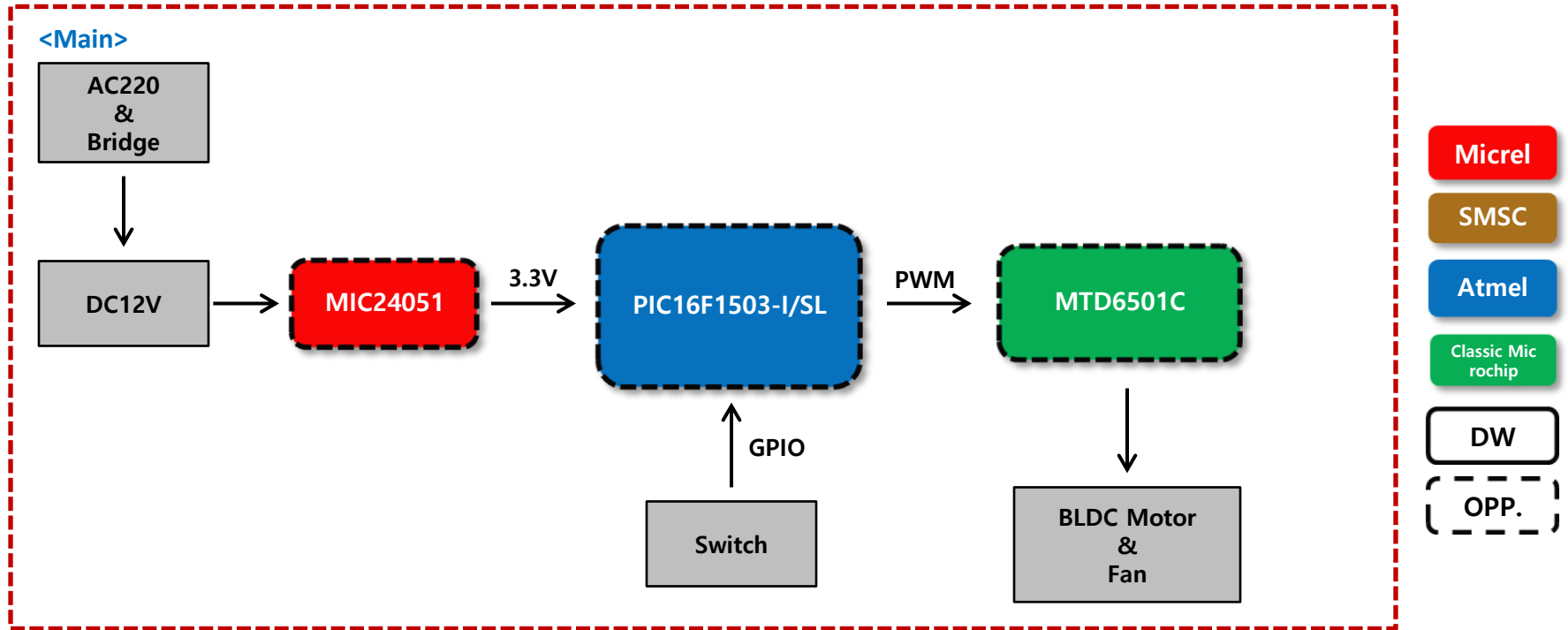
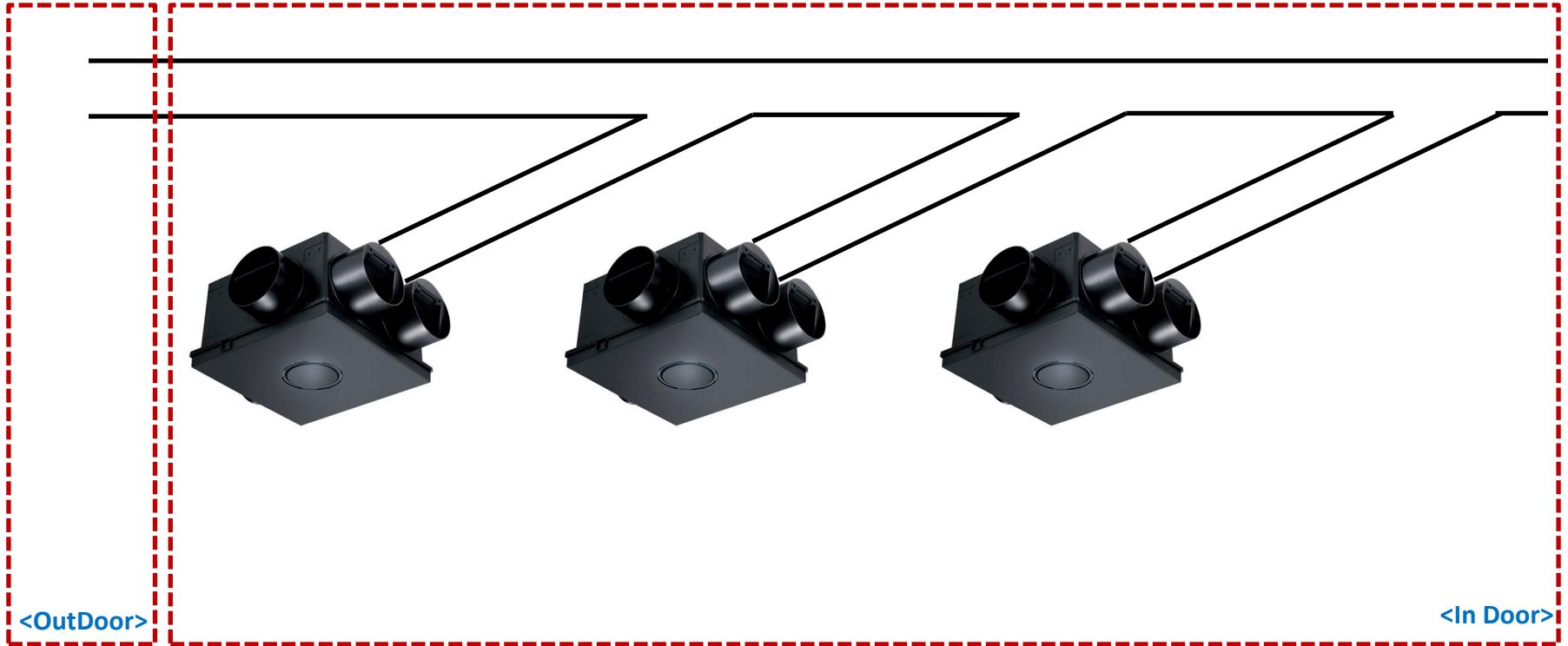


Airflow Ventilation Fan- Block Diagram





- Microchip MCU, PIC16F1503-I/SL
 - Max CPU Speed(MHz) : 20
 - Program Memory Size (KB) : 3.5
 - SRAM (Byte) : 128
 - 4x Standalone PWM
 - Complementary Waveform Generator (CWG)
 - Numerically Controlled Oscillator (NCO)
 - 2x Configurable Logic Cell (CLC)
 - Integrated Temperature Indicator
 - 8 Channel 10-bit ADC with Voltage Reference
 - 5-bit Digital to Analog Converter (DAC)

- Microchip Regulator, MIC24051
 - Hyper Speed Control™ architecture enables
 - High delta V operation (VIN = 19V and VOUT = 0.8V)
 - Small output capacitance
 - 4.5V to 19V input voltage
 - Adjustable output from 0.8V to 5.5V ($\pm 1\%$ accuracy)
 - Any Capacitor™ stable &em; Zero-to-high ESR

- Microchip Motor Driver, MTD6501C
 - 12v, 3-phase full-wave drivers for brushless sensorless dc motors.
 - Position sensorless BLDC drivers (no Hall sensor required)
 - 180° sinusoidal drive, for high efficiency and low acoustic noise
 - Support 2V to 14V power supplies
 - Speed control through PAM and/or PWM
 - Built-in frequency generator
 - Built-in lockup protection and automatic recovery circuit (external capacitor not necessary)