy) backend that provides access to scanners based on the rts8891 ASIC.

The scanners that work with this backend are:

| Vendor Model | | status |
|--------------|-------|----------|
| | | |
| Umax Astra | 4400 | untested |
| Umax Astra | 4450 | untested |
| HP scanjet | 4000c | good |
| HP scanjet | 4470c | good |

The options the backend supports can either be selected through command line options to programs like scanimage or through GUI elements in xscanimage or xsane.

If you have any strange behavior, please report to the backend maintainer or to the SANE mailing list.

Valid command line options and their syntax can be listed by using scanimage —help –d rts8891

Scan Mode Options

--mode

selects the basic mode of operation of the scanner valid choices are *R Color*, *Gray* and *Lineart* The default mode is Color. The Lineart mode is black and white only (1 bit). Grayscale will produce 256 levels of gray (8 bits). Color mode allows for over 16 million different colors produced from 24 bits of color information.

--resolution

selects the resolution for a scan. The horizontal and vertical resolutions are set by the value of this option. The scanner is capable of the following resolutions for the specified option value:

| Value | Hor. Resolution | Vert. Resolution |
|-------|-----------------|------------------|
| | | |
| 75 | 75dpi | 75dpi |
| 150 | 150dpi | 150dpi |
| 300 | 300dpi | 300dpi |
| 600 | 600dpi | 600dpi |
| 1200 | 1200dpi | 1200dpi |

--preview

requests a preview scan. The resolution used for that scan is 75 dpi and the scan area and the scan mode are as specified through their options, or the default if not specified. The default value for preview mode is "no".

--threshold

selects the minimum-brightness to get a white point. The threshold is only used with Lineart mode scans. It is specified as a percentage in the range 0..100% (in steps of 1). The default value of the threshold option is 50.

CONFIGURATION FILE

The configuration file @CONFIGDIR@/rts8891.conf contains the usb device ids of supported scanners (eg usb $0x043d\ 0x007c$) and scanner configuration options. Empty lines and lines starting with a hash mark (#) are ignored.

The options supported are allowsharing, modelnumber

Option

allowsharing enables or not the sharing of the scanner between multiple frontends at the same time.

modelnumber is used to force the reported model by the backend and is only useful in the case of a scanner which NVRAM has been erased.

```
0 to report a HP4470c.
1 to report a HP4400c.
2 to report an Astra 4400.
```

FILES

@LIBDIR@/libsane-rts8891.a

The static library implementing this backend.

@LIBDIR@/libsane-rts8891.so

The shared library implementing this backend (present on systems that support dynamic loading).

ENVIRONMENT

SANE_DEBUG_RTS8891 SANE_DEBUG_RTS8891_LOW SANE_DEBUG_RTS88XX_LIB

If the library was compiled with debug support enabled, these environment variables controls the debug level for this backend. E.g., a value of 255 requests all debug output to be printed. Smaller levels reduce verbosity.

LIMITATIONS

Scanners of the same model exist with different sensors, due to lack of data (ie USB logs) some sensors are better supported than others. At least 75 dpi mode is working for any model. Sharing the scanner between several frontends at the same time (allowsharing option) may not work on some USB controllers.

XPA is no (yet) supported.

BUGS

No bugs currently known.

SEE ALSO

```
sane-scsi(5), scanimage(1), xscanimage(1), xsane(1), sane(7)
```

AUTHOR

This backend has been developed by Stéphane Voltz.

http://stef.dev.free.fr/sane/rts8891

CREDITS

Many thanks go to:

Laurent Fournier who donated me a HP4470c. Vladimir Sysoev and "TheUnruly Squash" for the time they spent recording USB activity and testing the experimental version on HP4400 models.