



PRODUCT NAME

TM87 Series

TITLE

How to minimize the power noise in system design which will cause MCU malfunction

APPLICATION NOTE

There are two reference tips to minimize the power noise in system design:

1. Active external RESET pin function with “level reset” option only, the Mask Option items are as below:

POWER ON RESET : **NO USE**

RESET PIN TYPE : **LEVEL**

IOC1/KI1 FOR KEY RESET : **NO USE**

IOC2/KI2 FOR KEY RESET : **NO USE**

IOC3/KI3 FOR KEY RESET : **NO USE**

IOC4/KI4 FOR KEY RESET : **NO USE**

2. Take care of the placement and route on PCB Layout, the details are as below:
 - Minimize the routes between MCU and power capacitors.
 - Minimize the routes between MCU and the capacitor which connected to RESET pin.
 - Minimize the routes between MCU and Crystal, and trim the external capacitors of on oscillator driver well.
 - Insert the ground shielding on PCB as you can.
 - Minimize the route of each signal on PCB.