CoolGaN™ e-mode HEMTs are best driven by Infineon’s EiceDRIVER™ ICs, the 1EDF5673K, 1EDF5673F and 1EDS5663H. They ensure robust and highly efficient high voltage GaN switch operation whilst concurrently minimizing R&D efforts and shortening time-to-market.

**Key advantages of designing with the GaN EiceDRIVER™ family**

**Positive and negative gate drive currents:**
- Fast turn-on / turn-off GaN switch slew-rates

**Firmly hold gate voltage at zero, during off-phase:**
- Avoids spurious GaN switch turn-on
- Up to 50% lower dead-time losses

**Configurable and constant GaN switching slew-rates, across wide range of switching frequency and duty-cycle:**
- Robust and energy efficient SMPS designs
- Short time-to-market

**Integrated galvanic isolation:**
- Robust operation in hard-switching applications
- Safe isolation where needed

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**GaN EiceDRIVER™ ICs evaluation environment**

High frequency (1 MHz) half-bridge evaluation board EVAL_1EDF_G1_HB_GAN

**Key components:**
- GaN switches: 2x CoolGaN™ 600 V e-mode HEMTs (IGOT60R070D1)
- GaN drivers: 2x GaN EiceDRIVER™ (1EDF5673K)

**Order code:** EVAL_1EDF_G1_HB_GAN*

*Coming soon

www.infineon.com/gan-eicedriver
# GaN EiceDRIVER™ family

Single-channel isolated gate driver ICs for high voltage GaN switches

## High power SMPS application example

![Diagram of GaN EiceDRIVER™ family](image)

*GaN EiceDRIVER™ ICs are single-channel products

## Product portfolio

<table>
<thead>
<tr>
<th>Package</th>
<th>Product</th>
<th>OPN</th>
<th>Isolation (input to output)</th>
<th>Source/sink output resistance</th>
<th>UVLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-pin LGA 5x5 mm</td>
<td>1EDF5673K*</td>
<td>1EDF5673KUXUMA1</td>
<td>( V_{G} = 1500 , V_{CC} )</td>
<td>0.85 Ω/0.35 Ω</td>
<td>4.5 V / 5.0 V</td>
</tr>
<tr>
<td>16-pin DSO 150 mil</td>
<td>1EDF5673F</td>
<td>1EDF5673FXUMA1</td>
<td>( V_{G} = 1500 , V_{CC} )</td>
<td>0.85 Ω/0.35 Ω</td>
<td>4.5 V / 5.0 V</td>
</tr>
<tr>
<td>16-pin DSO 300 mil</td>
<td>1EDS5663H</td>
<td>1EDS5663HUXUMA1</td>
<td>( V_{G} = 8000 , V_{CC} ) ( (\text{VDE0884}!-!10, \text{pending}) )</td>
<td>0.85 Ω/0.35 Ω</td>
<td>4.5 V / 5.0 V</td>
</tr>
</tbody>
</table>

*Coming soon

## Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

## Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life-endangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.