

Garage Door Control

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Architecture

XPC280 Garage Door Control, a device that will automatically open or close depending upon conditions, with a motion detector responsive to vehicle space for actuating security lighting and warning measures to provide enablement of the door closure activator during respective exiting and non-exiting modes.

The hardware architecture is shown in Figure 1.

The unit is of closed/opened switches to detect the condition of the door, and send the information to the processor. The processor (PIC16F873) process kinds of operation, including scanning the discovery switch to initialize communication, lighting LED to indicate status, driving motor, and communicating with CC1100 module, CC1000 is a true single chip UHF transceiver designed for very low power and low voltage wireless communications with sensors. It operates at 418MHz or 433MHz frequency by programmed different firmware via an easy-to-interface serial bus with a microcontroller.