Demonstration Board – EPC9101 Schematic
Rev. 2.0

TP7 PGOOD — PGOOD
Keystone 5015

TP8 TRACK — TRK/SS
Keystone 5015

TP5 SYNC — 1k R13 — MODE
Keystone 5015

VCC — 1k R14

TP9 EXT
Keystone 5015

RUN   VIN
R11 560k

RUN
TP6
Keystone 5015
C6 Optional
R12 100k

Remote sensing

VOUT
R3 10.0k   C12 Optional
R4 10.0k
TRK/SS

C2 0.1uF, 25V
C1 220pF   R2 15k
C3 22pF

R5 Opt   R7 Zero   R8 39.2k
VCC

C5 4.7uF, 10V

S-   S+
C4 0.1uF, 25V   C18 Optional

VOUT
PGOOD

R10 10.0k   VCC

U1 LTC3833
21 SGND
20 Vout
19 Sns-
18 Sns+
17 PGood
1 Vosns-   Boost 16
2 Vosns+   TG 15
3 Trk/ss   SW 14
4 ITH   BG 13
5 Vrng   PGND 12
6 RT   IntVCC 11
7 Run
8 ExtVCC
9 Mode/PLL
10 Vin

RUN   MODE   EXT
R9 2.2   VIN
C7 0.1uF, 25V

U3
A   VDD
B
GND   Y
NC7SZ00L6X
VCC

C15 0.1uF, 25V   C8 4.7uF, 10V

P1 optional
D1 SDM03U40
R21 22

P2 optional
D2 SDM03U40
R22 47   C17 100pF
C16 100pF

U2 LM5113TM
0.1uF, 25V C9
R19
0.1uF, 25V C19
R20

0 Ohm
Q1 EPC2014
0 Ohm
Q2 EPC2015

TP1 Keystone 5015
VIN
C11 C22 C23 4.7uF, 35V

J1 VIN
SJ1   SJ2
C10 10uF, 35V
J2 GND

TP2 Keystone 5015

TP3 Keystone 5015
270nH L1
S-   VOUT
R16 Opt
R15 680   C13 C14 C24
S+   47uF, 10V
C20 C21

D3 Optional

1.2 V / 20 A
VOUT J3

GND J4

SJ3   SJ4

TP4 Keystone 5015