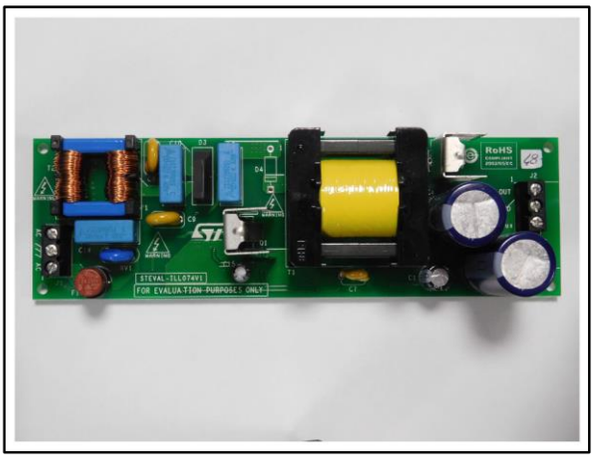
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# STEVAL-ILL074V1

## 60 W wide input range flyback converter using HVLED001A quasi resonant flyback controller

Data brief



## Features

- Input voltage: $V_{in}$ = 90 - 277 $V_{rms}$, f = 45-66 Hz
- Output voltage: 52 V / 1.2 A
- High power factor, low THD
- Full load efficiency: greater than 90%
- Short circuit protection
- Safety: complies with EN60065
- PCB board: 165 mm x 50 mm double sided PCB
- RoHS compliant

## Description

The STEVAL-ILL074V1 provides a stable and insulated 52 V voltage bus suitable for secondary side circuitry (e.g., LED current generators), for a total output power of 60 W, given a wide input voltage range. An auxiliary 15 V output is also present to supply small circuitries absorbing a maximum current of 50 mA.

A very high power factor is obtained thanks to the features of the HVLED001A device. Input voltage variations, excessive input voltage (overvoltage from surges or bursts) or very low input voltages are handled through several HVLED001A protections, improving the reliability of the application.

Output short circuit and overload protections with auto-restart are available for safe operation in lighting environments.



For further information contact your local STMicroelectronics sales office

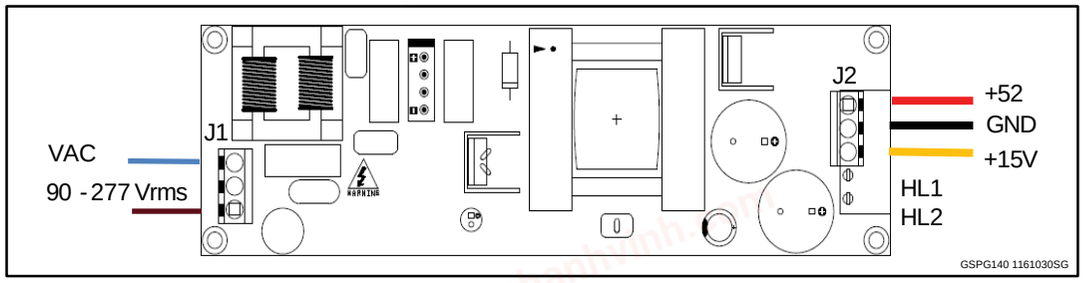
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# 1 Board circuit

**Figure 1: Board connections**

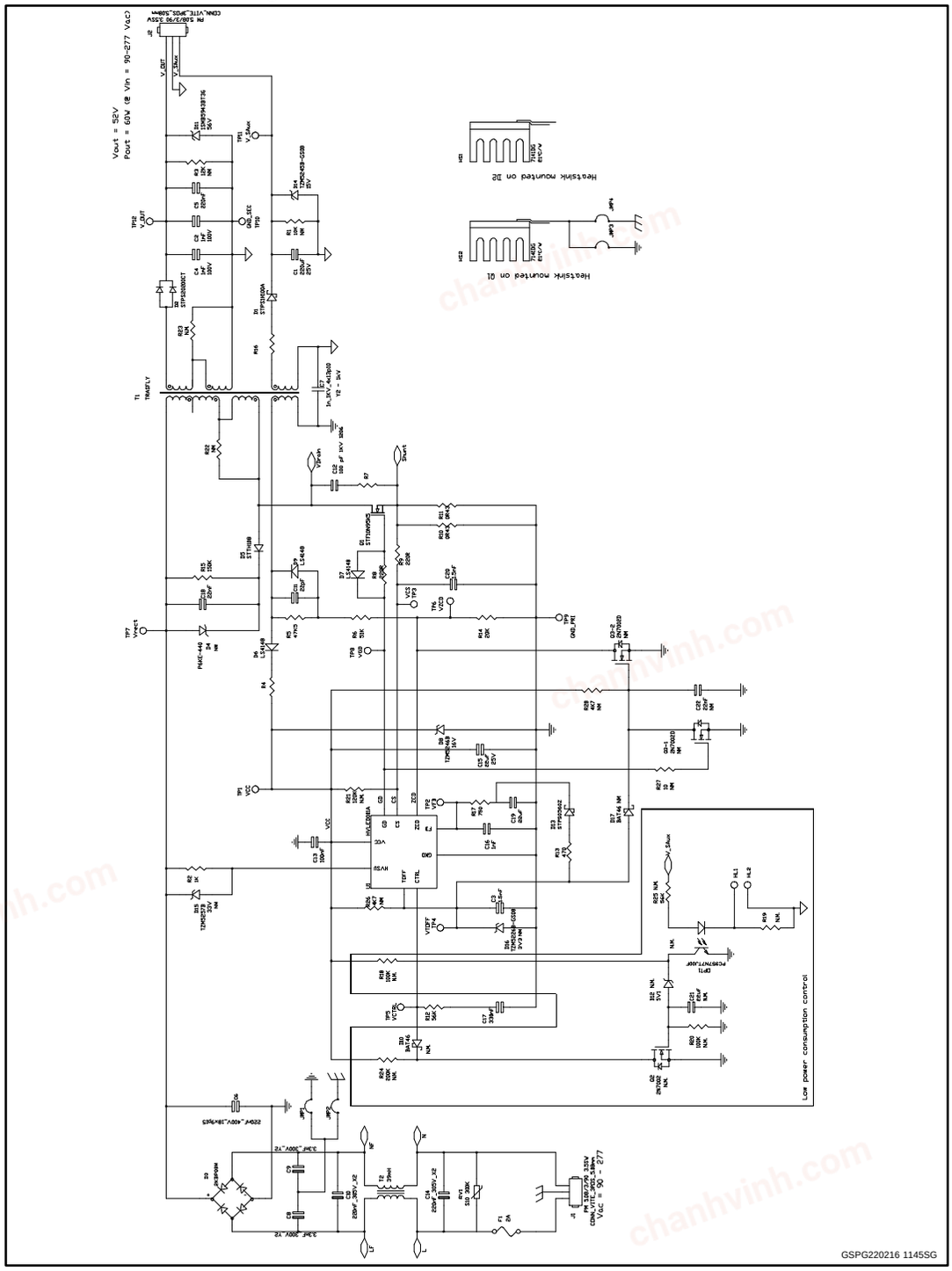


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# 2 Schematic diagram

**Figure 2: STEVAL-ILL074V1 circuit schematic**



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# 3 Revision history

Table 1: Document revision history

| Date | Version | Changes |
|---|---|---|
| 14-Jan-2016 | 1 | Initial release. |
| 19-Feb-2016 | 2 | Updated: title on the cover page and figure 2 STEVAL-ILL074V1 circuit schematic. |
| 10-Mar-2016 | 3 | Updated: Figure 2 STEVAL-ILL074V1 circuit schematic. |

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