



## EVAL6562-80W

### L6562-80W high performance transition mode PFC evaluation board

Data Brief

#### General description

The L6562 is a current-mode PFC controller operating in Transition Mode (TM). Pin-to-pin compatible with the predecessor L6561, it offers improved performance. The L6562 - 80W Evaluation Board is specific for 80W PFC pre-regulator and designed to operate in wide-range mains.



Figure 1. EVAL6562 - 80W schematic

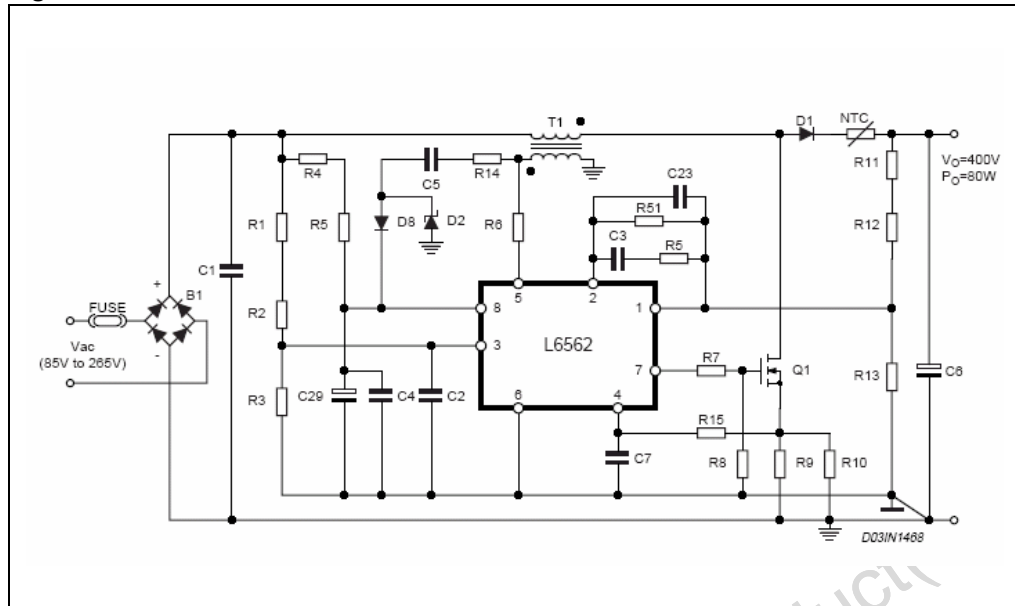


Figure 2. EVAL6562 - 80W : PCB and component layout (top view, real size: 57 x 108mm)

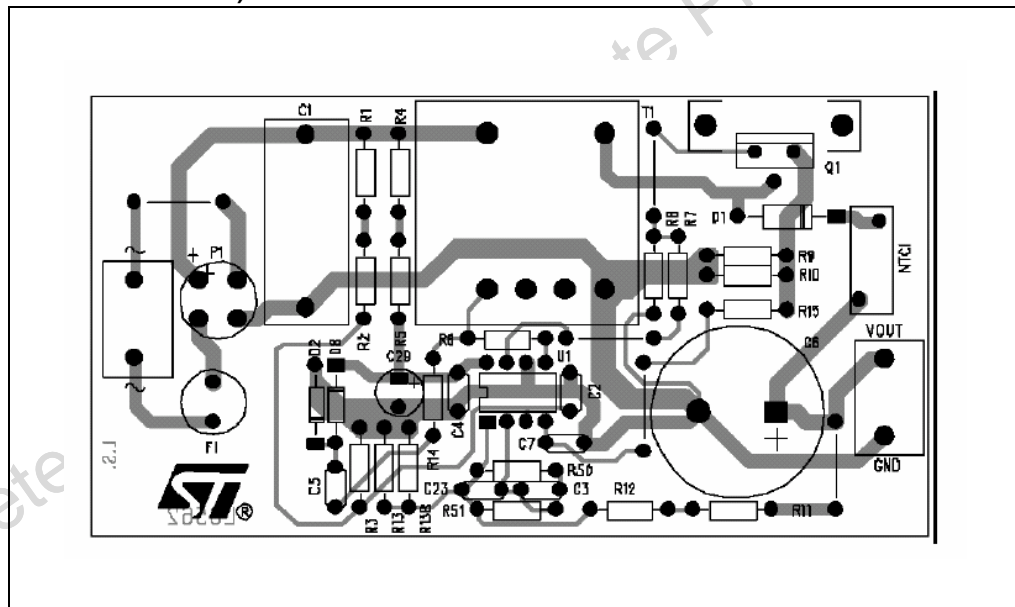
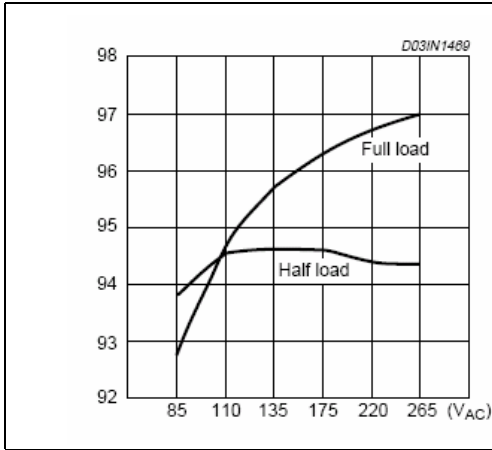
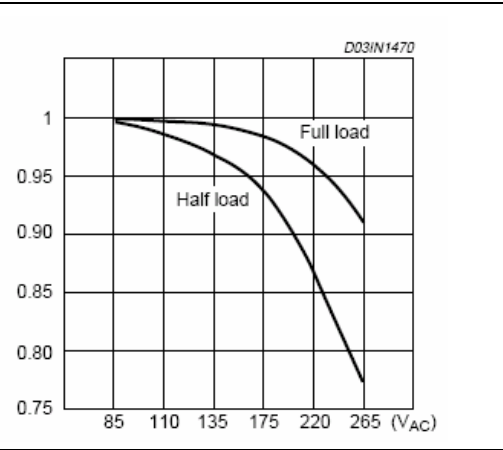


Table 1. Part list

Parameters	Values
R1	750K $\Omega$ 1%
R2	750K $\Omega$ 1%
R3	10K $\Omega$ 1%
R4, R5	180K $\Omega$ 5%
R6	68K $\Omega$ 5%
R7	33 $\Omega$
R8	47K $\Omega$
R9, R10	0.82 $\Omega$ , 0.6W
R11, R12	750K $\Omega$ 1%
R13	9.53K $\Omega$ 1%
R14	100 $\Omega$ , 5%
R15	shorted
R50	12K $\Omega$
R51	N.A
NTC	2.5
C1	0.47 $\mu$ F 400V
C2	10nF
C3	0.68 $\mu$ F
C4	100nF
C5	12nF
C6	47 $\mu$ F, 450V
C7	N.A
C23	33nF
C29	22 $\mu$ F, 25V
D1	STTH1L06
D2	1N5248B
D8	1N4148
Q1 (TO220)	STP8NM50
BRIDGE	DF06M
FUSE	4A/250V

- T1: Boost inductor spec (ITACOIL E2543/E)
  - E25x13x7 core, 3C85 ferrite
  - 1.5mm gap for 0.7mH primary inductance
  - Primary: 105 turns (20x0.1mm)
  - Secondary: 11 turns (0.1mm)

Figure 3. EVAL6562 - 80W: efficiency (left)

Figure 4. EVAL6562 - 80W: PF (right) vs.  $V_{in}$ 

Obsolete Product(s) - Obsolete Product(s)

# 1 Revision history

**Table 2. Revision history**

Date	Revision	Changes
03-Nov-2006	1	First issue

Obsolete Product(s) - Obsolete Product(s)

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