

PMC131 / PMS131 PB.3 IO Port

Application Note

Applied for: PMC131 / PMS131

When PB.3 is used as digital input and any other pin of Port B is used as output pin, please do NOT issue set1/set0 commands to control the output pin state. The correct way is to write the Port B data register pb to control the output pin state, or restrict PB3 as output pin only. **When PB.3 is used as analog (AD) input pin, the pbdier.3 must be set to 0 (pbdier.3=0) to avoid leakage current.**

Example: Using PB3 as digital input pin, and PB7 as output pin.

```
pbcr    = 0b_1111_0111;
pb      = 0b_0000_0000;
pbph    = 0b_1000_1000;    // PB3 is set to enable internal pull high
$ pbdier 0b_1111_1111;
```

Please do NOT use set1/set0 command to set PB7 output pin state.

```
if ( pb.3 )
{
set1 pb.7 ; // Don't use pb.7 = 1, either!
}
else
{
set0 pb.7 ; // Don't use pb.7 = 0, either!
}
}
```

The correct way is to write the Port B data register to control PB7 output pin state.

```
if ( pb.3 )
{
pb = 0b_1000_0000; // bit 3 must be 0
}
else
{
pb = 0b_0000_0000; // bit 3 must be 0
}
}
```