AC INPUT
90~264VAC
50/60 Hz

J1 F1 3.15A C6 0.33µF R37 0 L2 2.3mH R38 0 DB1 600V L1 32µH C7 15µF C5 450V 22uF C3 0.1uF C4 0.1uF Vbulk GND_P

D1 150V C2 1000pF R1 470k R2 15 R3 15 D2 1kV VSWN

C1 2200pF GND_P GND_S

T1 RLT1-1446

TP1 VOUT VOUT
C8 22uF C9 22uF C10 680uF
TP2 GND_S GND_S

12V/1.5A
VOUT J2 GND_S

5V/0.2A
VOUT2 J3 GND_C

Q1 BSC093N15NS5ATMA1
C11 1500pF
D4 120V
C12 1000pF
R4 10

VAUX D3 200V VDD C13 22µF GND_P

P:S1:S2:A = 33:5:5:7

R5 10
D6 200V

U1 TPS7A2401DBVR
EN OUT IN FB GND
VOUT2
C14 10uF
C15 10uF
R9 100k
R13 33.2k
GND_C GND_C GND_C GND_C

D5 100V
PWML R6 100
R7 10.0k
Q2 IPD80R600P7ATMA1
QLSRC
R10 0.68 R11 0.22
C16 22pF
Q3 CPC3982TTR
R8 1.0M
D7 18V
P13
R12 511
SWS
GND_P

SRDRV D8 RUN 40V
C21 0.1uF
U2 UCC5304DWV
IN VCCI VCCI GND VDD OUT VSS VSS
C20 10µF
VOUT
SR_DRV
GND_P GND_S

VDD C17 0.1uF C18 10uF C19 22µF GND_P

REF R15 27.4k R16 1.00k Q4 MMST3906-7-F R20 10.0k D10 39V VAUX
VAUX R14 12.4k R17 2.10k R19 15.4k R22 6.98k
QLSRC D9 75V D11 27V
VS R23 340 PWML SRDRV CS C25 100pF
FLT RT1_1 R27 3.32k C27 100pF RT1 47k GND_P
RTZ R29 169k
RDM R31 93.1k
IPC CS R32 1.0M R34 0
REF C31 0.22uF

U3 UCC28781QRTWRQ1
VDD VS PWML PWMH CS SET FLT RTZ RDM IPC REF
SWS FB P13 S13 BUR RUN XCD XCD GTP1 GTP2 GTP3 Thermal_Pad AGND PGND
SWS FB P13 BUR RUN QLSRC
C22 330pF R21 20.0k OPTO_C
REF R24 191k R25 39.2k C26 330pF
C23 1µF
GND_P

VOUT R18 0
TP3 VOUT_A
VOUT_A
R26 8.66k C24 0.015uF R28 511
R33 8.66k
R30 154k C28 22pF
C29 22pF C30 0.01uF R35 10.0k
R36 40.2k
U4 TLP383(GR-TPL,E
OPTO_C
U5 ATL431AIDBZR
GND_P GND_S

Orderable: UCC28781EVM-053		Designed for: Public Release	Mod. Date: 10/19/2022
TID #: N/A		Project Title: ZVS Aux Flyback	
Number: PMP23195	Rev: B	Sheet Title:	
SVN Rev: Not in version control		Assembly Variant: 001	Sheet: 1 of 2
Drawn By: U. Goerke		File: PMP23195.schdoc	Size: B
Engineer: Ben Lough		Contact: http://www.ti.com/support	

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Assembly Notes

1. Built on PMP23195 RevA PCB