Fan Control

Fan PWM driver configuration path on Debian for Nuvotron 6775 is: **/sys/devices/platform/nct6775.2592/hwmon/hwmon1**.

```
pwm[1-*]    Pulse width modulation fan control.
        Integer value in the range 0 to 255
        RW
        255 is max or 100%.

pwm[1-*]_enable
        Fan speed control method:
        0: no fan speed control (i.e. fan at full speed)
        1: manual fan speed control enabled (using pwm[1-*])
        2+: automatic fan speed control enabled
        Check individual chip documentation files for automatic mode
        details.
        RW

pwm[1-*]_mode   0: DC mode (direct current)
        1: PWM mode (pulse-width modulation)
        RW

pwm[1-*]_freq   Base PWM frequency in Hz.
        Only possibly available when pwmN_mode is PWM, but not always
        present even then.
        RW

pwm[1-*]_auto_channels_temp
        Select which temperature channels affect this PWM output in
        auto mode. Bitfield, 1 is temp1, 2 is temp2, 4 is temp3 etc...
        Which values are possible depend on the chip used.
        RW

pwm[1-*]_auto_point[1-*]_pwm
pwm[1-*]_auto_point[1-*]_temp
pwm[1-*]_auto_point[1-*]_temp_hyst
        Define the PWM vs temperature curve. Number of trip points is
        chip-dependent. Use this for chips which associate trip points
        to PWM output channels.
        RW

temp[1-*]_auto_point[1-*]_pwm
temp[1-*]_auto_point[1-*]_temp
temp[1-*]_auto_point[1-*]_temp_hyst
        Define the PWM vs temperature curve. Number of trip points is
        chip-dependent. Use this for chips which associate trip points
        to temperature channels.
        RW
```

There is a third case where trip points are associated to both PWM output channels and temperature channels: the PWM values are associated to PWM output channels while the temperature values are associated to temperature channels. In that case, the result is determined by the mapping between temperature inputs and PWM outputs. When several temperature inputs are mapped to a given PWM output, this leads to several candidate PWM values. The actual result is up to the chip, but in general the highest candidate value (fastest fan speed) wins.

Links

- PWM kernel documentation
- Control Script