

**S** 40 3F FF FF FF FF 03 **P**  
// 40=> device ID, 3F=> pull up/ pull down Enable index, FF ~ 03 => all input pin pull up, due to all input when power on( default value) & 44H~48H =FF FF FF FF 03 when power on, if not at power on, need to 44H~48H => FF FF FF FF 03, 0FH~13H (I/O configuration index) set to FF FF FF FF 03 for input( high Z), 3F~43H=>FF FF FF FF 03, as below.

**S** 40 44 FF FF FF FF 03 **P** **S** 40 0F FF FF FF 03 **P** **S** 40 3F FF FF FF FF 03 **P**

**S** 40 0F 00 00 00 00 00 00 **P** //40=> device ID, 0F=>I/O config index, 00~00=> I/O config value registers=> Config all I/O= output

**S** 40 05 00 00 00 00 00 **P** //40=> device ID, 05=>output port index, 00~00=> set all I/O = 0.

**S** 40 0F FF FF FF FF 03 **P** //40=> device ID, 0F=>I/O config index, 00~00=> I/O config value registers=> Config all I/O= input, then I/O= high due to 3F~43H pull up/pull down Enable index value still FF~03 & 44~48H=>FF FF FF FF 03.

// Powe on again, device ID=44

**S** 44 0F FF **P** **S** 44 10 FF **P** **S** 44 11 FF **P** **S** 44 12 FF **P** **S** 44 13 FF **P** //INITIAL PORT STATUS to input & high Z.

**S** 44 05 FC **P** **S** 44 06 FF **P** **S** 44 07 FF **P** **S** 44 08 FF **P** **S** 44 09 FF **P** //POWER UP FOR setting output state, but I/O still input direction.

**S** 44 0F FC **P** **S** 44 10 FF **P** **S** 44 11 FF **P** **S** 44 12 FF **P** **S** 44 13 FF **P** //POWER UP FOR OUTPUT direction. I/O= 05~09H data vlu.

// read I/O states

// Power on again or after reset

// Device ID=40

**S** 40 3F FF FF FF FF 03 **P** // I/O= Pull up

**S** 40 00 **P**// Command index=00H => input port

**S** 41 d d d d d **P**// read command of 41H, d = read input state