

LTspice Model

Single Schmitt trigger buffer

Nexperia

74LVC1G17GW-Q100

Model Information

Model A macro model
Call Name MDC_74LVC1G17GW-Q100_LT
Pin Assign 1: n.c. 2: A 3: GND 4: Y 5: Vcc
File List Model Library MDC_74LVC1G17GW-Q100_LT02.lib
 Model Report MDC_74LVC1G17GW-Q100_LT.pdf
Verified Simulator Version LTspice XVII

Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version 14 January 2022 / Rev.14
- Product name 74LVC1G17GW
- Company name Nexperia

[Characteristics listed]

- Characteristics Transfer characteristics

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
Voltage Supply	1.65 to 5.5	V

Schmitt trigger buffer

○ : Implemented
 × : Not Implemented
 — : Not applicable

Model Functions Table

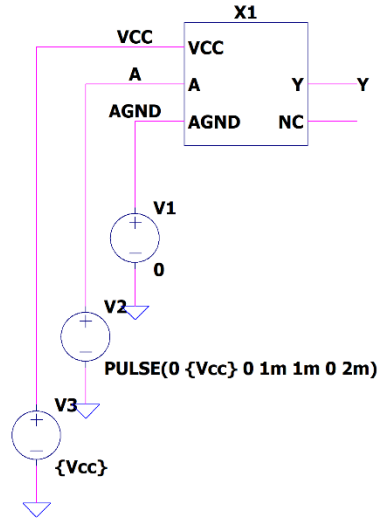
RANK=1

Functions	RANK	Implemented
Transfer characteristics	1	○

Threshold voltage characteristics **Testbench**

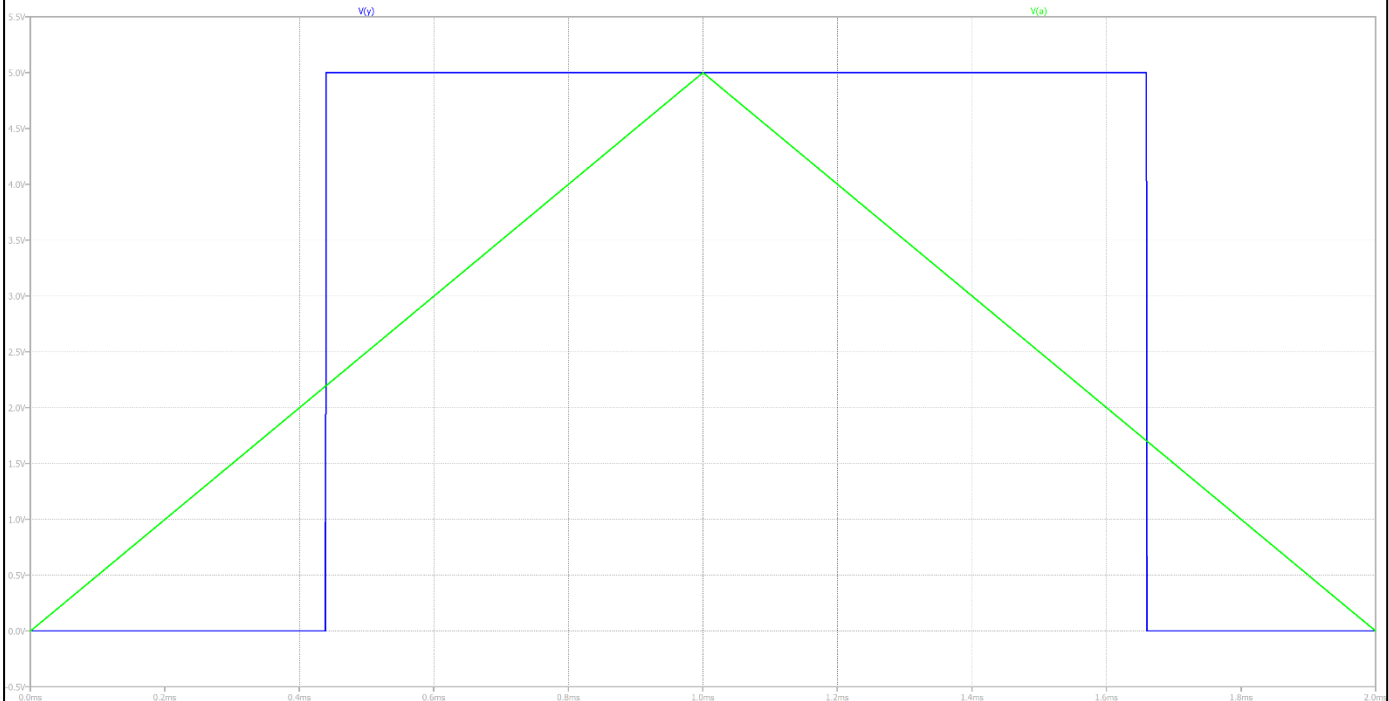
Referred to Data Sheet

Case for $V_{cc} = 5.0\text{ V}$



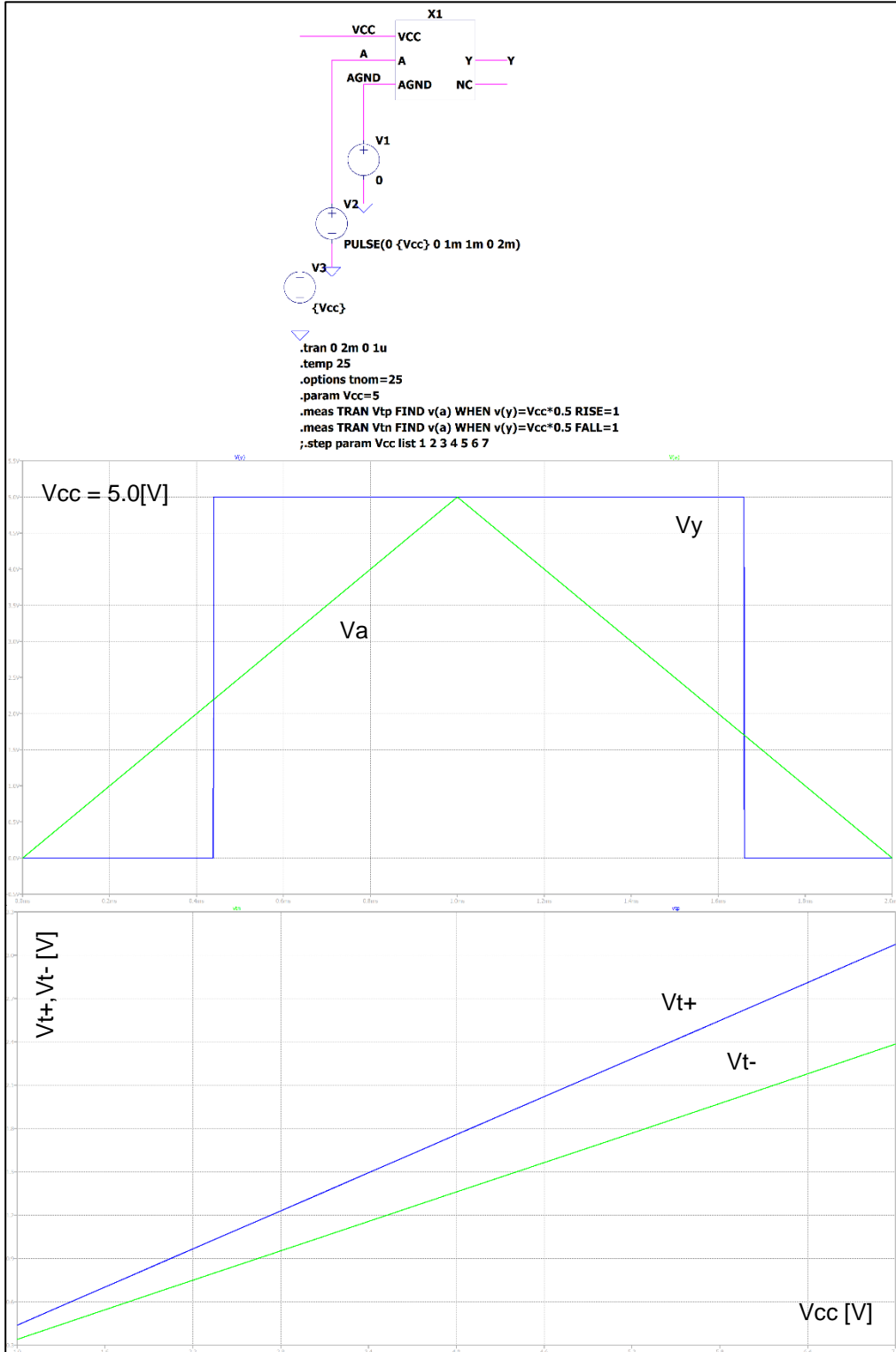
```

.tran 0 2m 0 1u
.temp 25
.options tnom=25
.param Vcc=5
.meas TRAN Vtp FIND v(a) WHEN v(y)=Vcc*0.5 RISE=1
.meas TRAN Vtn FIND v(a) WHEN v(y)=Vcc*0.5 FALL=1
;step param Vcc list 1 2 3 4 5 6 7
    
```



Threshold voltage characteristics **Testbench**

Referred to Data Sheet



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