

All the in-vehicle installed systems require a sophisticated power management. The new Advantech solution based on the Box IPC ARK-1388V designed especially for in-vehicle applications offers due to its outstanding hardware and firmware design in microcontroller based safe boot and safe shut down functions. The rugged industrial PC works with both 12 volt and 24 volt battery systems. The innovative power management system is dedicated primarily for taxicabs, trucks, wagons, mining, and city buses. This chapter will introduce how to setting the relative parameter of the power management system.

4.1 Power mode selection

ARK-1388V can work as a normal Box IPC or in-vehicle Box IPC. But the power solution of these two applications is quite different. The connector CN18 is designed for selecting whether the power input is in-vehicle power or not. If the two pins of CN18 are leaved open without any jumper on it, then ARK-1388V will work as an in-vehicle Box IPC. Its power management firmware design in PIC microcontroller will start to work.

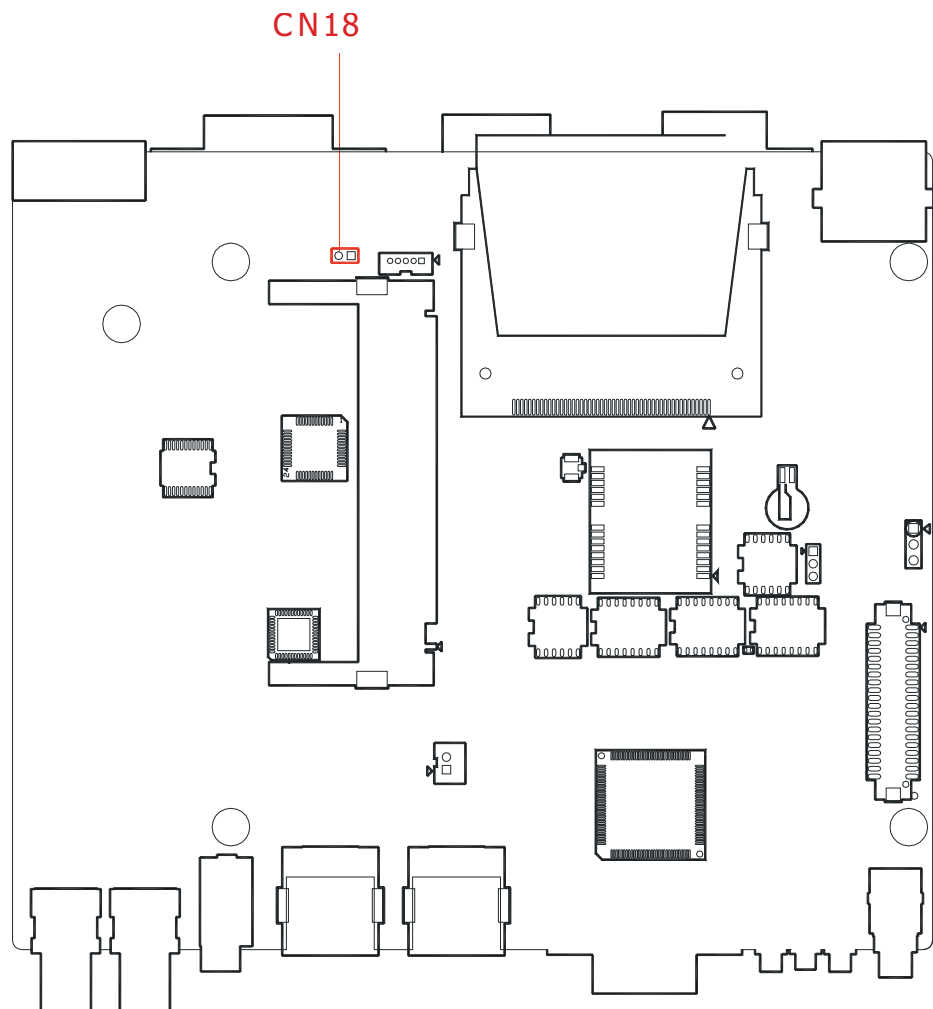


Figure 4.1 The jumper location for power mode selection (CN18)