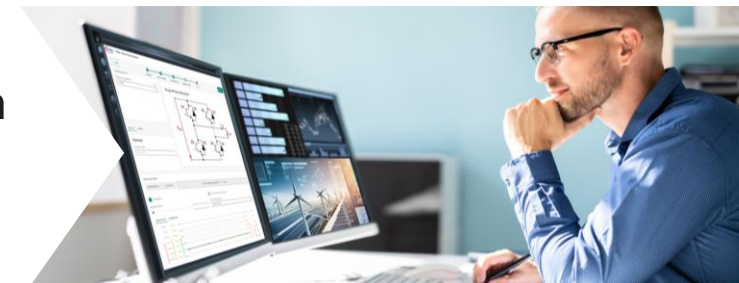# How-to- access IPOSIM with SPICE

IPOSIM is getting SPICE 🌶️

Simulate now your system closer to real-world operating conditions with the **New PLECS model generation out of SPICE directly in IPOSIM!**

IPOSIM with SPICE now accounts for the complexities of your specific external circuitry setup and particular gate driver used, enabling you to simulate, test and optimize your system design with **a higher degree of accuracy**, thereby **reducing development time and costs.**

More realistic operating conditions to support their selection decision

Main Features:

- ✓ **Customize your own application environment** setup, tailoring for deadtime, stray inductance and gate voltage.
- ✓ Design support with **higher system accuracy**
- ✓ Model generation taking into account **your** choice of **gate driver**.

 Higher system accuracy

 Speed-up development

 Reduce design iterations

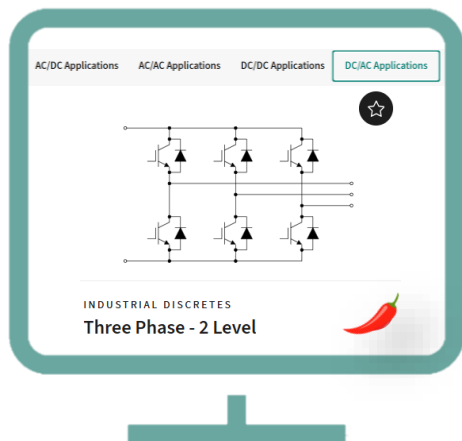**Where? Online & free of charge. Go to:** **iposim.infineon.com**

Generate your own custom PLECS model out of SPICE

How to find IPOSIM with SPICE?

Simply follow the 🌶 icon in IPOSIM to simulate with higher accuracy.

🌐 **iposim.infineon.com**

Topology ✓ —— **Device Selection** ✓ —— **Simulation Type** ✓ - - - **Application Data** ○ - - - **Results** ○

🔘 🌶 My Model support only

Device Name

- ○ IMW120R040M1H 🌶
- ○ IMBG120R034M2H 🌶
- ○ IMBG120R026M2H 🌶
- ○ IMW120R020M1H 🌶
- ○ IMW120R014M1H 🌶
- ○ IMW120R007M1H 🌶

Steady-State

Power and thermal calculation at a **single operating condition** over time.

Select one of the **topologies** available for custom model generation

Select the **switch device(s)** available for custom model generation

Note: you can select more than one set-up
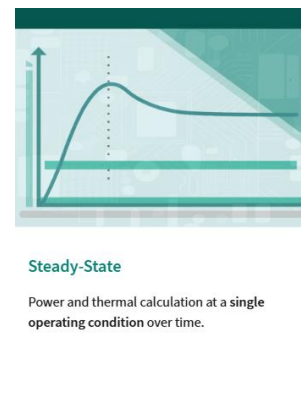
Select the **Simulation Type** as usual

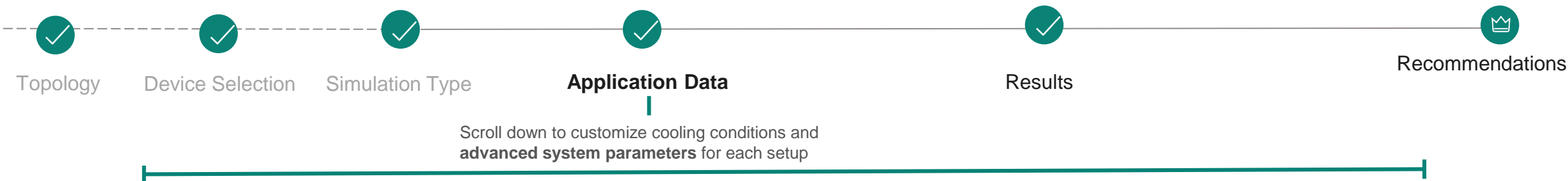# Generate your own custom PLECS model out of SPICE

How to find IPOSIM with SPICE?

Simply follow the 🌶 icon in IPOSIM to simulate with higher accuracy.

Topology — Device Selection — Simulation Type — **Application Data** — Results — Recommendations

Scroll down to customize cooling conditions and **advanced system parameters** for each setup

1 Select the type of model
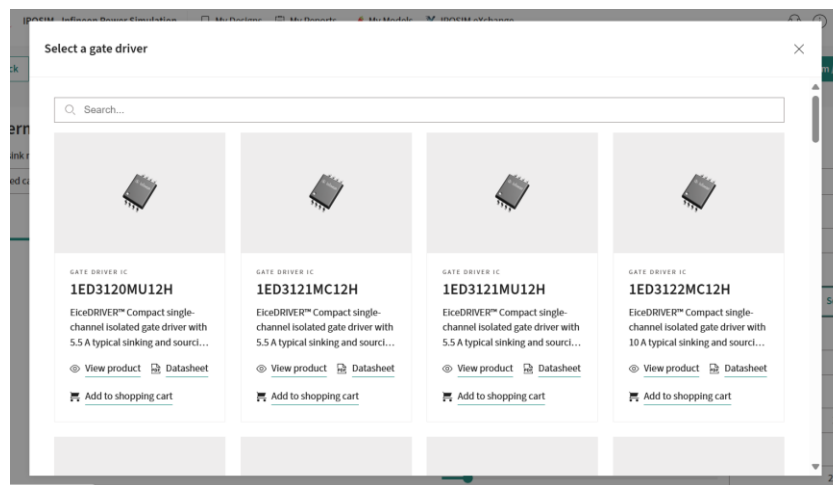
2 Give a name to your custom model

3 Select a Gate Driver

4 Customize advanced application parameters: rg (on/off) Vgs, td, lo.

System parameters

Select model

Infineon Default

Infineon Default

🌶 Generate custom model

Model name

My Spice Model

Select a gate driver

🔍 Search...

GATE DRIVER IC
1ED3120MU12H
EiceDRIVER™ Compact single-channel isolated gate driver with 5.5 A typical sinking and sourci...
👁 View product 📄 Datasheet
🛒 Add to shopping cart

GATE DRIVER IC
1ED3121MC12H
EiceDRIVER™ Compact single-channel isolated gate driver with 5.5 A typical sinking and sourci...
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GATE DRIVER IC
1ED3121MU12H
EiceDRIVER™ Compact single-channel isolated gate driver with 5.5 A typical sinking and sourci...
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GATE DRIVER IC
1ED3122MC12H
EiceDRIVER™ Compact single-channel isolated gate driver with 10 A typical sinking and sourci...
👁 View product 📄 Datasheet
🛒 Add to shopping cart

Turn-off gate voltage — 0 V

Turn-on gate voltage — 18 V

Turn-on gate resistor R_{Gon} — 2.3 Ω

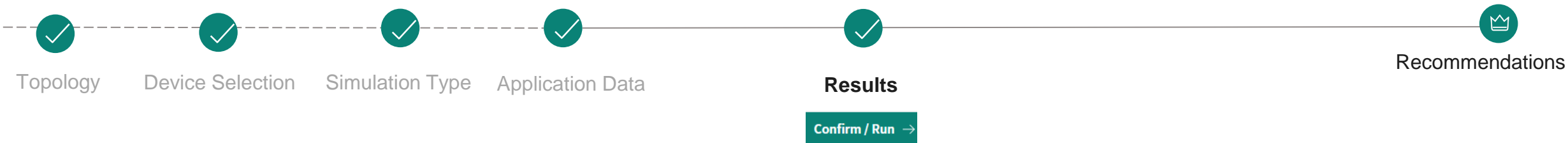Turn-off gate resistor R_{Goff} — 2.3 Ω

DC-link stray inductance — 2 nH

Dead time — 50 ns

– Default: standard plecs xml model (based on datasheet)
– Custom model: plecs model generation (powered by SPICE)

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Generate your own custom PLECS model out of SPICE

How to find IPOSIM with SPICE?

Simply follow the 🌶 icon in IPOSIM to simulate with higher accuracy.

Topology   Device Selection   Simulation Type   Application Data   **Results**   Recommendations

Confirm / Run →

Simulation results

Option to download xml file