Integrated Technology Express, Inc.

Application Note of IT8700F
for Early I/O Initialization
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When the battery is installed on motherboard or the ATX power connector is plugged in the motherboard, the bouncing glitches may be generated on "VBAT" (from battery) or "5VSB" (from ATX power supply). Such kind of bouncing glitches may cause the initialization of "Environment Controller Configuration Registers" of IT8700F to be unstable.

For preventing any abnormal behaviors of IT8700F, to program some bits of "Environment Controller Configuration Registers" to suitable value, after power-on and before POST sequence, is necessary (We may call it as an "Early I/O initialization" sequence.).

The registers which should be programmed to suitable values in the Early I/O initialization are described as follows;

Environment Controller Configuration Registers (LDN=04h):
  Index F0h = 00h
  Index F1h = 00h
  Index F2h = 00h
  Index F3h = 00h
  Index F4h = 00h
  Index F5h = 00h (Especially, must Bit 7~6 = 00)

 By the way, please also set
  LDN0, Index F1h/ Bit 7 = 1
  LDN3, Index F0h/ Bit 3 = 1   (If the POST Data Port function is used, please
                  still set LDN3/IndexF0/Bit3 to 1 after POST.)

 Moreover, for 720K floppy diskette, please set
  LDN5, Index 2Bh = F0h
  LDN5, Index 2Ch = 08h
  And set FIFO threshold of FDC to 0Fh.