Kernel driver w1_ds2423

Supported chips:

• Maxim DS2423 based counter devices.

supported family codes:

```
W1_THERM_DS2423 | 0x1D
```

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Description

Support is provided through the sysfs $w1_slave$ file. Each opening and read sequence of $w1_slave$ file initiates the read of counters and ram available in DS2423 pages $12 - \overline{15}$.

Result of each page is provided as an ASCII output where each counter value and associated ram buffer is outputed to own line.

Each lines will contain the values of 42 bytes read from the counter and memory page along the crc=YES or NO for indicating whether the read operation was successful and CRC matched. If the operation was successful, there is also in the end of each line a counter value expressed as an integer after c=

Meaning of 42 bytes represented is following:

- 1 byte from ram page
- 4 bytes for the counter value
- 4 zero bytes
- 2 bytes for crc16 which was calculated from the data read since the previous crc bytes
- 31 remaining bytes from the ram page
- crc=YES/NO indicating whether read was ok and crc matched
- c=<int> current counter value

example from the successful read:

example from the read with crc errors:

| 0 | 0 0: | 2 0 | 0 (| 00 | 00 | 00 | 00 | 00 | 00 | 6d | 38 | 00 | ff | ff | 00 | 00 | fe | ff | 00 | 00 | ff | f |
|---|------|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| 0 | 0 0 | 2 0 | 0 (| 00 | 22 | 00 | 00 | 00 | 00 | e0 | 1f | 00 | ff | ff | 00 | 00 | ff | f |
| 0 | 0 e | 16 | 1 5 | 5d | 19 | 00 | 00 | 00 | 00 | df | 0b | 00 | ff | ff | 00 | 00 | ff | f |
| 0 | 0 0 | 5 0 | 0 (| 00 | 20 | 00 | 00 | 00 | 00 | 8d | 39 | ff | f |