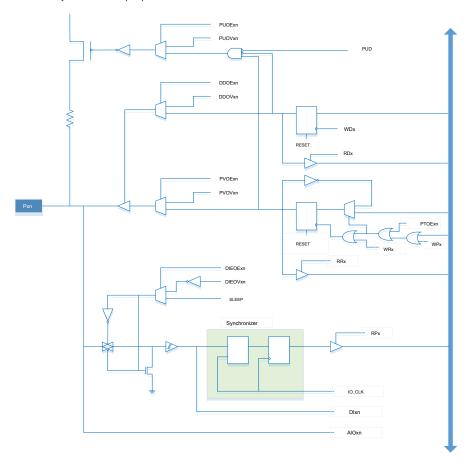
## Processing idle port

If some of the port is not in use, it is recommended to drive them to a fixed level. In any case, the floating pin will bring more power and cause the system to become unstable under strong interference.

A fixed level to a port easiest way is to open a pull-up resistor port. Note that the pull-up resistor in the power-on reset is prohibited. Way pull-up resistor will also bring the excess leakage. It is recommended to use a pull-up or pull-down resistor external connection. Or directly to the port connected to the power supply it is not recommended, because if the pin is configured as an output, there may result in a very large current, resulting in a devastating impact on the chip through the port.

## Port multiplexing function

Most ports have alternate functions, the following illustrates an equivalent circuit of the port of the multiplexing function control port. These alternate functions does not necessarily exist and so the port pin.



PULLUP DISABLE PUOExn: Pxn PULL-UP OVERRIDE ENABLE PUD: PUOVxn: Pxn PULL-UP OVERRIDE VALUE WDx: WRITE DDRx DDOExn: Pxn DATA DIRECTION OVERRRIDE ENABLE RDx: READ DDRx DDOVxn: Pxn DATA DIRECTION OVERRIDE VALUE RRx: READ PORTX REGISTER WRx: PVOExn: Pxn PORT VALUE OVERRIDE ENABLE WRITE PORTX PVOVxn: Pxn PORT VALUE OVERRIDE VALUE RPx: READ PORTx PIN DIEOExn: Pxn INPUT-ENABLE OVERRIDE ENABLE WPx: WRITE PINx DIEOVxn: Pxn INPUT-ENABLE OVERRIDE VALUE IO\_CLK: I / O CLOCK SLEEP: SLEEP CONTROL Dlxn: INPUT PIN n ON PORTx PTOExn: Pxn PORT TOGGLE OVERRIDE ENABLE AIOxn. ANALOG I / O PIN n ON PORTX