PFC BOOST CONVERTER

CR1 MR756RLG

E6

C150 220P 250VAC
C2 .0015 250VAC
L2
C3 250VAC
C151 220P 250VAC
L3A
R5 SL22-14007
CR3 D25XB60
R136 10 1W 5%
R137 10 1W 5%
C133 220P 500V
500V 220PF C135
C1 220P 500V
C136 220P 500V
R1 10 5% 1W
L1
CR2 CSD10060A
Q1 STW45NM50FD
C11 0.1 500V
Vout
C7 1000 MFD 350V
C4 1000 MFD 350V
C8 1000 MFD 350V
C9 1000 MFD 350V
C148 0.1 500V
L12B
L12A
Vout_2
250VDC_RTN_2
C42 220P 250VAC
250VDC_RTN

AC_LINE
AC_NEUTRAL
SAFETY_GND
E2
L3B
C10 0.1 275V
X1 130VRMS
X2 130VRMS
C6 0.47 275VAC
L4
C152 220P 250VAC
C13 .0015 250VAC
C14 N 250VAC
C153 220P 250VAC
R160 1 1/8W 1%

Vac
C12 0.01 400/200V
R2 .200 OHM 2W 1%
R7 .200 OHM 2W 1%
R3 20.5K 1/8W 1%
R4 14.7 1/8W 1%
R6 10 1/8W 1%
C134 470PF 100V
C15 0.0047 250VAC
E1 PRI
+Vbb
R9 10 1/8W 1%
R8 JUMPER
U1 UCC27322DGN
C16 0.1 50V
C17 10 16V
R10 JUMPER .05 MAX 1A MAX

K1B ALZ51F12TW
K1A
VR6 15V
C132 100PF 100V
CR27 1N4148WS
Q2 2N7002K

Vac
Vout
R22 162K 1/8W 1%
R27 162K 1/8W 1%
R33 162K 1/8W 1%
R21 162K 1/8W 1%
R28 162K 1/8W 1%
R34 162K 1/8W 1%
R35 1M 1/16W 1%
R40 10K 1/16W 1%
C28 0.001 50V
R41 10K 1/16W 1%
C29 0.001 50V
TLV271IDBVT U4
C30 0.001 50V
CR4 BAV70LT1
R43 4.99K 1/16W 1%
U5A LM2903
R45 4.99K 1/16W 1%
R46 10K 1/16W 1%
U5B LM2903
R47 4.99K 1/16W 1%
U7 LM4050-5.0 5.00V .1%
C38 0.1 25V
C33 0.22 25V
C34 0.1 50V
C141 0.001 50V
U3 LM431B
C142 0.001 50V
C20 .01 50V

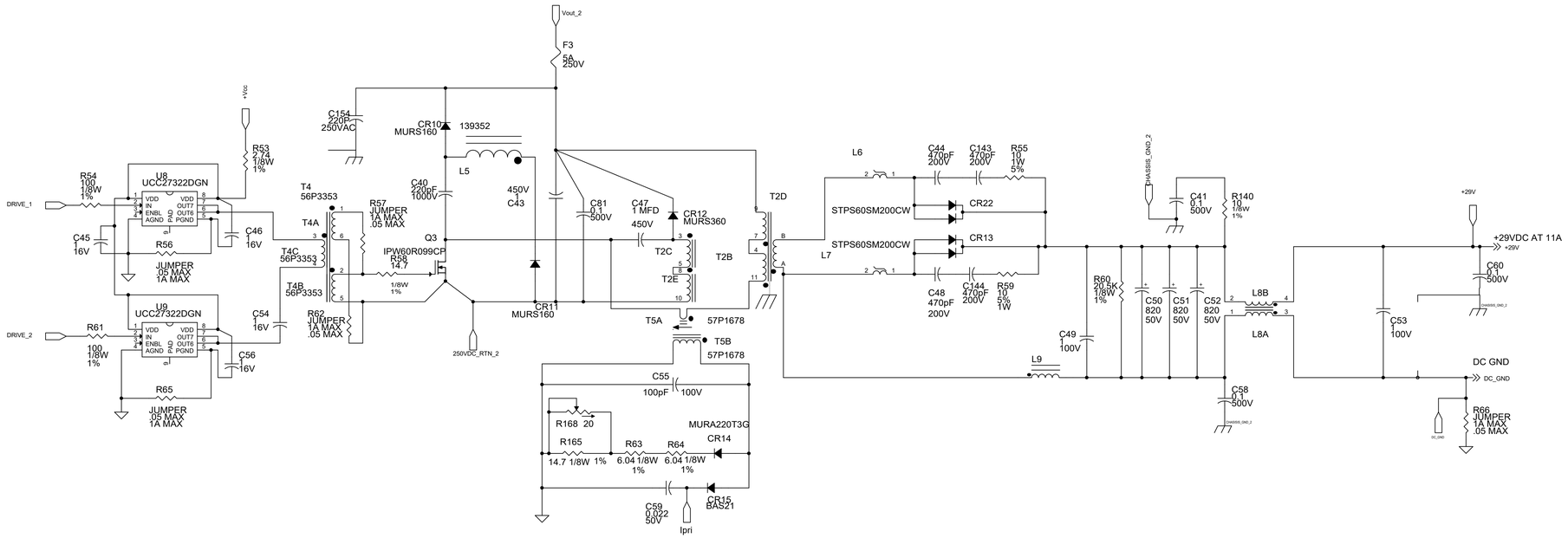
R12 249K 1/8W 1%
R18 249K 1/8W 1%
R23 249K 1/8W 1%
R29 11.8K 1/16W 1%
R13 2.2M 1/8W 1%
R19 2.2M 1/8W 1%
R24 2.2M 1/8W 1%
R30 100K 1/16W 1%
C21 0.1 50V
C22 220PF 200V
R14 4.32K 1/16W 1%
C18 10 16V
C19 0.1 50V
U2 NCP1654
R11 10 1/8W 1%
R15 10 1/8W 1%
R31 47.5K 1/16W 1%
C23 0.68 16V
C24 0.47 25V
C26
R26 12.1K 1/16W 1%
R32 36.5K 1/16W 1%
R17 1.2M 1/8W 1%
R20 1.2M 1/8W 1%
R25 1.2M 1/8W 1%
C25 0.001 50V

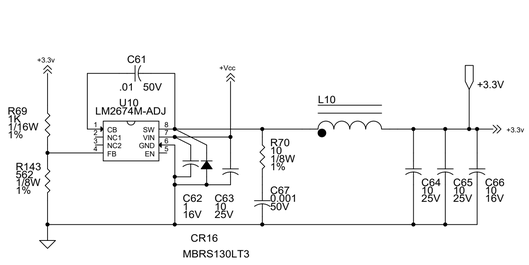
ACTIVE INRUSH CONTROL
PFC CONTROL

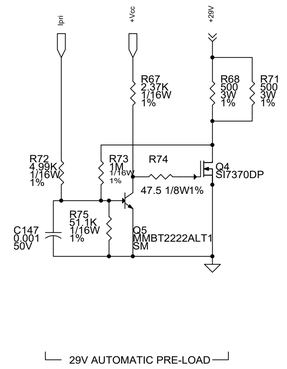
F2 1A 250V
VR2 188V SM
C27 0.0022 1000V
R36 1M 1/8W 1%
R38 1M 1/8W 1%
R42 1M 1/8W 1%
R44 1M 1/8W 1%
R37 100K 1/8W 1%
R39 100K 1/8W 1%
T1B CSM2010-071
CR5 MURS160

U6 TOP254YN
R133 1K 1W 1%
MURS160 CR25
R134 1.1K 1W 1%
C120 220PF 500V
R159
JUMPER .05 MAX 1A MAX
R171 N/U
R172 JUMPER
C35 10 10V
C39 10 10V
CR7 BAV70LT1
R50 47.5 1/16W 1%
R51 12.1K 1/8W 1%
R52 47.5 1/16W 1%
VR3 5.6V
CR8 MBRS140LT3
R138 2.49K 1/8W 1%
VR4 15V
C36 120 25V
R156 10 1/8W 1%
C139 220PF 100V
T1A CSM2010-071
T1C CSM2010-071
C145 220P 250V
CR9 MBRS360
R157 10 1/8W 1%
C140 220PF 100V
C37 120 25V
C31 10 16V
C32 10 16V
+Vcc

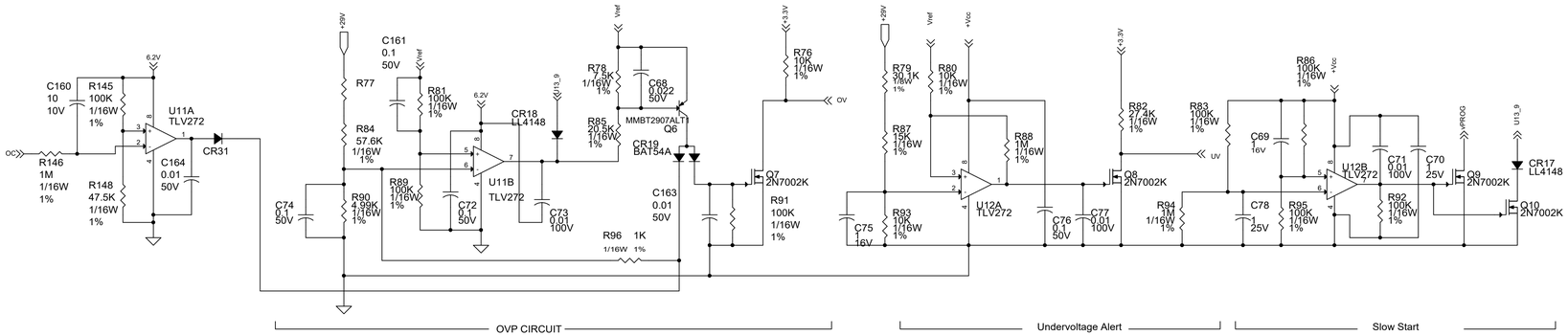
BIAS SUPPLY

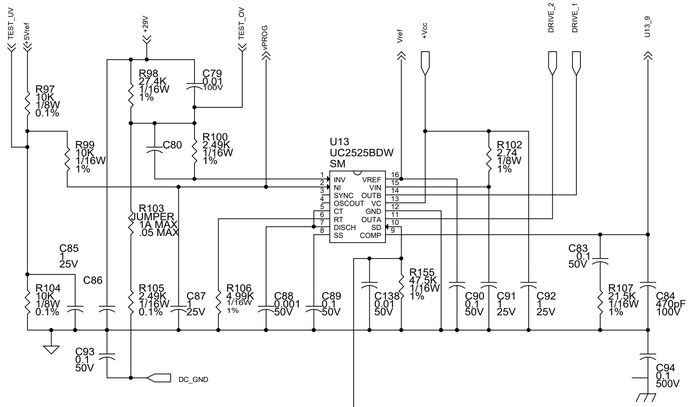


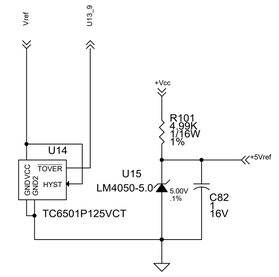


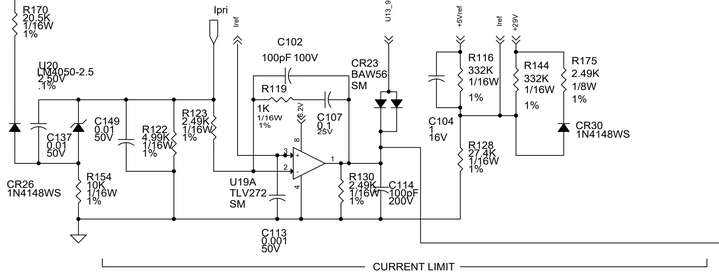


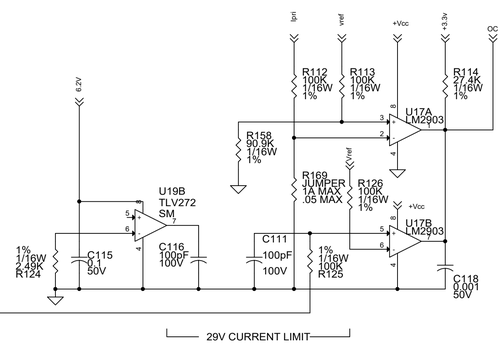
29V AUTOMATIC PRE-LOAD

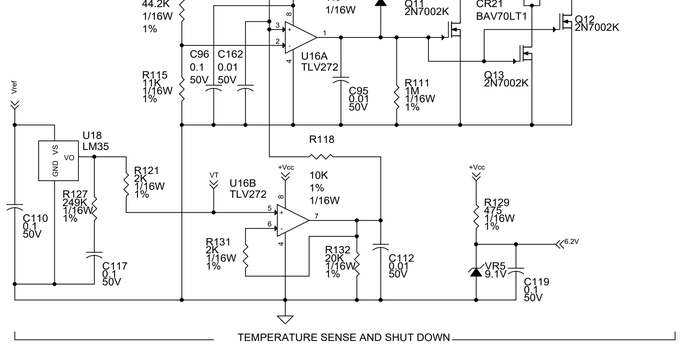

C160 10 10V
R145 100K 1/16W 1%
6.2V
U11A TLV272
OC
R146 1M 1/16W 1%
R148 47.5K 1/16W 1%
C164 0.01 50V
CR31
+29V
C161 0.1 50V
Vref
R77
R84 57.6K 1/16W 1%
R81 100K 1/16W 1%
R89 100K 1/16W 1%
C74 0.1 50V
R90 4.99K 1/16W 1%
C72 0.1 50V
U11B TLV272
CR18 LL4148
U13_9
C73 0.01 100V
R78 7.5K 1/16W 1%
C68 0.022 50V
R85 20.5K 1/16W 1%
MMBT2907ALT1 Q6
CR19 BAT54A
R96 1K 1/16W 1%
C163 0.01 50V
+3.3V
R76 10K 1/16W 1%
OV
Q7 2N7002K
R91 100K 1/16W 1%
OVP CIRCUIT
R79 30.1K 1/8W 1%
R87 15K 1/16W 1%
R93 10K 1/16W 1%
C75 1 16V
R80 10K 1/16W 1%
+Vcc
R88 1M 1/16W 1%
U12A TLV272
C76 0.1 50V
C77 0.01 100V
R82 57.4K 1/16W 1%
UV
Q8 2N7002K
Undervoltage Alert
R83 100K 1/16W 1%
R94 1M 1/16W 1%
C69 16V
R86 100K 1/16W 1%
C78 1 25V
R95 100K 1/16W 1%
U12B TLV272
C71 0.01 100V
C70 25V
R92 100K 1/16W 1%
vPROG
Q9 2N7002K
CR17 LL4148
Q10 2N7002K
Slow Start

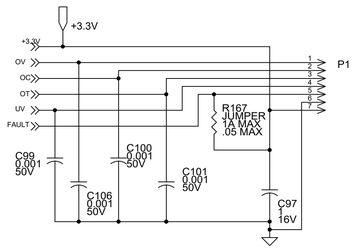

TEST_UV
+5Vref
R97 10K 1/8W 0.1%
R99 10K 1/16W 1%
+29V
R98 27.4K 1/16W 1%
C79 0.01 100V
TEST_OV
vPROG
C80
R100 2.49K 1/16W 1%
R103 JUMPER 1A MAX .05 MAX
C85 1 25V
R104 10K 1/8W 0.1%
C86
R105 2.49K 1/16W 0.1%
C87 1 25V
R106 2.49K 1/16W 1%
C88 0.001 50V
C89 0.1 50V
DC_GND
C93 0.1 50V
U13 UC2525BDW SM
INV VREF
NI VIN
SYNC OUTB
OSCOUT VC
CT GND
RT OUTA
DISCH SD
SS COMP
Vref
+Vcc
DRIVE_2
DRIVE_1
U13_9
R102 2.1K 1/8W 1%
C138 0.01 50V
R155 47.5K 1/16W 1%
C90 0.1 50V
C91 1 25V
C92 1 25V
C83 0.1 50V
R107 21.5K 1/16W 1%
C84 470PF 100V
C94 0.1 500V


U14
OVER
HYST
GND/VCC
GND2
TC6501P125VCT
Vref
U13_9
+Vcc
R101 4.99K 1/16W 1%
+5Vref
U15 LM4050-5.0
5.00V .1%
C82 1 16V


R170 20.5K 1/16W 1%
U20 LM4050-2.5 2.50V .1%
C137 0.01 50V
C149 0.01 50V
R154 10K 1/16W 1%
CR26 1N4148WS
R122 4.99K 1/16W 1%
R123 2.49K 1/16W 1%
Ipri
Iref
C102 100pF 100V
R119 1K 1/16W 1%
6.2V
C107 0.1 25V
U19A TLV272 SM
C113 0.001 50V
CR23 BAW56 SM
U13_9
R130 2.49K 1/16W 1%
C114 100pF 200V
+5Vref
Iref
+29V
R116 332K 1/16W 1%
R144 332K 1/16W 1%
R175 2.49K 1/8W 1%
C104 1 16V
R128 27.4K 1/16W 1%
CR30 1N4148WS
CURRENT LIMIT


6.2V
U19B TLV272 SM
1% 1/16W 2.49K R124
C115 0.1 50V
C116 100pF 100V
Ipri
Vref
+Vcc
+3.3v
OC
R112 100K 1/16W 1%
R113 100K 1/16W 1%
R114 27.4K 1/16W 1%
U17A LM2903
R158 90.9K 1/16W 1%
R169 JUMPER 1A MAX .05 MAX
R126 100K 1/16W 1%
U17B LM2903
C111 100pF 100V
1% 1/16W 100K R125
C118 0.001 50V
29V CURRENT LIMIT


Vref
GND VS VO
U18 LM35
C110 0.1 50V
R121 2K 1/16W 1%
R127 249K 1/16W 1%
C117 0.1 50V
+5Vref
TEST_OT
+Vcc
R109 1M 1% 1/16W
R110 44.2K 1/16W 1%
C96 0.1 50V
C162 0.01 50V
R115 11K 1/16W 1%
U16A TLV272
C85 0.01 50V
CR20 LL4148
Q11 2N7002K
R111 1M 1/16W 1%
Vpsq
U13_9
CR21 BAV70LT1
Q12 2N7002K
Q13 2N7002K
+3.3V
R108 27.4K 1/16W 1%
OT
R118 10K 1% 1/16W
VT
U16B TLV272
R131 2K 1/16W 1%
R132 20K 1/16W 1%
C112 0.01 50V
+Vcc
R129 475 1/16W 1%
6.2V
VR5 9.1V
C119 0.1 50V
TEMPERATURE SENSE AND SHUT DOWN


+3.3V
+3.3V
OV
OC
OT
UV
FAULT
P1
R167 JUMPER 1A MAX .05 MAX
C99 0.001 50V
C100 0.001 50V
C106 0.001 50V
C101 0.001 50V
C97 16V