

SrlApi

Srl API is your gateway to [software resources](#).

Logging

Log API let you define message levels. Levels allow you to let your debug code in the source, and only compile it when needed.

- `srl_log(level, "message")` prints a message
- `srl_log_printf(level, "message_with_format", arguments...)` prints a printf-like message

Mwmr fifos

- `srl_mwmr_read(fifo, buffer, size)` reads size 32-bit words from fifo to buffer. size must be a multiple of fifo width.
- `srl_mwmr_write(fifo, buffer, size)` writes size 32-bit words from buffer to fifo. size must be a multiple of fifo width.

Locks

- `srl_lock_lock(lock)` takes the lock, waiting if necessary
- `srl_lock_unlock(lock)` releases the lock

Barriers

- `srl_barrier_wait(barrier)` waits for a barrier-global synchronization

Other APIs

- `srl_run_cycles(N)` tells the simulation environment the simulation should run at least N cycles while in this call. This makes sense only for virtually sunthetised tasks, otherwise, this call is a noop.
- `srl_mwmr_config(controller_name, reg_n, value)` puts value value in config register reg_n of specified controller
- `srl_mwmr_status(controller_name, reg_n)` reads status register reg_n of specified controller, returns a `int32_t`
- `srl_assert(cond)` checks cond is true, fatally fails otherwise