

PD700-Please refer to hardware block diagram:

- (1) PD700 is a plug-in Dimmer module with an 120V AC Power. The user can turn ON/OFF and control the brightness level of the connected lighting. This can be done by the push button on the unit or using a remote controller through RF .
- (2) Connect the unit to AC 120V, 60Hz Line to get the AC power. .
- (3) This module is one component of a Z-Wave control system. RF frequent Z-Wave sub-1 GHz frequency. It's designed to work with all other Z-Wave enabled devices in a home network.

Operation Principle of the Transceiver

The product employs ZGM130S Z-Wave 700 SIP Module as the MCU and for controlling the wireless signal.

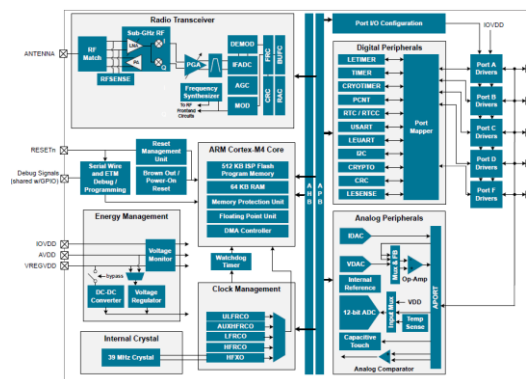


Figure 3.1. ZGM130S Block Diagram

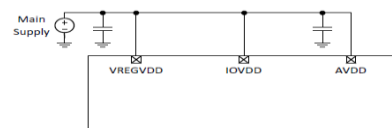


Figure 5.1. Typical Power Connections for ZGM130S

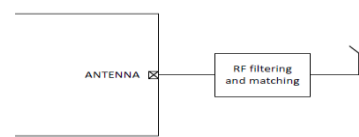


Figure 5.2. Typical RF Connections for ZGM130S

Introduction

The ZGM130S product family combines an energy-friendly MCU (32-bit ARM® Cortex®-M4 core at 39 MHz) with a highly integrated radio transceiver. The devices are well suited for any battery operated application, as well as other system where ultra-small size, reliable high performance RF, low-power consumption and easy application development are key requirements. This section gives a short introduction to the full radio and MCU system.

Radio

The ZGM130S features a radio transceiver supporting Z-Wave protocol. The RF transceiver can handle 40kbit/s and 100kbit/s data simultaneously. Channel 0 is 916MHz, 100Kbit/s, channel 1 is 908.4Hz, 40kbit/s.

Antenna Interface

The antenna interface consists of a single pin, connected to internal balun and matching network.

FCC statements:

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes could void the user's authority to operate the equipment.