

PSpice Model

Monostable Multivibrator

TOSHIBA

TC7WH123FK

Model Information

Model A macro model
Call Name MDC_TC7WH123FK_PS
Pin Assign 1: \bar{A} 2:B 3: \bar{CLR} 4:GND 5:Q 6:Cx 7:Rx/Cx 8:VCC
File List Model Library MDC_TC7WH123FK_PS01.lib
 Model Report MDC_TC7WH123FK_PS.pdf(this file)
Verified Simulator Version PSpice 17.2

Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 2017/06/06
- Product name TC7WH123FK
- Company name TOSHIBA

[Characteristics listed]

- Characteristics VIH, VIL, VOH, VOL, trr, tpLH, tpHL, twOUT

Simulation Condition

This table shows the range of evaluated simulation range that was not occurs any convergence problems in this area.

Item	Condition	Unit
Temperature	25	deg C

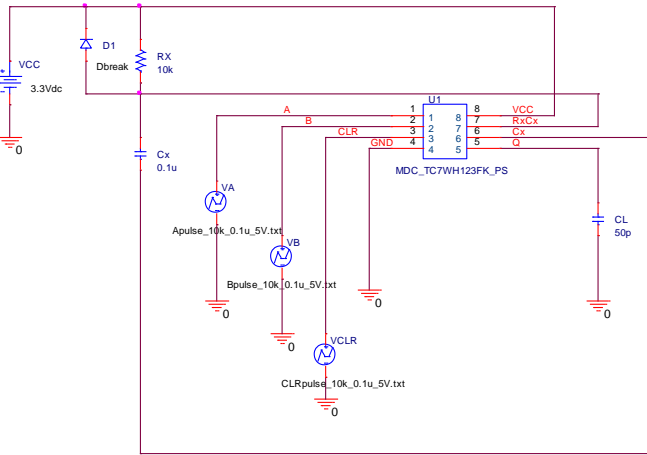
○ : Implemented
× : Not Implemented
— : Not applicable

Model Functions Table**RANK=1**

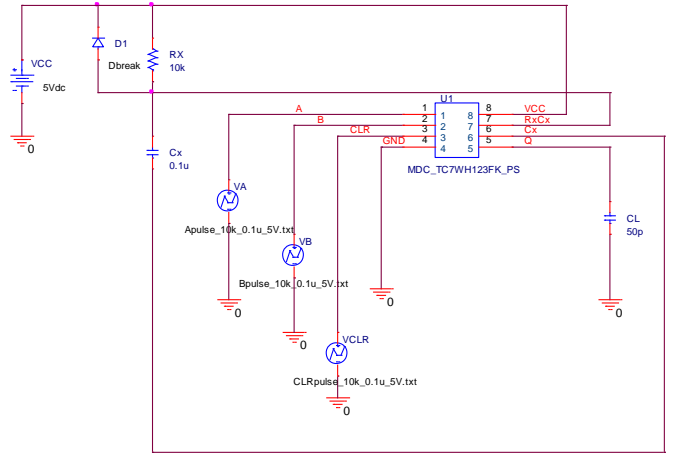
Functions	RANK	Implemented
Truth table	1	○

Timing Chart(10k_0.1u_3.3V_5V) Testbench
Referred to Data Sheet

Timing Chart(10k_0.1u_3.3V)

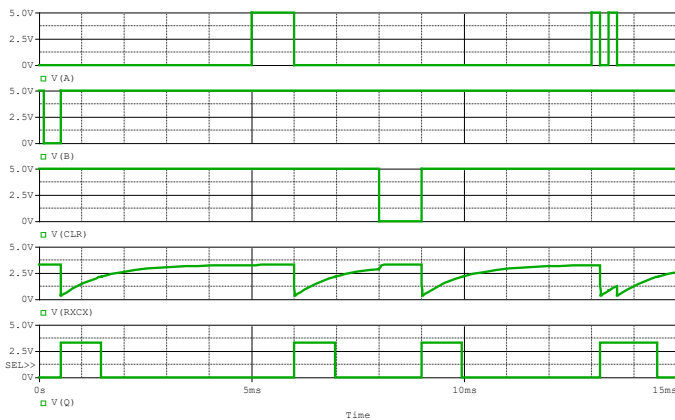


Timing Chart(10k_0.1u_5V)

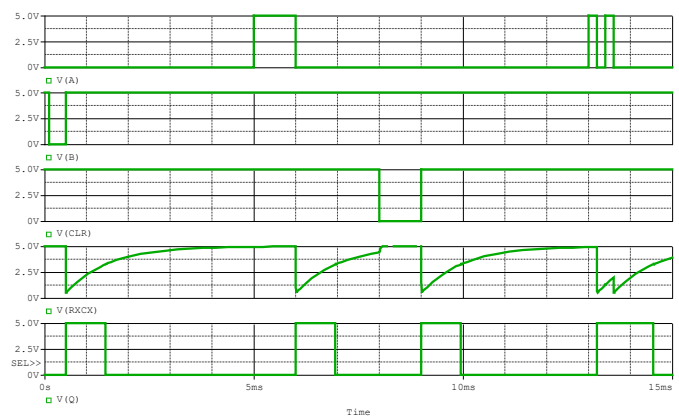


Simulation results are following.
 Explanatory notes — : simulated

Timing Chart(10k_0.1u_3.3V)

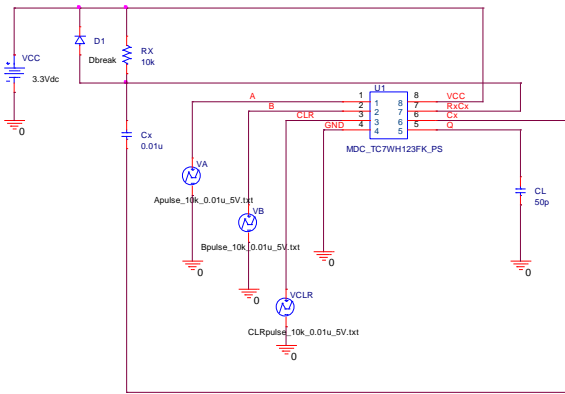


Timing Chart(10k_0.1u_5V)

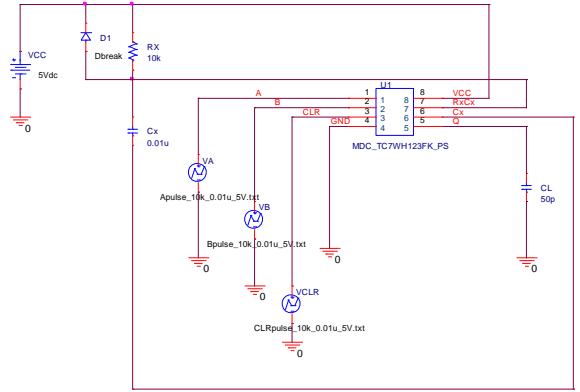


Timing Chart(10k_0.01u_3.3V_5V) **Testbench**
Referred to Data Sheet

Timing Chart(10k_0.01u_3.3V)

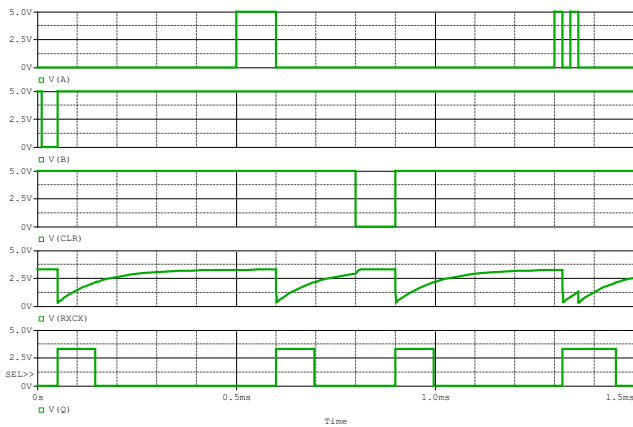


Timing Chart(10k_0.01u_5V)

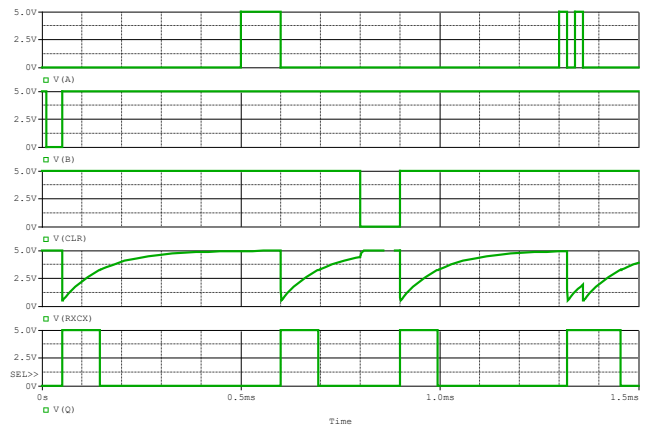


Simulation results are following.
 Explanatory notes — : simulated

Timing Chart(10k_0.01u_3.3V)

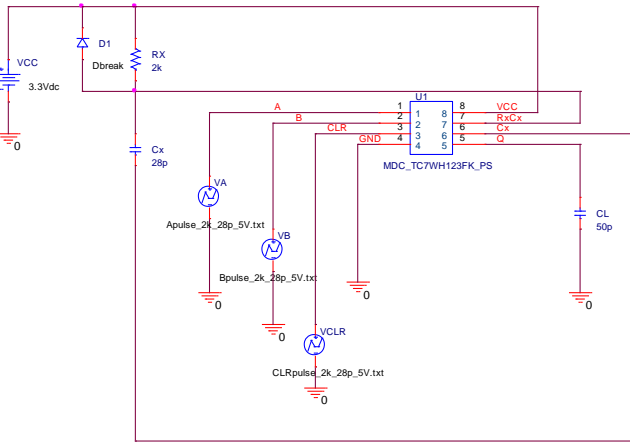


Timing Chart(10k_0.01u_5V)

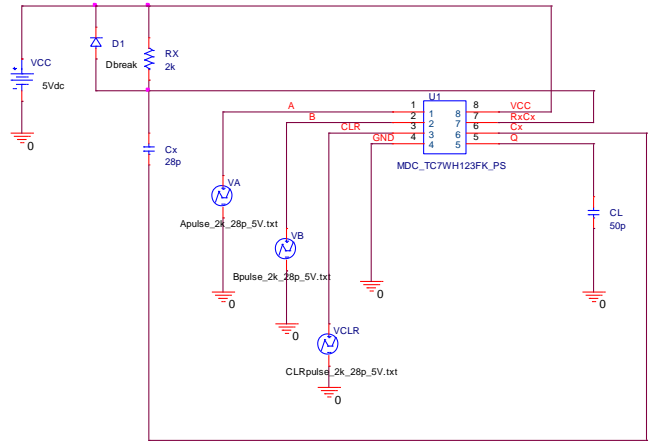


Timing Chart(2k_28p_3.3V_5V) **Testbench**
Referred to Data Sheet

Timing Chart(2k_28p_3.3V)

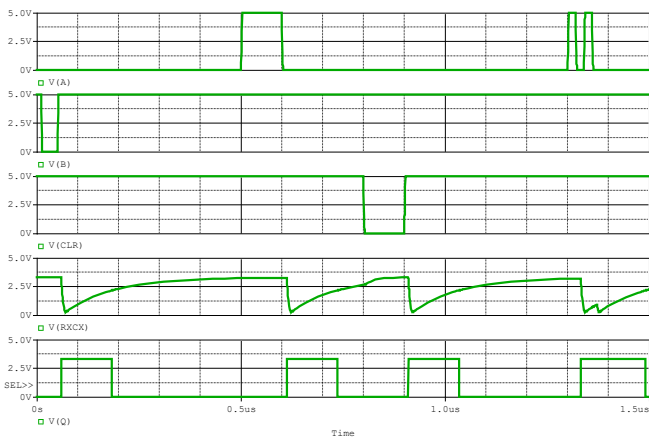


Timing Chart(2k_28p_5V)

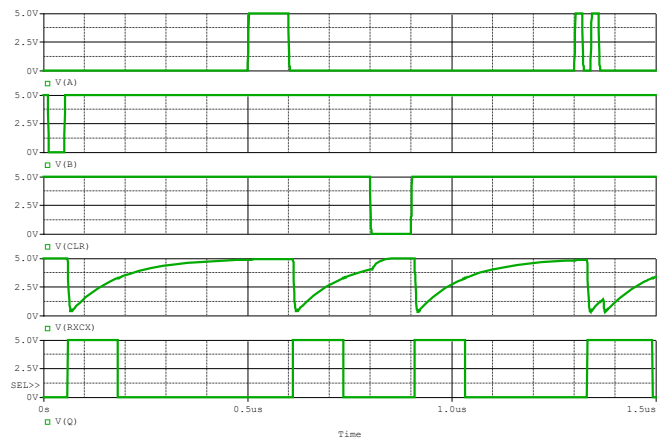


Simulation results are following.
 Explanatory notes — : simulated

Timing Chart(2k_28p_3.3V)



Timing Chart(2k_28p_5V)



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