

## 26 ICP(IN-CIRCUIT PROGRAM) FLASH PROGRAM

The contexts of flash in N79E825 series are empty by default. User must program the flash EPROM by external Writer device or by ICP (In-Circuit Program) tool.

In the ICP tool, the user must take note of ICP's program pins used in system board. In some application circuits, the pins are located at P1.5, P0.4 and P0.5, as below figure. During ICP programming, P1.5 must be set to high voltage (~10.5V), and keeping this voltage to update code, data and/or configure CONFIG bits. After programming completion, the high voltage of P1.5 should be released. So, it is highly recommended user power off then power on after ICP programming has completed on the system board.

Upon entry into ICP program mode, all pin will be set to quasi-bidirectional mode, and output to level "1".

The N79E825 series support programming of Flash EPROM (**16K/8K/4K/2K** bytes AP Flash EPROM) and NVM data memory (**256** bytes). User has the option to program the AP flash and NVM either individually or both.

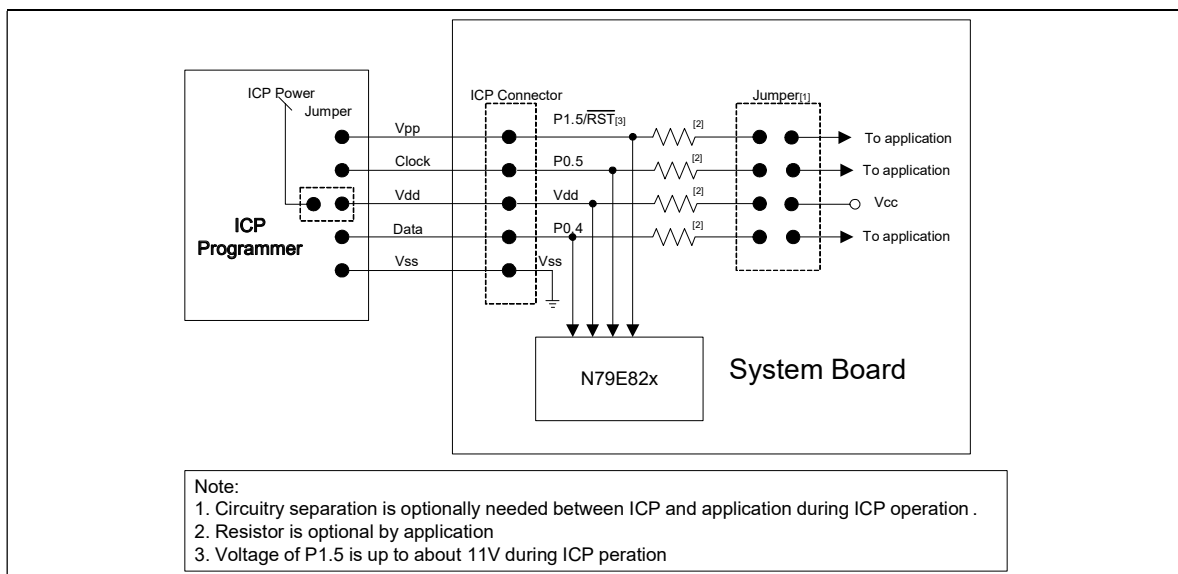


Figure 26-1: Application Circuit of ICP

- Note:**
1. When using ICP to upgrade code, the P1.5, P0.4 and P0.5 must be taken within design system board.
  2. After program finished by ICP, to suggest system power must power off and remove ICP connector then power on.
  3. It is recommended that user performs erase function and programming configure bits continuously without any interruption.