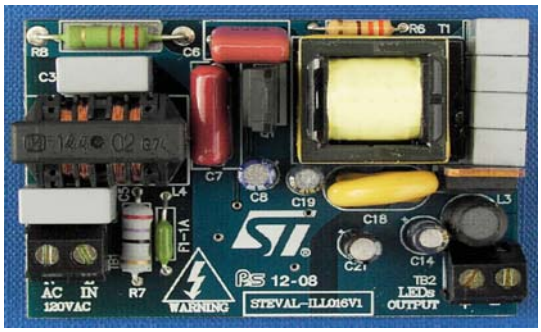
STEVAL-ILL016V1

15 W offline TRIAC dimmable LED driver based on the LD6562AD and TSM1052 (USA market-115 V)

Data Brief

Features

- 120 V line (96 V to 132 Vrms)
- V_{out} is set at 40 V max
- I_{out} is set at 0.7 A maximum average current
- 0.7 minimum power factor, required for residential use
- 0.9 or greater power factor, required for commercial use
- Capable of FCC Class B conducted EMI
- Emitted acoustic noise less than 24 dBA
- Isolated output, "safe" voltage
- Dimmable with low-cost TRIAC based dimmer, average current down to less than 10% of maximum LED current
- LED lifetime of 25,000 hours (residential) or 35,000 hours (commercial) to 70% light output
- Meets requirements of US DOE ENERGY STAR® program requirements for SSL luminaires - version 1.0



AM3120v1

STEVAL-ILL016V1

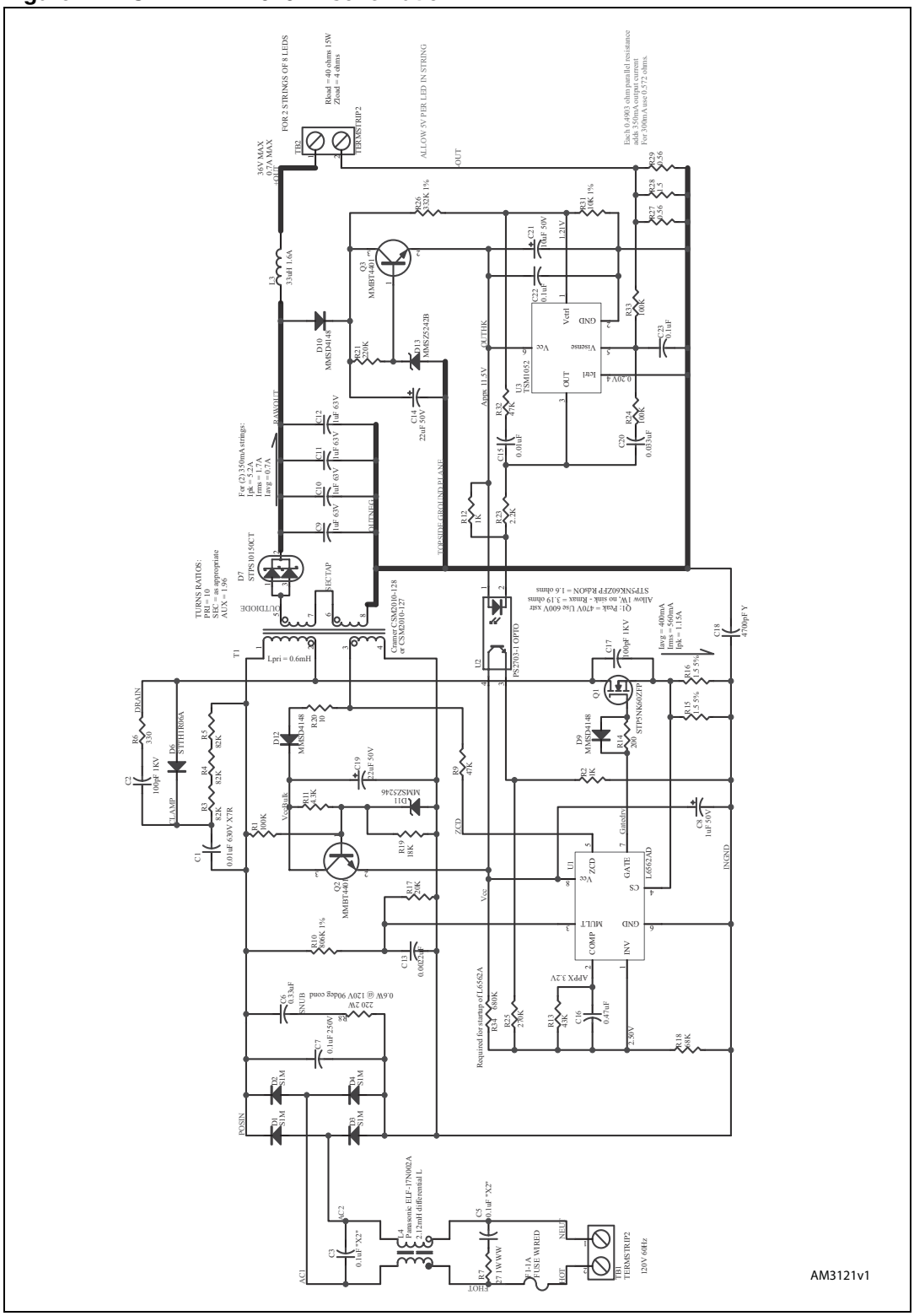
Description

This demonstration board is a low-cost driver for LEDs that is compatible with TRIAC phase-control dimmers. The design gives illumination manufacturers a low-cost, commonly available dimming option for home fixtures. A side benefit is that, when not wired to a dimmer, the unit's power factor is over 0.9.
The design is based on the L6562A transition mode PFC controller driving a single stage PFC-flyback power converter.

For further information contact your local STMicroelectronics sales office. www.st.com

1 Schematic

Figure 1. STEVAL-ILL016V1 schematic



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
06-Nov-2008	1	Initial release

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