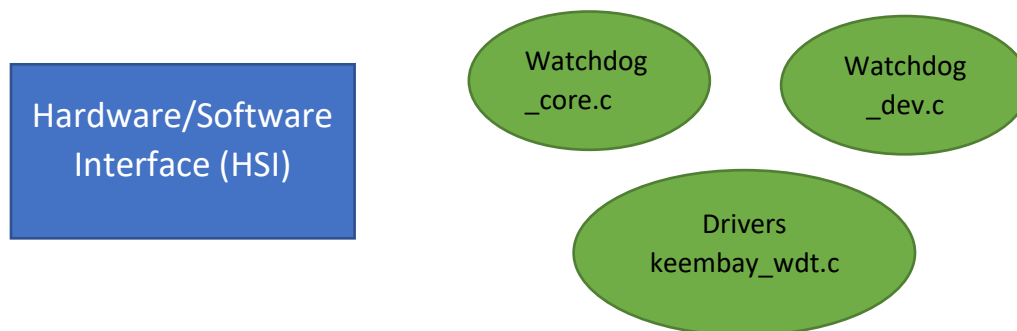


Userspace daemon notifies Watchdog driver periodically that it is still alive.



[watchdog\\_core.c](#), [watchdog\\_dev.c](#) define generic core code which can be used by all watchdog timer drivers. All device-specific Linux Watchdog drivers are defined [here](#).

All Watchdog drivers support basic functionality:

- Watchdog activates as soon as `/dev/watchdog` is opened by userspace application.
- Device reboots unless Watchdog is “kicked” (e.g., pinged) within a certain time (specific timeout value, or timeout interval).
- KEEPAIVE to prevent device reset

More advanced Watchdog drivers can do more:

- Support additional features of Watchdog `ioctl` API:
  - Manipulate/read timeout values: `WDIOC_SETTIMEOUT`, `WDIOC_GETTIMEOUT`, `WDIOC_SETPRETIMEOUT`, `WDIOC_GETPRETIMEOUT`.
  - Monitoring device environment: e.g., `WDIOF_OVERHEAT`, `WDIOF_FANFAULT`, `WDIOF_POWERUNDER`, `WDIOF_POWEROVER`
  - Device measurements/control: e.g., `WDIOC_GETTEMP`
  - Additional control options: e.g., `WDIOS_TEMPPANIC` to trigger a kernel panic on temperature fault

Hardware (vendor specific)