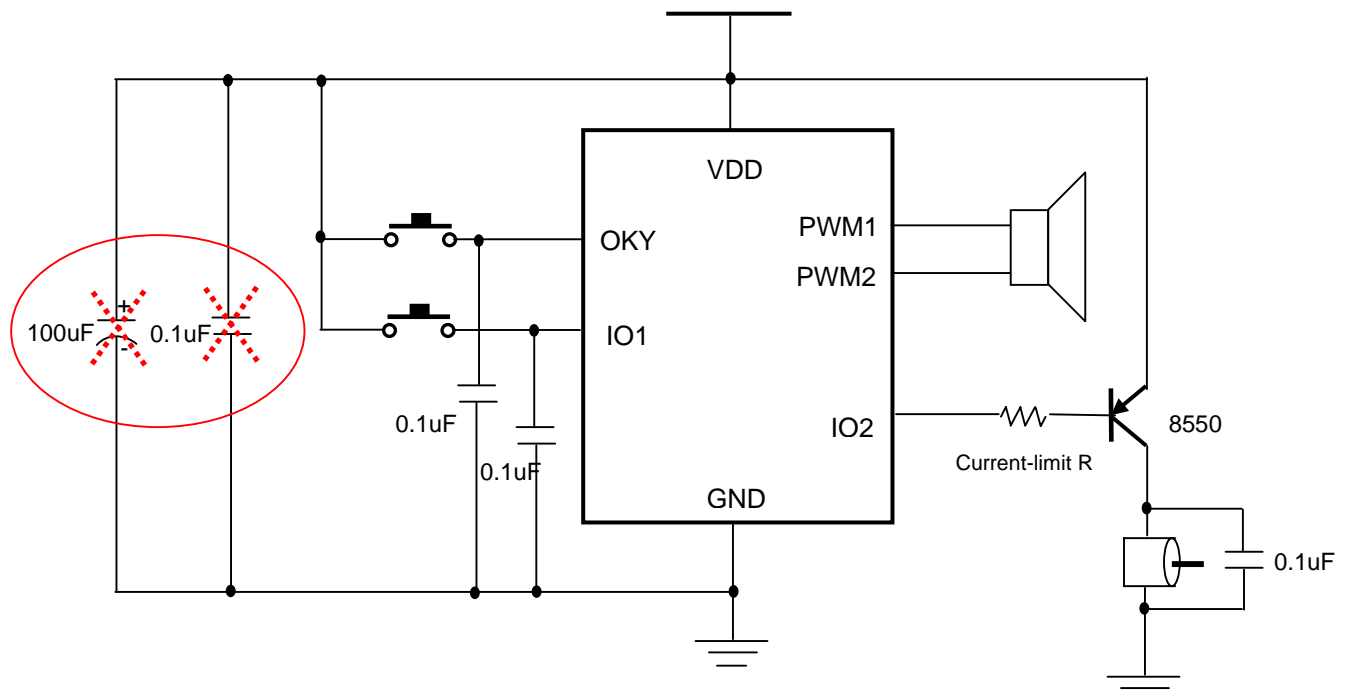# NY3C & NY3D Driving Motor Notice 1

IO mode

OKY: Input, E/U/**R**, On/Off

IO1: Input, E/U/**R**

IO2: Output, Busy_Low

1. NY3C & NY3D series IC need to connect 0.1uF capacitor between input pin and GND to filter noise at re-trigger mode while driving high-noise motor. Otherwise input pin will be re-triggered by motor noise.

2. NY3C & NY3D series IC use new technology in power management. It's not necessary to add 0.1uF or 47/100uF between VDD and GNG to filter noise or to stabilize supplied voltage. But it still needs a 0.1uF capacitor on motor.

3. NY3B series IC don't need to connect 0.1uF capacitor between input pin and GND because its architecture is different from NY3C & NY3D.

NY3B, NY3C & NY3D Driving Motor Notice 2

Since NY3B, NY3C & NY3D series IC use new power technology, it's not necessary to add 0.1uF capacitor between VDD and GND to filter noise, and not necessary to add 47uF or 100uF capacitor between VDD and GND to stabilize the power. But one 0.1uF capacitor is needed on motor.

NY3 series IC is not MCU architecture, it's state-machine architecture, ie pure hardware structure. There is no program hang-down issue at low voltage 1.5~1.8V, thus Low-Voltage-Reset (LVR) is not essential. The purpose of 47uF or 100uF power capacitor is to balance the instant voltage-drop and to avoid LVR happening when large current occurs at heavy loading start. Due to no LVR in NY3, it's not necessary to add 47uF or 100uF capacitor between VDD and GND.

Don't put any electrolytic capacitor (E-cap) in peripheral circuit as possible as you can. Because of low power consumption of NY3 series IC and discharge of E-cap, IC will continue playing at power-on even if you switch off power at playing. It's different from MCU IC that there will be LVR at power switch-off.