clk. txt

Clock framework on SuperH architecture

The framework on SH extends existing API by the function clk_set_rate_ex, which prototype is as follows:

```
clk set rate ex (struct clk *clk, unsigned long rate, int algo id)
```

The algo_id parameter is used to specify algorithm used to recalculate clocks, adjanced to clock, specified as first argument. It is assumed that algo_id==0 means no changes to adjanced clock

Internally, the clk_set_rate_ex forwards request to clk- \gt ops- \gt set_rate method, if it is present in ops structure. The method should set the clock rate and adjust

all needed clocks according to the passed algo id.

Exact values for algo_id are machine-dependent. For the sh7722, the following values are defined:

```
= 0,
NO CHANGE
IUS_N1_N1,
IUS_322,
                  /* I:U = N:1, U:Sh = N:1 */
                  /* I:U:Sh = 3:2:2
                  /* I:U:Sh = 5:2:2
IUS_522,
                                              */
IUS_N11,
                  /* I:U:Sh = N:1:1
                                              */
                  /* Sh:B = N:1
SB N1,
                                              */
SB3 N1.
                  /* Sh:B3 = N:1
                                              */
SB3 32,
                  /* Sh:B3 = 3:2
                                              */
SB3_43,
                  /* Sh:B3 = 4:3
                                              */
SB3_54,
BP_N1,
                  /* Sh:B3 = 5:4
                                              */
                  /* B:P
                                              */
                            = N:1
IP N1
                  /* I:P
                            = N:1
                                              */
```

Each of these constants means relation between clocks that can be set via the FRQCR register