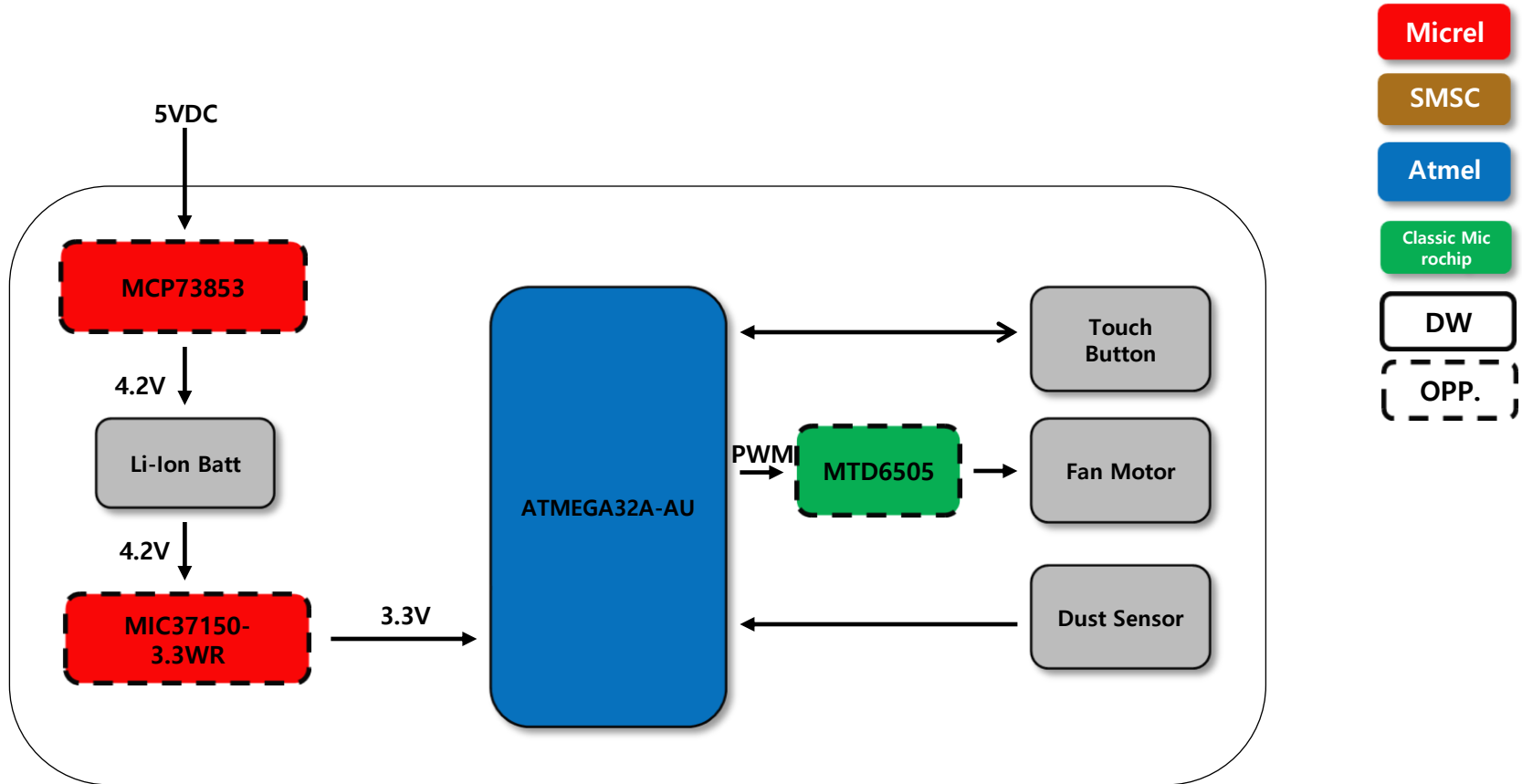
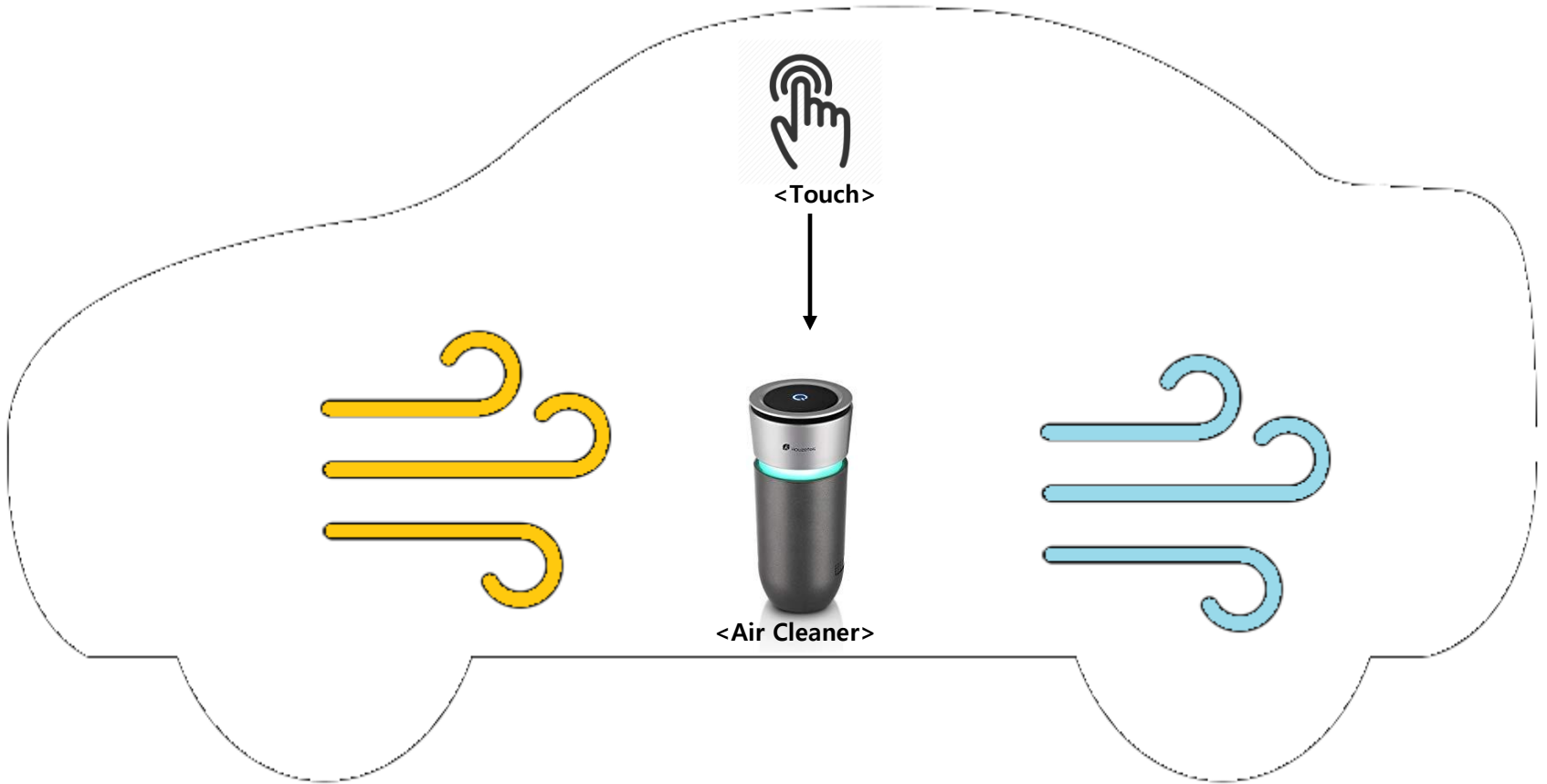


Car Portable Air Cleaner – Block Diagram





❑ Microchip MCU, ATMEGA32A-AU

- 131 Powerful Instructions - Most Single-clock Cycle Execution
- 32 × 8 General Purpose Working Registers
- Fully Static Operation
- Up to 16MIPS Throughput at 16MHz
- On-chip 2-cycle Multiplier
- 32Kbytes of In-System Self-programmable Flash program memory
- QTouch library support

❑ Microchip Battery Charger, MCP73853

- USB Li-Ion/Li-Polymer Battery Charger with Safety Timers & Thermal Monitor
 - USB Compatible Charge Current Settings
 - Programmable Safety Charge Timer
 - Temperature Monitor
 - Thermal Regulation
 - Automatic Re-Charge
 - Automatic End-of-Charge Control
-

□ Microchip LDO, MIC37150-3.3WR

- 1.5A minimum guaranteed output current
- 500mV maximum dropout voltage over temperature
- Stable with ceramic or tantalum capacitor
- Wide input voltage range
- $\pm 1.0\%$ initial output tolerance
- Fixed and adjustable output voltages: MIC37150 - 3-pin fixed voltages

□ Microchip Motor Driver, MTD6505

- 5v bldc fan driver
- 180° Sinusoidal Drive, for high efficiency and low acoustic noise
- Position Sensorless BLDC Drivers (No Hall-effect sensor required)
- Integrated Power Transistors
- Supports 2V to 5.5V Power Supplies
- Programming Resistor (RPROG) setting to fit motor constant (Km) range from 3.25 mV/Hz to 52 mV/Hz
- Direction Control: - Forward direction: connect DIR pin to GND or leave floating - Reverse direction: connect DIR pin to VBIAS