# LTspice Model
# Buck Converter
# Sanken Electric Co., Ltd.
# STR6A168HVD

## Model Information

| | | |
|---|---|---|
| **Model** | A macro model | |
| **Call Name** | MDC_ STR6A168HVD _LT | |
| **Pin Assign** | 1:S/OCP 2: BA 3:AGND 4:FB/OLP 5:VCC 6:NC 7:D/ST1 8:D/ST2 | |
| **File List** | Model Library | MDC_STR6A168HVD_LT01.lib |
| | Model Report | MDC_STR6A168HVD_LT.pdf (this file) |
| **Verified Simulator Version** | | LTspice XVII |
| **Note** | | |

**References**

The information which was used for modeling is as follow:

[Data Sheet]

- ●Date/Version Rev.3.0 2021.01.25
- ●Product name STR6A168HVD
- ●Company name SANKEN ELECTRIC

[Characteristics listed]

- ●Characteristics $V_{CC}$, $V_{FB/OLP}$, $V_{D/ST}$, $V_{S/OCP}$

**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 |

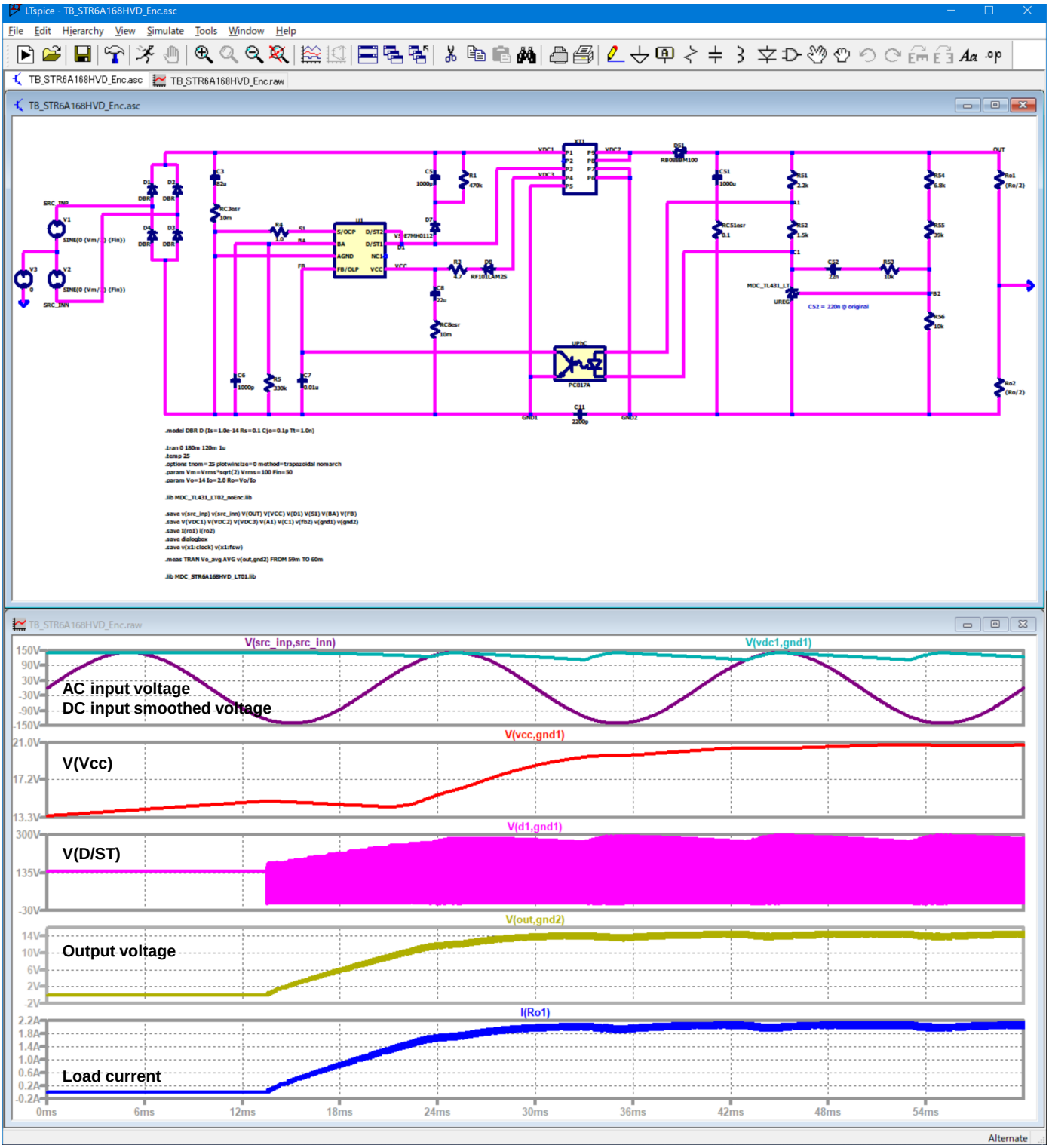
# Switching Regulator

○ : Implemented
× : Not Implemented
— : Not applicable

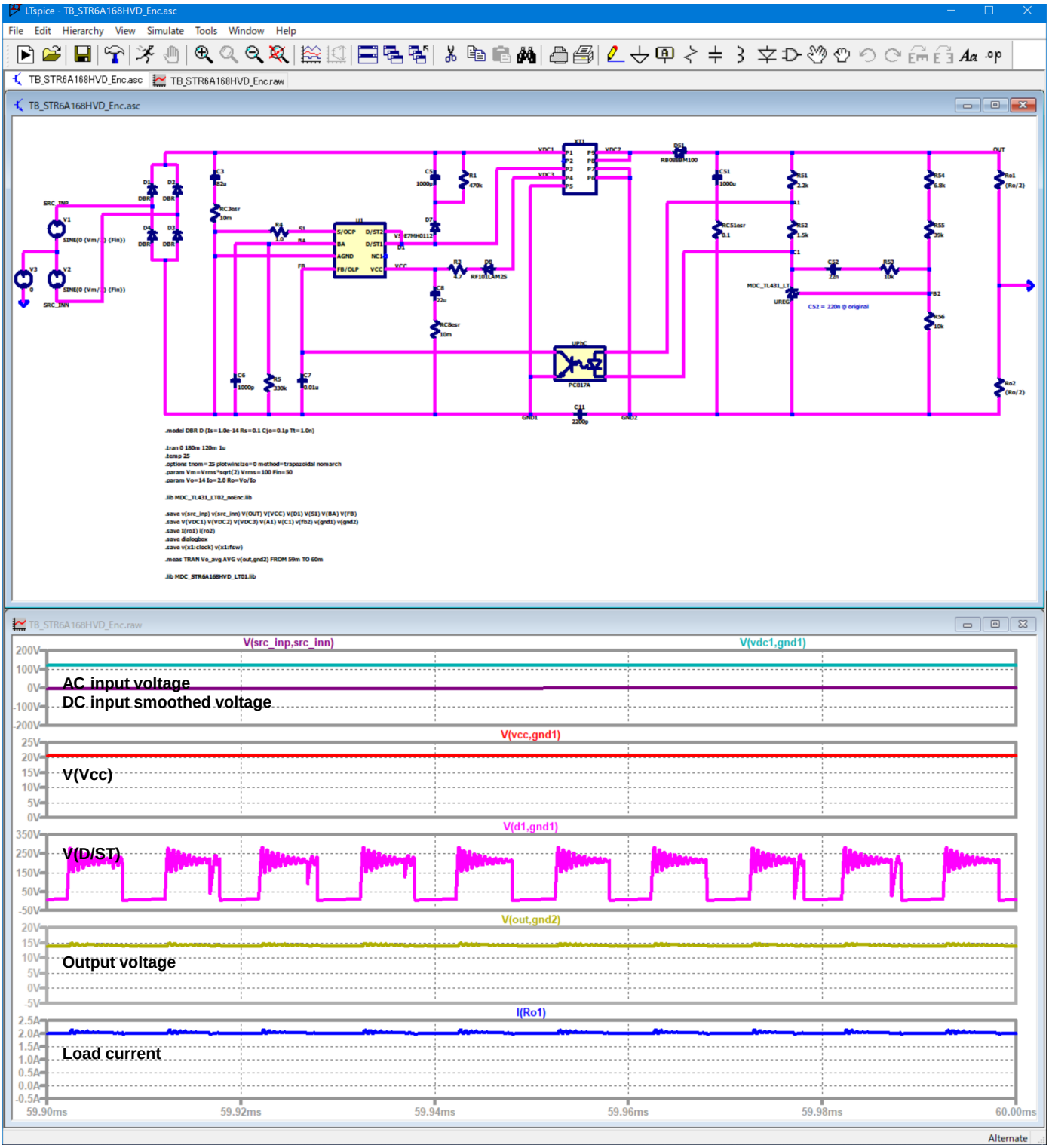
**Model Functions Table**

| | RANK=2 | |
|---|---|---|
| **Functions** | **RANK** | **Implemented** |
| Control Method (PWM,PFM) | 1 | ○ |
| Enable Function | 1 | – |
| Soft Start | 1 | ○ |
| Line Regulation | 1 | – |
| Load Regulation | 1 | – |
| Synchronous External Oscillation | 1 | – |
| UVLO | 1 | ○ |
| Line Transient | 2 | – |
| Load Transient | 2 | – |
| Light Load Current Mode | 2 | ○ |
| Spread Spectrum | 2 | – |
| Over Current Protection | 2 | ○ |
| Over Voltage Protection | 2 | ○ |
| Forward/Flyback Other Device in Circuit | 3 | – |
| Brown IN/OUT Function | — | – |
| ZT Pin OVP Function | — | – |

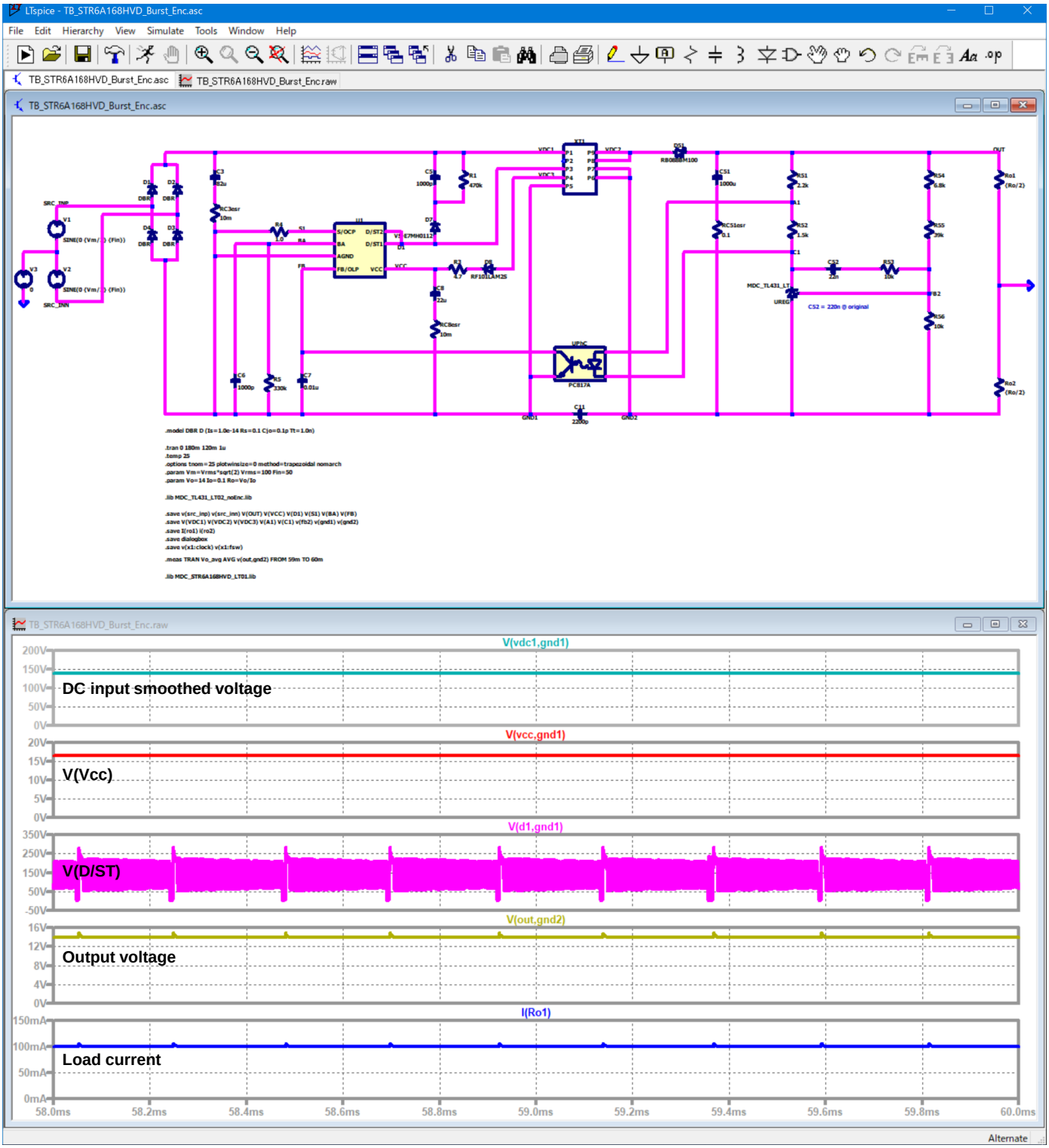
**Test bench for power supply circuit (Vac = 100V, Vout = 14V, Iout = 2.0A)**



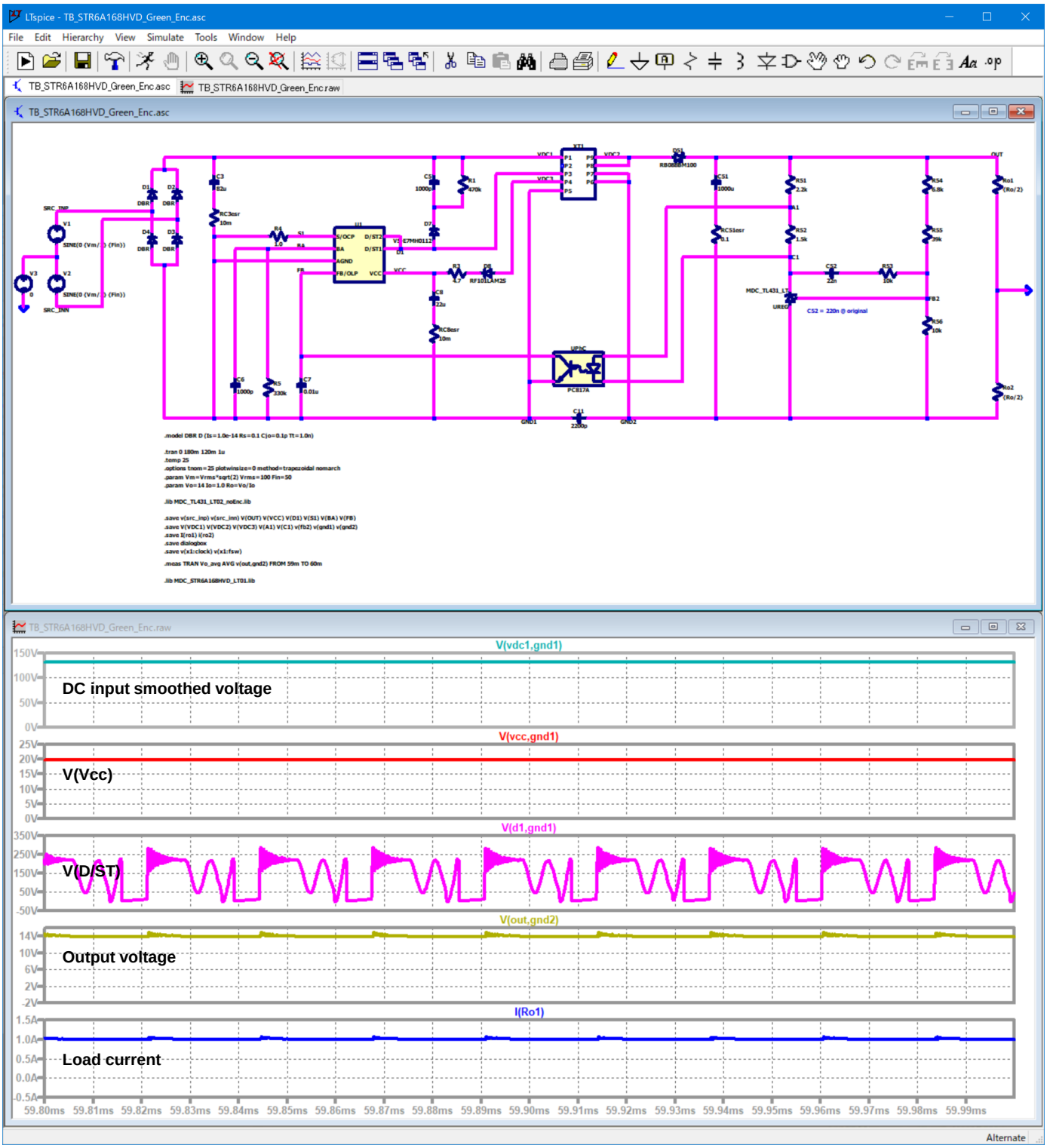
**Test bench for power supply circuit (Vac = 100V, Vout = 14V, Iout = 2.0A)**



**Test bench for Burst-mode function (Vac = 100V, Vout = 14V, Iout = 0.1A)**



**Test bench for Green-mode function (Vac = 100V, Vout = 14V, Iout = 1.0A)**



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