

ZW-01 Z-Wave bridge working description

The Z-Wave bridge is host of Z-wave network to control others slaves and controller when system ready.

CPU STR8131 is heart of bridge, it has all function of Lan protocol that support bridge connect to network of both Tx and Rx; IP configuration for all nodes at this network and has oscillator work at frequency 25MHz. The flash memory stores program code and default setting, and SDRAM is store area for data read /write of system operation and information exchange.

Power is come from AC adaptor to modules in PCB, and indicated by **power LED**.

LED of LAN is lighted by CPU after check the condition of ethernet cable RJ-45 which connect to LAN section. LED of Z-Wave is lighted by ZM3102N module when it detect the Z-Wave slave or controller is join to bridge.

Bridge is reset by button when system is blocked. RTC is real time clock of system which support the timer for event stamp the date in memory. Z-wave module ZM3102N is primary controller of Z-Wave network and it work at frequency 32.768KHz, it work as master of to communicate with all Z-Wave product and update the status store in SDRAM.

All of commands from Web or mobile phone is received by CPU from internet are send to Z-Wave module ZM3102N to control all of Z-Wave products in this network.

The function block is showed as below