



# 4-Bit Micro-Controller

## TM87 Series

The solution to the “power on reset” problem during installing the battery procedure in 3V power supply and LCD 1/3 bias application

## Application Note

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**PRODUCT NAME**

TM87 series

**TITLE**

The solution to the “power on reset” problem during installing the battery procedure in 3V power supply and LCD 1/3 bias application.

**APPLICATION NOTE**

**Description:**

The capacitor on VDD3 is connected to GND in the typical application circuit. However, when the batteries are installed, The voltage of VDD3 will be pumped from 0V to 4.5V, but it takes relative long time to rise to the target voltage level. This will cause the Power On Reset function failed in such application circuit.

**Solution:**

Modify the application circuit as shown in Fig. 1. Connect VDD3 capacitor between the VDD3 and the VDD2 pins. This can speed up the voltage rising-speed of VDD3 and keep the “power on reset” function work normally. ◦

**Figure 1.**

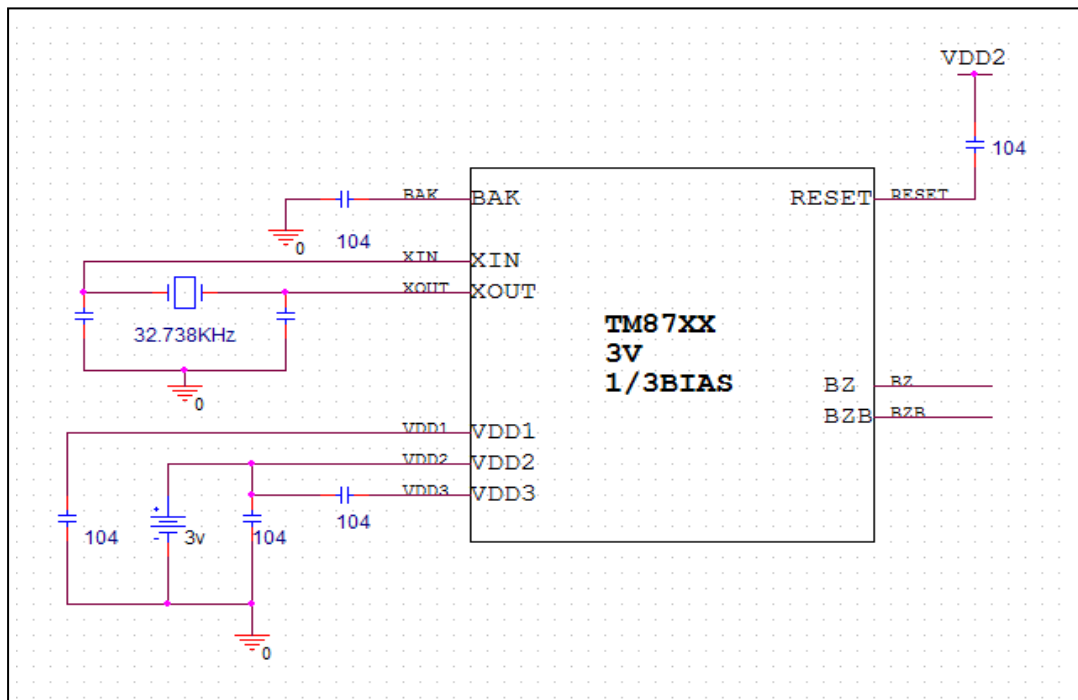


Fig.1