

# LTspice Model

## High- and Low-Side Gate Driver

### ON Semiconductor(Fairchild)

### FAN7382M1X

#### Model Information

<b>Model</b>	A macro model
<b>Call Name</b>	MDC_FAN7382M1X_LT
<b>Pin Assign</b>	1:VCC 2:HIN 3:LIN 4:NC 5:NC 6:COM 7:LO 8:NC 9:NC 10:NC 11:VS 12:HO 13:VB 14:NC
<b>File List</b>	Model Library MDC_FAN7382M1X_LT.lib Model Report MDC_FAN7382M1X_LT.pdf(this file)
<b>Verified Simulator Version</b>	LTspice XVII

#### Note

#### References

The information which was used for modeling is as follow:

[Data Sheet]

●Date/Version	FAN7382 Rev. 1.0.8
●Product name	FAN7382M1X
●Company name	ON Semiconductor(Fairchild)

[Characteristics listed]

- Characteristics
- Switching
- HalfBridge

#### 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	○
On Resistance	1	–
Switching(Typ.)	1	○
UVLO	1	○
VH/VIL-VDD	1	○
Clamp Voltage	1	–
Propagation delay	1	○
Over Current Protection	2	–
Over Voltage Protection	2	–

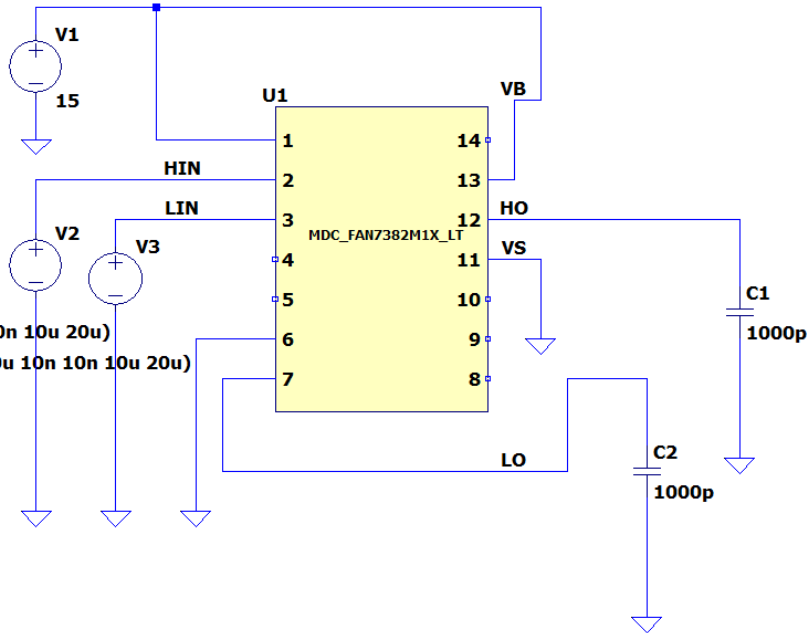
Switching Testbench

Referred to Data Sheet

.OPTION TNOM=25  
.TEMP 25

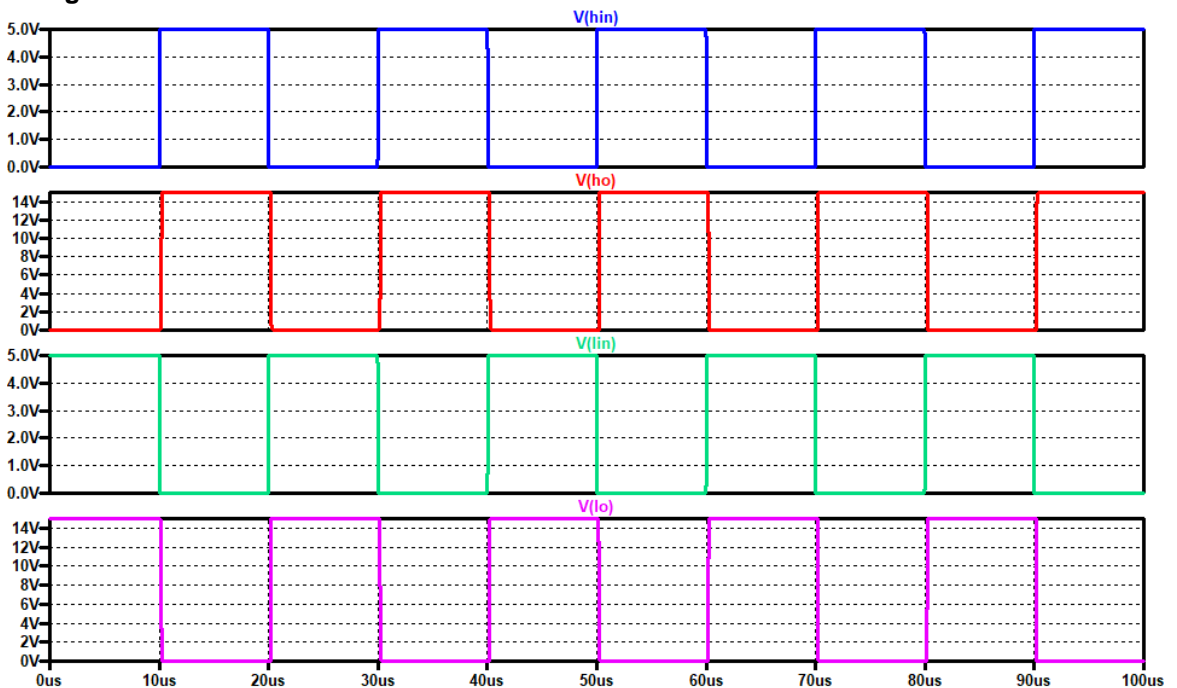
.tran 100u

PULSE(0 5 10u 10n 10n 10u 20u)  
PULSE(5 0 10u 10n 10n 10u 20u)

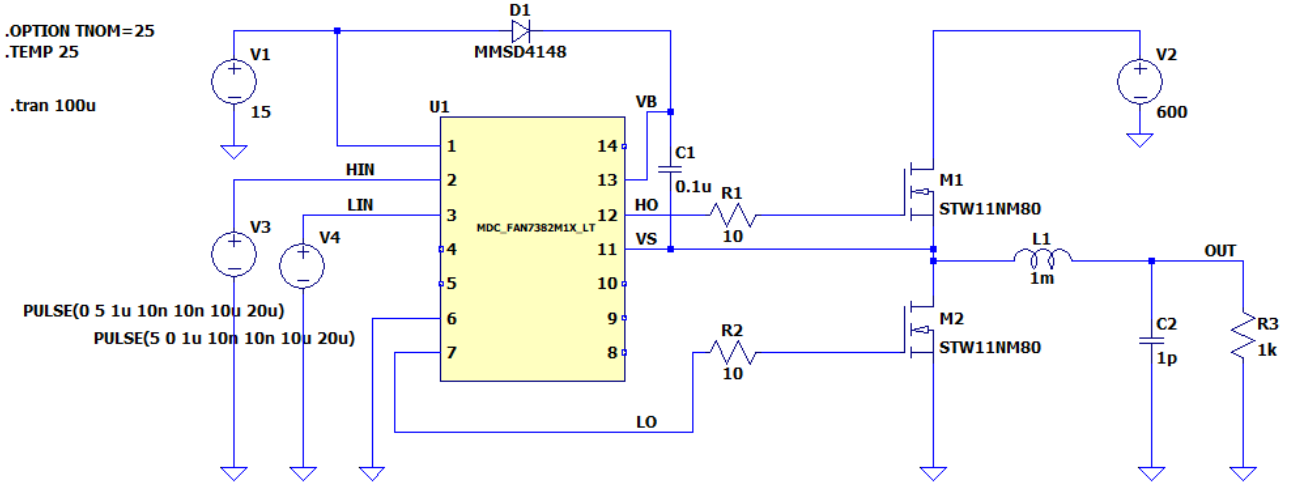


Simulation results are following.  
Explanatory notes — : simulated

Switching

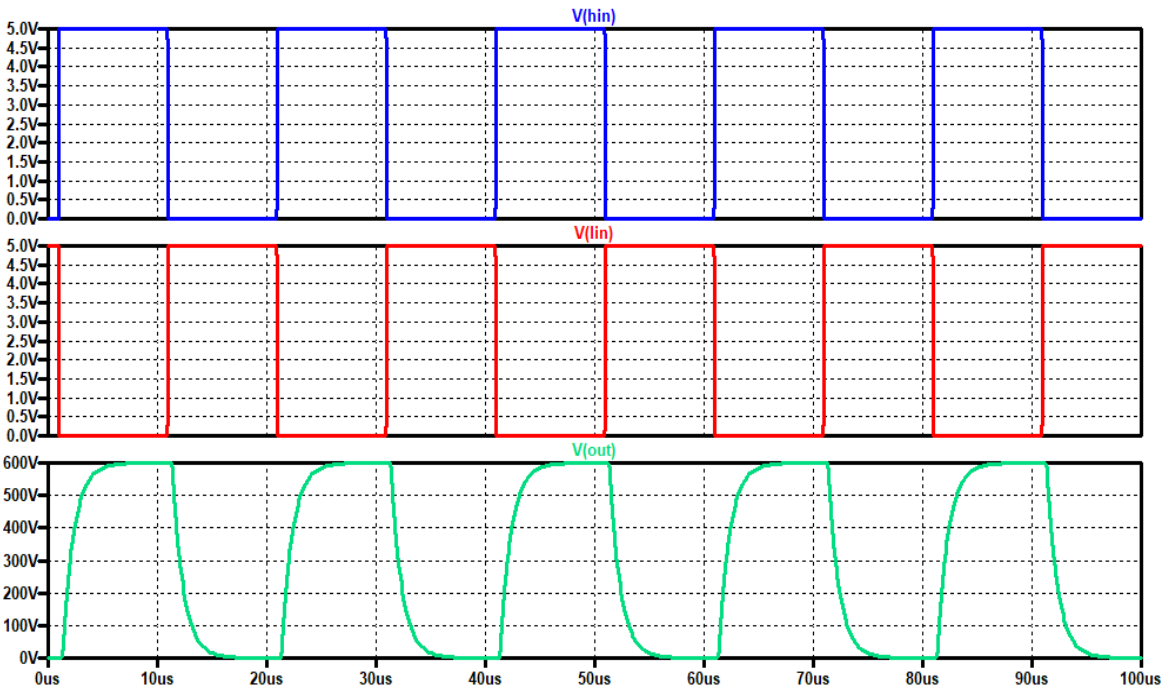


Half Bridge Testbench  
 Referred to Data Sheet



Simulation results are following.  
 Explanatory notes — : simulated

Half Bridge



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