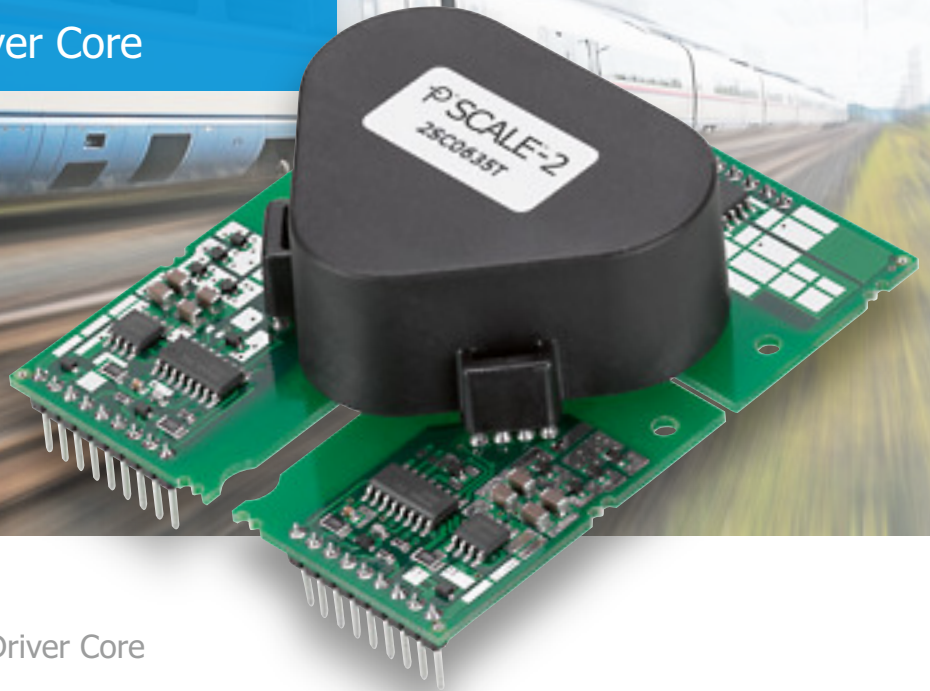


## 2SC0635T SCALE™-2 IGBT Gate Driver Core



### 2SC0635T-45 Proven High-Voltage IGBT Dual Gate Driver Core with Electrical Signal Interface.

#### PRODUCT DESCRIPTION

The 2SC0635T dual-channel SCALE™-2 driver core combines unrivalled compactness with broad applicability and cost efficiency. It is designed for industrial and traction applications requiring high reliability. The 2SC0635T drives all standard high-voltage IGBT modules up to 4500 V.

The driver is designed for universal applications requiring high reliability. Its embedded paralleling capability allows easy inverter design covering higher power ratings. Multi-level topologies involving 1700 V or 3300 V IGBTs with higher isolation requirements can also be easily supported by 2SC0635T2A0-45.

The 2SC0635T is the most compact driver core in its voltage and power range, featuring a footprint of only 75.5x 66.8 mm and an insertion height of maximum 26 mm. It allows even the most restricted insertion spaces to be efficiently used.

An output current of 35 A and 6 W drive power is available per channel, making the 2SC0635T2A0-45 an ideal driver platform for universal use in medium and high-power applications. The driver provides a gate voltage swing of 15 V/-10 V.

The turn-on voltage is regulated to maintain a stable 15 V regardless of the output power level. Its outstanding EMC allows safe and reliable operation even in hard industrial applications.

#### APPLICATIONS

- Traction
- HVDC
- STATCOM
- Medium-voltage converters/drives
- Wind-power converters

#### KEY BENEFITS

4.5 kV driver core with on board power supply and no fiber optics achieves lower system costs.

#### KEY FEATURES

- Dual-channel driver core for up to 4500 V
- $\pm 35$  A gate current, +15 V/-10 V
- 6 W @ 85 degC per channel
- High reliability (reduced component count)
- Design flexibility
- 1700 V/3300 V 3-level converters
- Direct paralleling capability
- Advanced Active Clamping
- Short-circuit protection, under-voltage lockout
- Adjustable short-circuit turn-off delay (3-level converters)
- Delay time <100 ns, up to 100 kHz
- Isolation coordination according to IEC Standards
- UL compliant
- Applications up to -55 degC
- Lead free

