

Kernel driver ds620

Supported chips:

- Dallas Semiconductor DS620

Prefix: 'ds620'

Datasheet: Publicly available at the Dallas Semiconductor website

<http://www.dalsemi.com/>

Authors:

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Description

The DS620 is a (one instance) digital thermometer and thermostat. It has both high and low temperature limits which can be user defined (i.e. programmed into non-volatile on-chip registers). Temperature range is -55 degree Celsius to +125. Between 0 and 70 degree Celsius, accuracy is 0.5 Kelvin. The value returned via sysfs displays post decimal positions.

The thermostat function works as follows: When configured via platform_data (struct ds620_platform_data) .pomode == 0 (default), the thermostat output pin PO is always low. If .pomode == 1, the thermostat is in PO_LOW mode. I.e., the output pin PO becomes active when the temperature falls below temp1_min and stays active until the temperature goes above temp1_max.

Likewise, with .pomode == 2, the thermostat is in PO_HIGH mode. I.e., the PO output pin becomes active when the temperature goes above temp1_max and stays active until the temperature falls below temp1_min.

The PO output pin of the DS620 operates active-low.