Simulation not totally finished yet.

Vin=+48V

K L1 L2 0.997

The following shows the
magnetising current in the
primary....
I(L1)+2.11*I(L2)

Vout=-40V
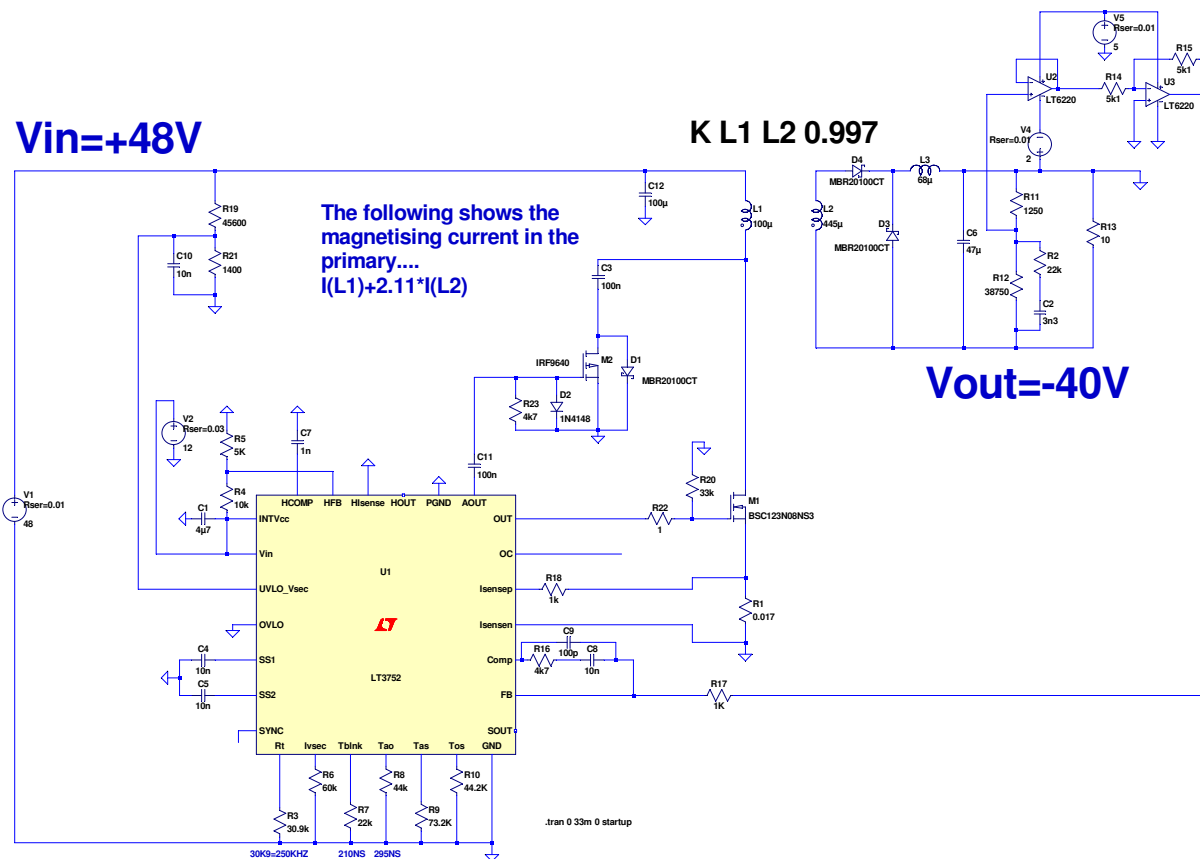
V(Cclamp) ..want ~constant in steady state
Bigger leakage..-> Bigger duty due to FET current rise time.
Gap the transformer.
Lower Lmag generally preferred.
V.dt ON = V.dt OFF for L(pri)
L(mag) is in CCM
Beware saturation on startup or transients. (remember
that V.dt ON should equal V.dt OFF, and for a while,
it may not be in transient intervals.)
Use controller with max duty cycle clamp.

V5 Rser=0.01 5
R15 5k1
U2 LT6220
R14 5k1
U3 LT6220
V4 Rser=0.01 2

D4 MBR20100CT
L3 68µ
R11 1250
R13 10

L2 445µ
D3 MBR20100CT
C6 47µ
R2 22k
R12 38750
C2 3n3

R19 45600
C10 10n
R21 1400

C12 100µ
L1 100µ

C3 100n
IRF9640 M2
D1 MBR20100CT
R23 4k7
D2 1N4148

V2 Rser=0.03 12
R5 5K
C7 1n
C11 100n
R20 33k
M1 BSC123N08NS3

R4 10k
C1 4µ7

R22 1
OUT

V1 Rser=0.01 48

INTVcc
HCOMP HFB HIsense HOUT PGND AOUT
Vin   OC
UVLO_Vsec   Isensep   R18 1k
OVLO   Isensen   R1 0.017
SS1   Comp   R16 4k7 C9 100p C8 10n
C4 10n   FB
C5 10n
SS2
SYNC   SOUT
Rt Ivsec Tblnk Tao Tas Tos   GND

U1 LT3752

R17 1K

R6 60k
R7 22k
R8 44k
R9 73.2K
R10 44.2K
R3 30.9k

.tran 0 33m 0 startup

30K9=250KHZ   210NS 295NS

--- C:\forum_ACTIV CLAMP\Active clamp forward _+48vin -40vout\Active clamp _LT3752.ASC ---