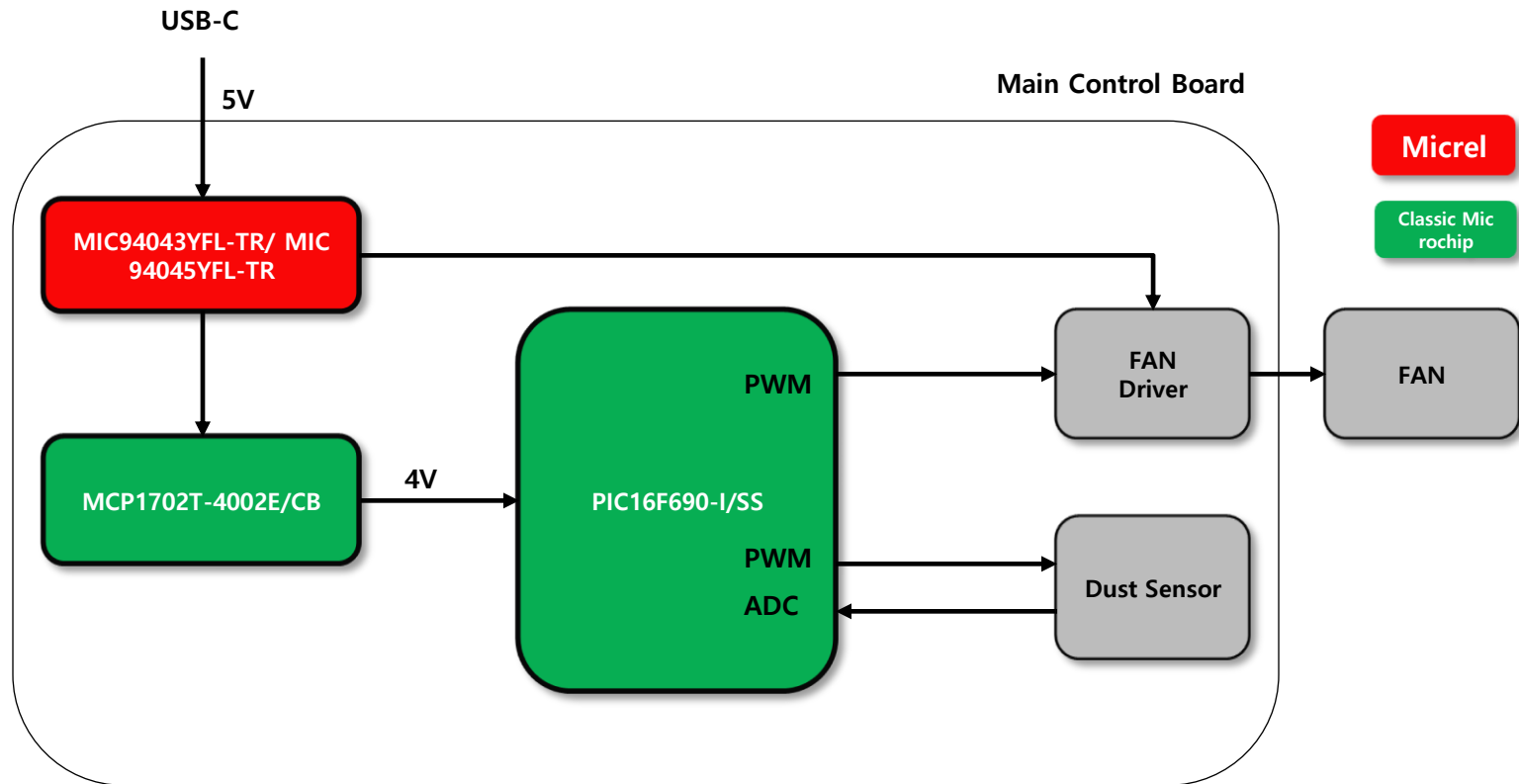


Air Purifier – Block Diagram



Air Purifier – System



<USB Power>



<Air Purifier>

□ Microchip MCU, PIC16F690

- 8-bit Processor
- Up to 20MHz, 7KB Flash, 256B SRAM, 256bytes EEPROM
- 4-ch PWM 10-bit
- Extended WDT
- MPLAB® ICD 2 programming support or debugging support with optional header adapter
- Precision internal oscillator-software selectable 8 MHz - 32 KHz
- nanoWatt Technology

□ Microchip Load Switch, MIC94040

- 28mΩ RDSON
- 3A continuous operating current
- 1.7V to 5.5V input voltage range
- Internal level shift for CMOS/TTL control logic
- Ultra low quiescent current
- Micro-power shutdown current

□ Microchip LDO, MCP1702

- 2.0 μ A quiescent current (typical)
- Wide input operating voltage range: 2.7V to 13.2V
- 250 mA Output Current for Output Voltages = 2.5V
- 200 mA Output Current for Output Voltages < 2.5V
- Output voltage range 1.2V to 5.5V in 0.1V increments (50 mV increments available upon request)
- Stable with 1.0 μ F to 22 μ F ceramic, aluminum, or tantalum output capacitors