

WatchDog Timer:

WDT can be helpful to automatically reset the system whenever a timeout occurs.

How does Watchdog Timer work?

- The watchdog timer is loaded with a timeout period which is dependent on the application.
- The watchdog timer starts its counting independent of the system clock i.e. it has a separate internal oscillator to work independently of a system clock.
- The watchdog timer cleared through software each time before the timeout period occurs.
- Whenever software failed to clear the watchdog timer before its timeout period, then watchdog timer resets the system.
- For this purpose, the watchdog timer is used to overcome software failures in real-time applications.
- The watchdog timer is also used to wake up the microcontroller from sleep mode.