

Kernel driver i2c-taos-evm

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This is a driver for the evaluation modules for TAOS I2C/SMBus chips. The modules include an SMBus master with limited capabilities, which can be controlled over the serial port. Virtually all evaluation modules are supported, but a few lines of code need to be added for each new module to instantiate the right I2C chip on the bus. Obviously, a driver for the chip in question is also needed.

Currently supported devices are:

- * TAOS TSL2550 EVM

For additional information on TAOS products, please see
<http://www.taosinc.com/>

Using this driver

In order to use this driver, you'll need the serport driver, and the inputattach tool, which is part of the input-utils package. The following commands will tell the kernel that you have a TAOS EVM on the first serial port:

```
# modprobe serport
# inputattach --taos-evm /dev/ttyS0
```

Technical details

Only 4 SMBus transaction types are supported by the TAOS evaluation modules:

- * Receive Byte
- * Send Byte
- * Read Byte
- * Write Byte

The communication protocol is text-based and pretty simple. It is described in a PDF document on the CD which comes with the evaluation module. The communication is rather slow, because the serial port has to operate at 1200 bps. However, I don't think this is a big concern in practice, as these modules are meant for evaluation and testing only.