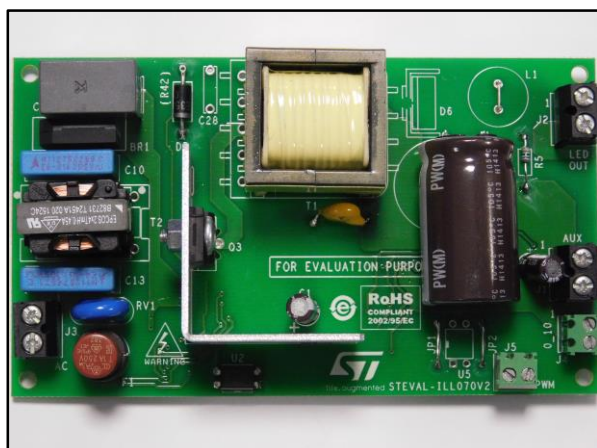


35W single string LED driver using HVLED001

Data brief



Description

The STEVAL-ILL070V2 is intended to drive a single LED string with a maximum output current of 700 mA. The LED current can be adjusted using either a 0-10 V interface or a PWM signal (for example provided by a microcontroller) on the SELV portion of the board. The universal input capability makes this board suitable in worldwide designs. An auxiliary 12 V output is also present to supply small circuitries (e.g., a potentiometer to drive the 0-10 V input) providing a maximum current of 10 mA. Input voltage variations, excessive input voltage (overvoltage, like surges or bursts) or very low input voltages are managed by some of the protections of the HVLED001, improving the reliability of the application. Output open circuit and overload protections trigger auto-restart for safe operation in lighting environments.

Features

- Input voltage: V_{IN} : 90 - 265 V_{RMS}, f: 45-66 Hz
- Output current: 700 mA ($V_{LED} = 24$ V to 48 V)
- Dimming: 100% to 10% (any condition)
- Dimming interfaces: 0-10 V and PWM input
- High power factor, low THD
- Efficiency: > 90% @ full load
- Open load voltage limiting
- RoHS compliant

Figure 1: STEVAL-ILL070V2 board schematic part 1

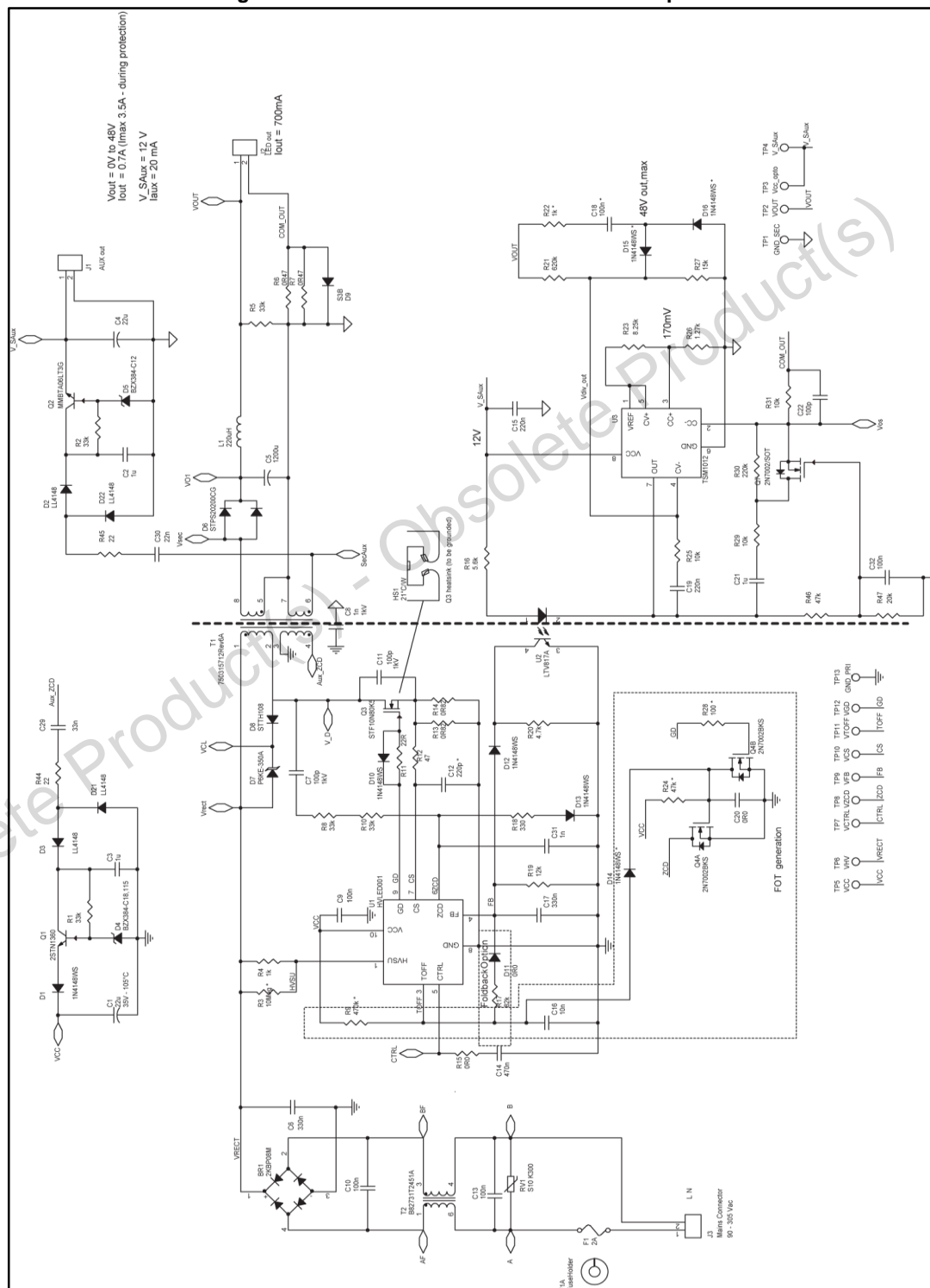
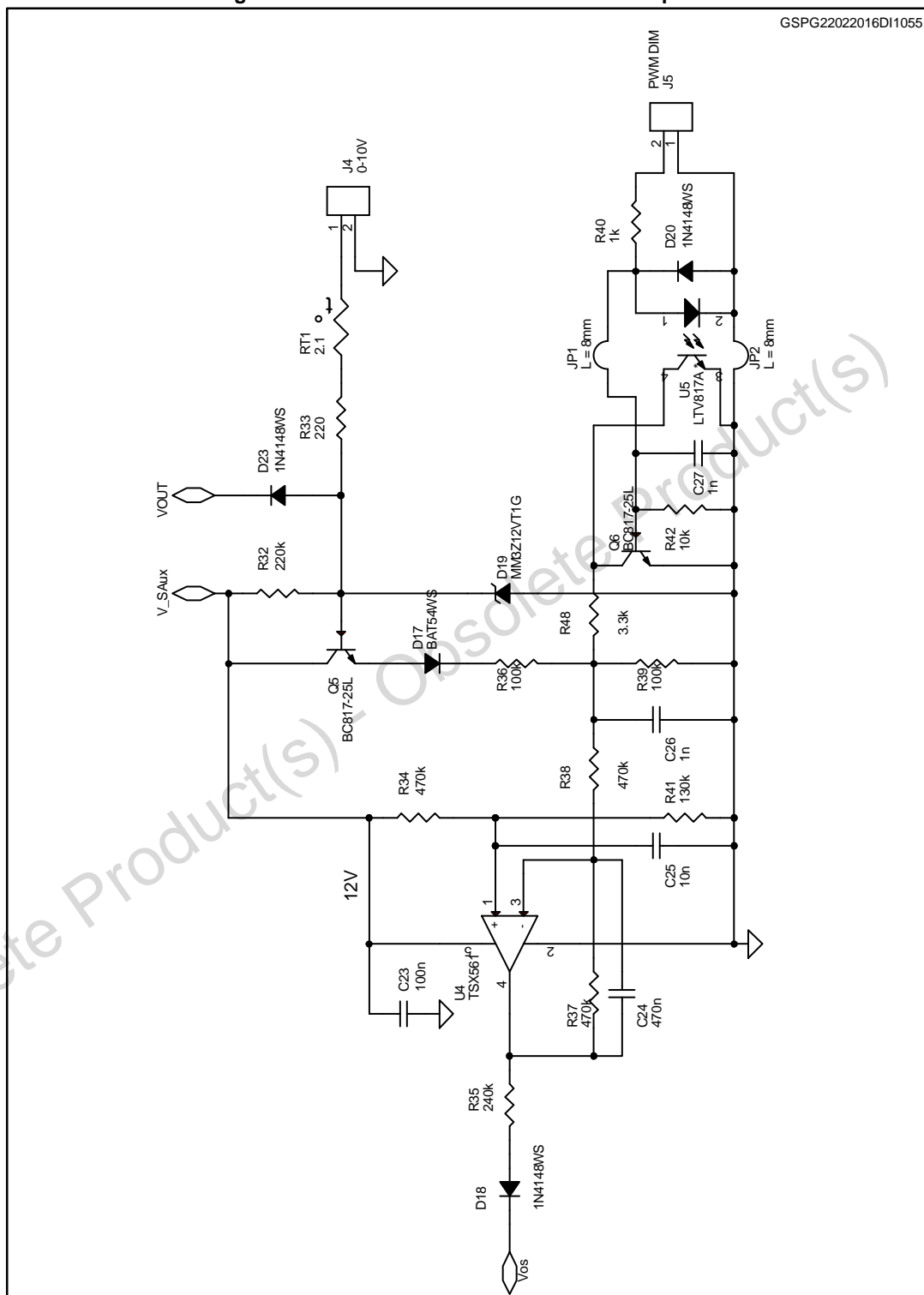


Figure 2: STEVAL-ILL070V2 board schematic part 2



2 Revision history

Table 1: Document revision history

Date	Version	Changes
17-Feb-2016	1	Initial release.
01-Mar-2016	2	Figure 1: updated

Obsolete Product(s) - Obsolete Product(s)

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