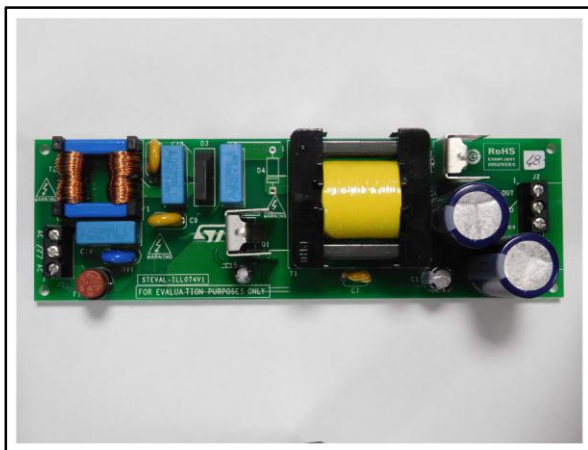


## 60 W wide input range flyback converter using HVLED001 quasi resonant flyback controller

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

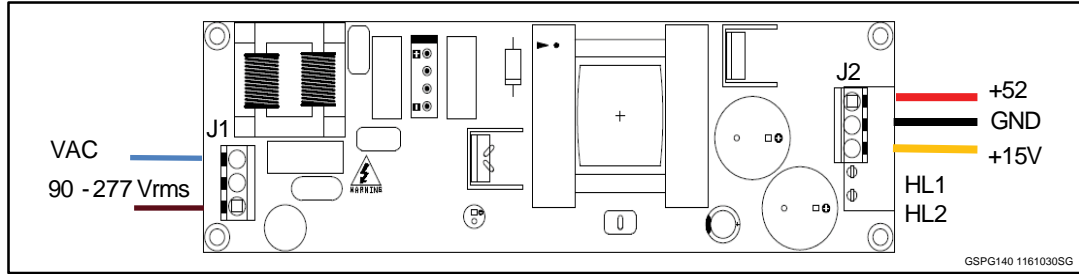
The STEVAL-ILL074V1 provides a stable and insulated 52 V voltage bus suitable for secondary side circuitry (e.g., LED current generators), for a total output power of 60 W, given a wide input voltage range. An auxiliary 15 V output is also present to supply small circuitries absorbing a maximum current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

A very high power factor is obtained thanks to the features of the HVLED001 device. Input voltage variations, excessive input voltage (overvoltage from surges or bursts) or very low input voltages are handled through several HVLED001 protections, improving the reliability of the application.

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

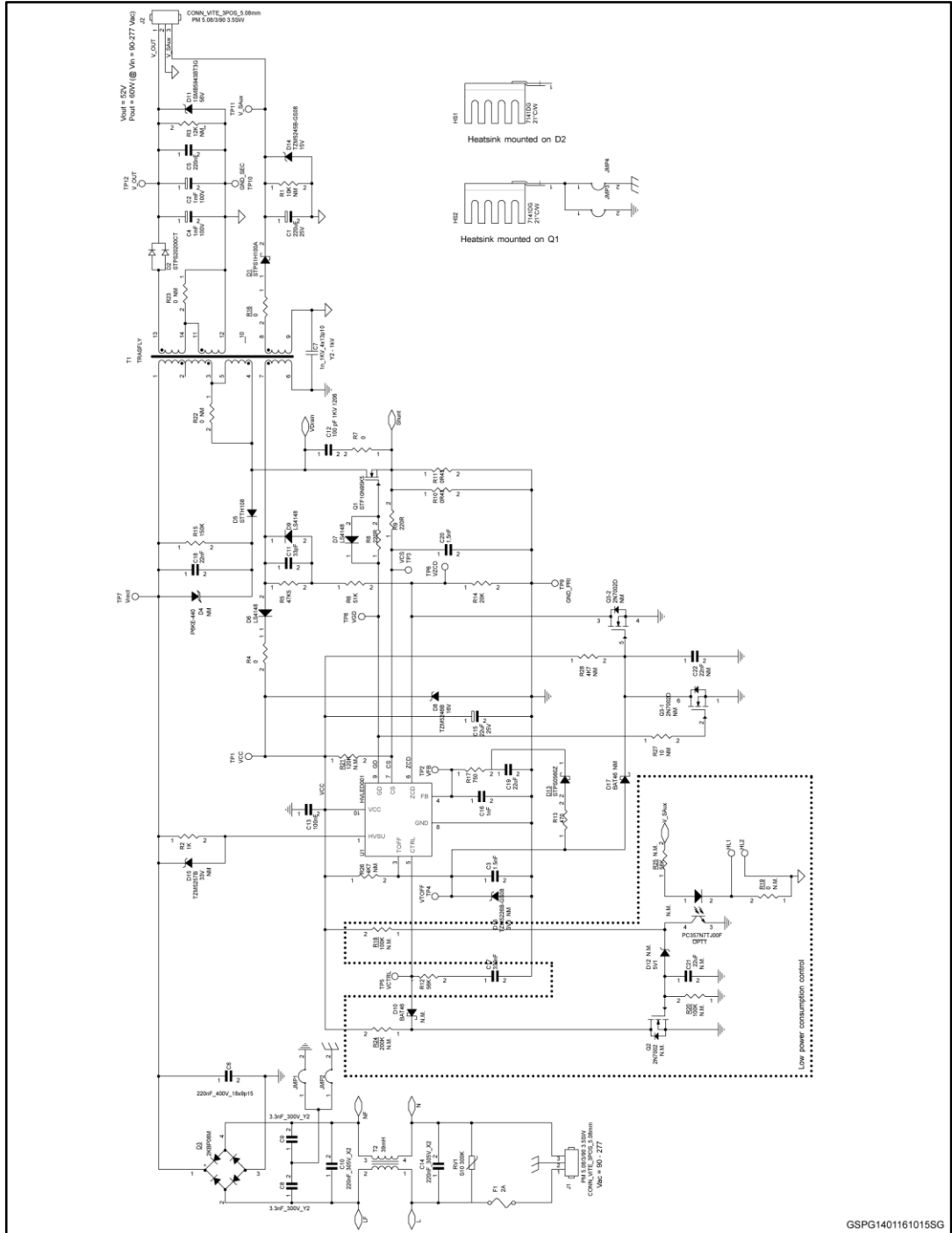
# 1 Board circuit

Figure 1: Board connections



# 2 Schematic diagram

Figure 2: STEVAL-ILL074V1 circuit schematic



### 3 Revision history

Table 1: Document revision history

Date	Version	Changes
15-Jan-2016	1	Initial release.

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