Difference of Standby Modes in Jauch VX3 and JO75 5.0V & 3.3V Oscillators



Short Description

Explanation

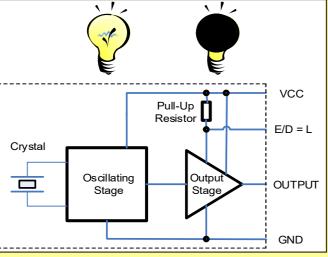
Standby function "Disabled" signal output disabled

Standby function "Enabled" signal output active

Application

"TRI = Tristate only"

during standby: oscillating stage operates & output has Tristate* function



Example values:

Oscillator Power, V_{DD} = 5.0V or 3.3V Current Consumption = reduced (3mA) E/D = 0V (Logic Low) Output = no signal, high impedance

Output = no signal, high impedance
Oscillation Circuit = fully enabled
Output Circuit = disabled

Crystal
Oscillating
Stage
Output
Stage
OUTPUT
GND

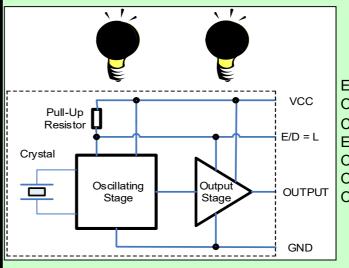
Example values:

Oscillator Power, V_{DD} = 5.0V or 3.3V Current Consumption = 10 mA E/D = H (Logic High or Open) Output = active (clock signal) Oscillation Circuit = fully enabled Output Circuit = enabled Enable Time <= 250nsec.

output multiplexed applications, <u>fast</u> reaction of output reduced power consumption when disabled

"STP = Stop with Tristate"

during standby: oscillating stage stops & output has Tristate* function



Example values:

Oscillator Power, $V_{DD} = 5.0V$ or 3.3V

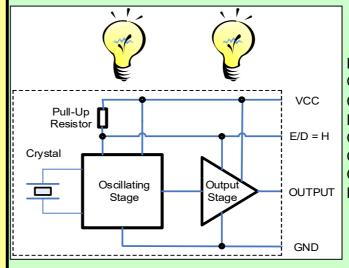
Current Consumption = almost Zero (some μ A)

E/D = 0V (Logic Low)

Output = no signal, high impedance

Oscillation Circuit = disabled

Output Circuit = disabled



Example Values:

Oscillator Power, $V_{DD} = 5.0V$ or 3.3V

Current Consumption = 10 mA

E/D = H (Logic High or Open)

Output = active (clock signal)

Oscillation Circuit = fully enabled

Output Circuit = enabled

Enable Time = 0.2...10msec.

battery powered applications, power consumption <u>very low when disabled</u>, <u>slower</u> reaction of output when re-enabled

*Tristate Tristate means that the output can have 3 states: High or Low when enabled / High Impedance if disabled

Note 1: If the E/D Pin is not connected, the oscillator is continuously operating as soon as a supply voltage is available

Note 2: The STOP Function is Jauch standard for all oscillators belonging to JO53, JO32, JO22 and JO21 series