Guidelines on Power Supply

"We do not recommend using filter or other device in the circuit leading into V_{DD} pin.

The input voltage of Tri-State pin cannot be higher than the power supply voltage."
Electrical Specification

$V_{DD}$: 3.3V +/- 10%
2.5V +/- 10%
1.8V +/- 10%

Output Enable - Max: $V_{DD}$, Min: -70% $V_{DD}$
Output Disable - Max: 0.3$V_{DD}$, Min: -0.5$V_{DD}$

HCMOS/CMOS Output
Output High - Min: 0.9$V_{DD}$
Output Low - Max: 0.1$V_{DD}$
Guidelines on Startup Timing (1)

Tri-State signal shall be lagging $V_{DD}$ by 50 uS or more during startup

$V_{DD} @ 3.3V$

Hi

Lo

Tri-State

Hi

Lo

$t \geq 50$ uSec
Guidelines on Startup Timing (2)

The startup time (t from 0V to 0.9V_{DD}) for power source shall be more than 10 uS and less than 100 mS.

V_{DD} \@3.3V

Setting time:
1. t > 10 \mu S and t < 100 mS
2. At power-up (after V_{DD} > 1/2V_{DD}, 2mSec Max)
Programmable Products Power Rise mode Recommendation

**Good or Pass $V_{DD}$**
- Sleek
- Linear

**Bad or Failed $V_{DD}$**
- Undulation + Dip
- Linear + Dip
- Two or more Step
Guideline on Power Supply Profile

When turning off the oscillator, make sure the power level drop below $0.1V_{DD}$
How to use Tri-State XO if you do not need Tri-State Function

Because there is a internal pull-up resistance. So you can connect Tri-State pin to $V_{DD}$ or let Tri-State pin is floating if you do not need Tri-State function.

Taitien recommend to connect Tri-State to $V_{DD}$.
Recommended Soldering Pattern

A bypass capacitor shall be placed within 1mm of GND or $V_{DD}$ pins.
Thank You for Your Attention

For more Information, please contact us at sales@taitien.com.tw, or visit www.taitien.com

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