Product Brief

µHVIC™ family

Now including IR44252L, IR44272L and IR44273L – single channel low-side drivers

The µHVIC™ family is a collection of high-voltage and low-voltage basic building block ICs. These simple ICs are used in common circuit elements giving designers the flexibility to innovate. The family is a basic toolkit containing ICs for common circuit elements in power electronics.

These devices use Infineon’s advanced high-voltage process to realize a compact, efficient and robust monolithic construction.

**The family consists of seven devices**

- The new IR44252L, IR44272L and IR44273L are single channel low-side drivers with current capability up to 1.7 A. The IR442xxL devices integrate $V_{CC}$ Undervoltage Lockout (UVLO) protection. The IR44272L features an enable pin and the IR44252L and IR44273L have dual output pins for easy PCB layout.

- The IRS25752L, IRS20752L and IRS10752L are single channel high-side drivers with a typical output sink current of 240 mA and typical output source current of 160 mA. The IRSxx725L devices are tailored for specific voltage classes: 600 V, 200 V and 100 V. Integrated $V_{CC}$ and $V_{BS}$ Undervoltage Lockout (UVLO) protection and low quiescent currents are standard features provided in the high-side drivers.

- IRS25751L is a 480 V high-voltage start-up IC, ideal for supplying initial start-up current to a low-voltage supply capacitor from a high-voltage bus. The IRS25751L provides easy and fast circuit start-up while consuming ultra-low stand-by current reducing stand-by losses and improving overall system efficiency.

**Main features and benefits**

- New building block IC family for popular circuit elements
- Uses Infineon’s advanced, robust high-voltage IC process
- Tiny SOT23 package
- Flexible & easy to use
- Multi-platform use
- Multi-application use
- Fast time-to-market

**Applications**

- General purpose electronics

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µHVIC™ family

Now including IR44252L, IR44272L and IR44273L – single channel low-side drivers

Product portfolio

Single channel low-side drivers

<table>
<thead>
<tr>
<th>Part number</th>
<th>Channels</th>
<th>Source/sink current (typ) [A]</th>
<th>Propagation delay (typ) [ns]</th>
<th>Control inputs</th>
<th>UVLO [V]</th>
<th>Dual output pin</th>
<th>Package</th>
<th>MSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR44252L</td>
<td>1</td>
<td>0.3/0.55</td>
<td>50</td>
<td>IN</td>
<td>4.15 ... 5.0</td>
<td>✓</td>
<td>5-lead SOT23</td>
<td>1</td>
</tr>
<tr>
<td>IR44272L</td>
<td>1</td>
<td>1.7/1.5</td>
<td>50</td>
<td>IN, EN</td>
<td>4.15 ... 5.0</td>
<td>✓</td>
<td>5-lead SOT23</td>
<td>1</td>
</tr>
<tr>
<td>IR44273L</td>
<td>1</td>
<td>1.7/1.5</td>
<td>50</td>
<td>IN</td>
<td>4.15 ... 5.0</td>
<td>✓</td>
<td>5-lead SOT23</td>
<td>1</td>
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</table>

Single channel high-side drivers

<table>
<thead>
<tr>
<th>Part number</th>
<th>Voltage class [V]</th>
<th>Channels</th>
<th>Source/sink current (typ) [mA]</th>
<th>Propagation delay (typ) [ns]</th>
<th>Control inputs</th>
<th>UVLO (typ) [V]</th>
<th>Package</th>
<th>MSL</th>
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<tbody>
<tr>
<td>IRS25752L</td>
<td>600</td>
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<td>160/240</td>
<td>140</td>
<td>215</td>
<td>IN</td>
<td>8 ... 9</td>
<td>6-lead SOT23</td>
</tr>
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<td>IRS20752L</td>
<td>200</td>
<td>1</td>
<td>160/240</td>
<td>140</td>
<td>215</td>
<td>IN</td>
<td>8 ... 9</td>
<td>6-lead SOT23</td>
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<tr>
<td>IRS10752L</td>
<td>100</td>
<td>1</td>
<td>160/240</td>
<td>140</td>
<td>215</td>
<td>IN</td>
<td>8 ... 9</td>
<td>6-lead SOT23</td>
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</tbody>
</table>

High-voltage start-up IC

<table>
<thead>
<tr>
<th>Part number</th>
<th>Voltage class [V]</th>
<th>Control inputs</th>
<th>Low off current [µA]</th>
<th>Programmable upper threshold</th>
<th>Overtemperature shutdown</th>
<th>Package</th>
<th>MSL</th>
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<tr>
<td>IRS25751L</td>
<td>480</td>
<td>EN</td>
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<td>✓</td>
<td>✓</td>
<td>S-lead SOT23</td>
<td>1</td>
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