

HVWS - Watchdog

(draft text received by Anup)

5. Watchdog Device

A watchdog device is very crucial for any real-time system to detect failure and recover from it by resetting the system. In virtualization, a watchdog device for each Guest/VM helps failure and recovery at Guest/VM level.

It is recommended that Guest/VM on ARM systems should have a ARM SP805 watchdog as memory mapped device. An ARM hypervisor can do software emulation ARM SP805 watchdog device. The driver for ARM SP805 watchdog is generally available in commonly used RTOSes and Linux kernel.

The technical reference manual of ARM SP805 is publically available on ARM website at: <https://static.docs.arm.com/ddi0270/b/DDI0270.pdf>