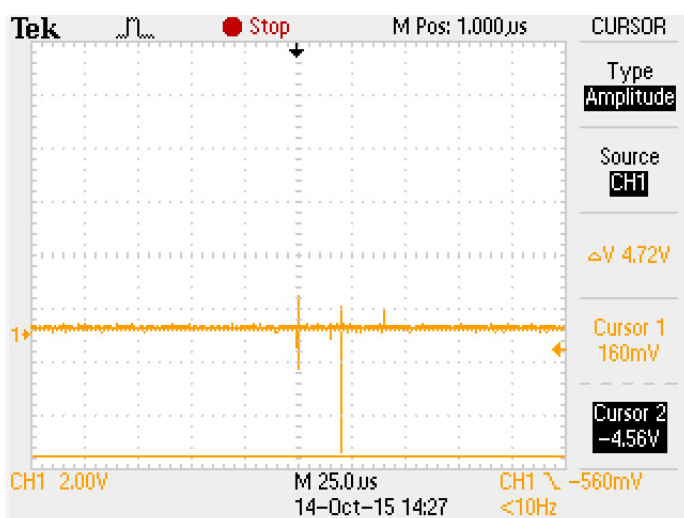
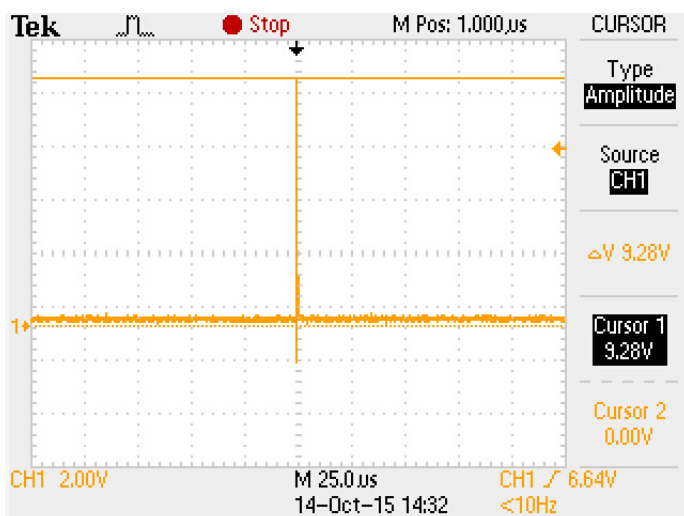


Application Note

Q: Can I hot plug power since the board only support single voltage input.

Ans: Generally speaking, if mother board comes with DC Jack connector, hot plug is ok when power supply is on. If mother board does not design with DC Jack connector, Hot plug power **is not allowed** when power supply is turned on because when you hot plug power pin, it could generate “Transient Voltage”. “Transient Voltage” could be positive or negative, and most of time it is over input power voltage.

Below is an example that mother board is 5V input. When power supply is on and does hot plug on power pin. From below waveform, you can see a high pulse is generated by hot plug, and voltage level could over motherboard power input level. It could damage IC on mother board.



The specification of power input is as below. Advantech does not guarantee board function or to give any explanation if power input is not constantly provided in the range.

12V input: 12V +/- 10%

5V input: 5V +/- 5%

Also, rapidly power cycling **is not allowed** because the product is not designed for this kind of application. Once power is down, the user has to wait for mother board to discharge to 0 voltage; then, re-apply the power to start up the mother board. Normally the discharge time will depend on power supply or system design. System designer has to check it by himself.

No hot plug support product:

PC/104 Series: PCM-3353, PCM-3355, PCM-3343, PCM-3356, PCM-3362, PCM-3363

3.5" SBC Series: PCM-9376, PCM-9375, PCM-9343, PCM-9389, PCM-9362

EBX Series: PCM-9562