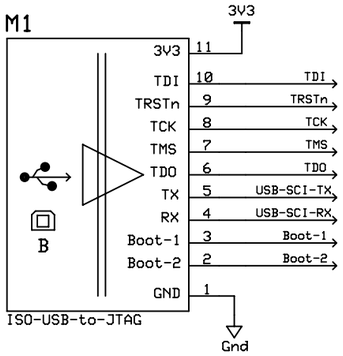
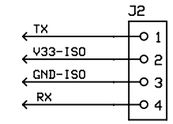
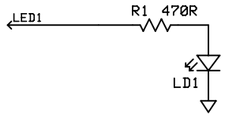
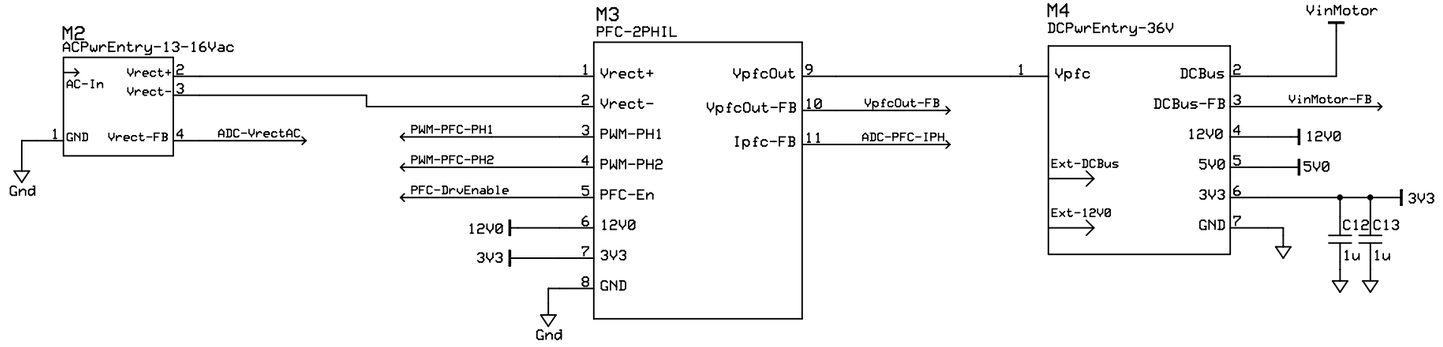
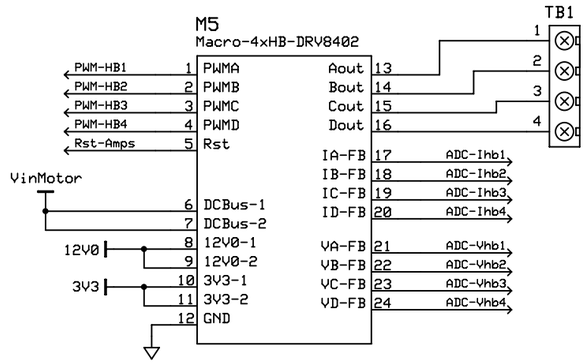
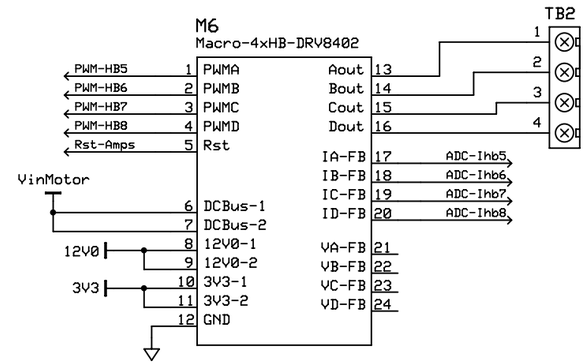


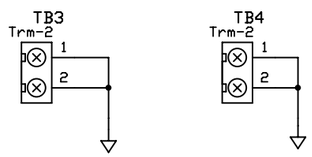


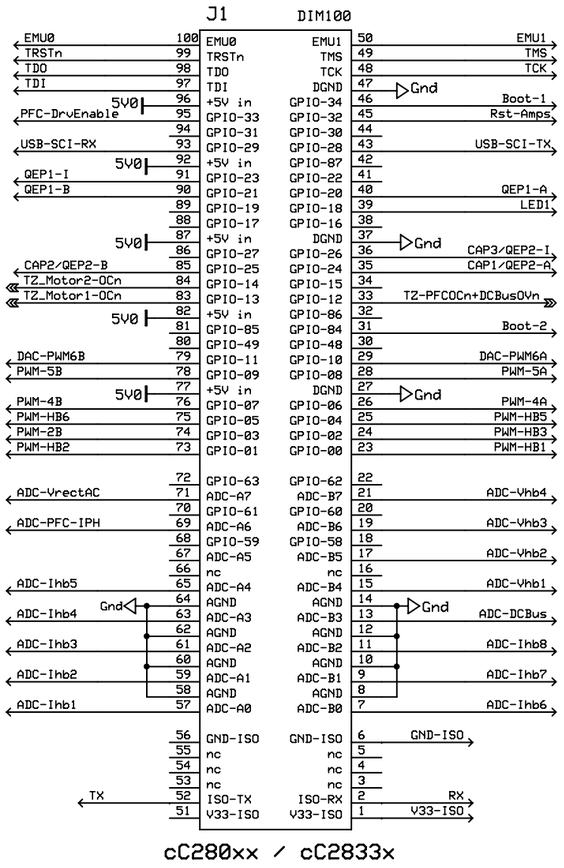


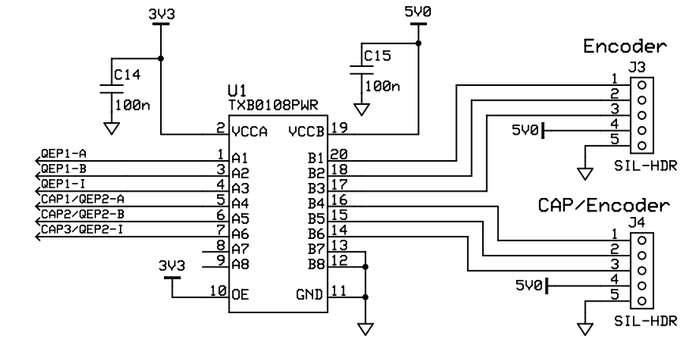




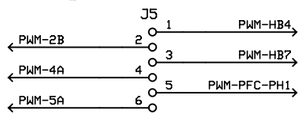


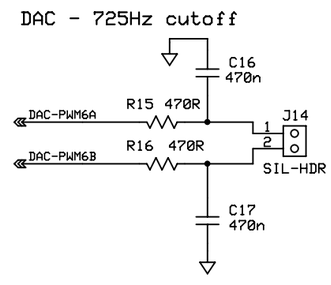






Configurations





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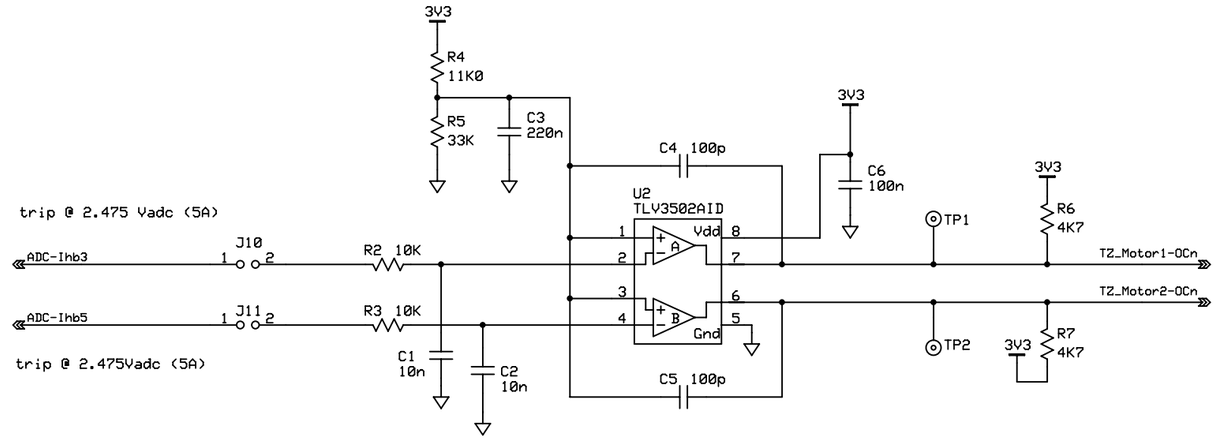

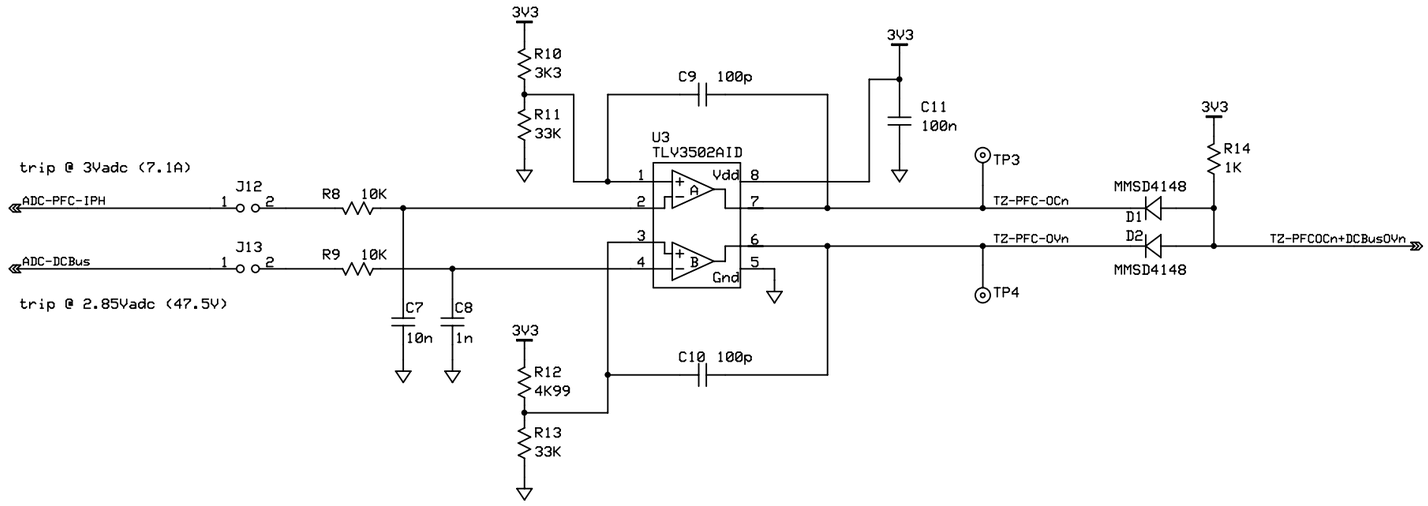

The schematics shown on this page are here for full compatibility within the F28x series.

The F2802x and F2803x (Piccolo) devices may only need some of the comparator devices be active:
  The F2802x only needs J12 to be populated.
  The F2803x does not need these external comparators and can therefore disable them by removing J10, J11, and J12

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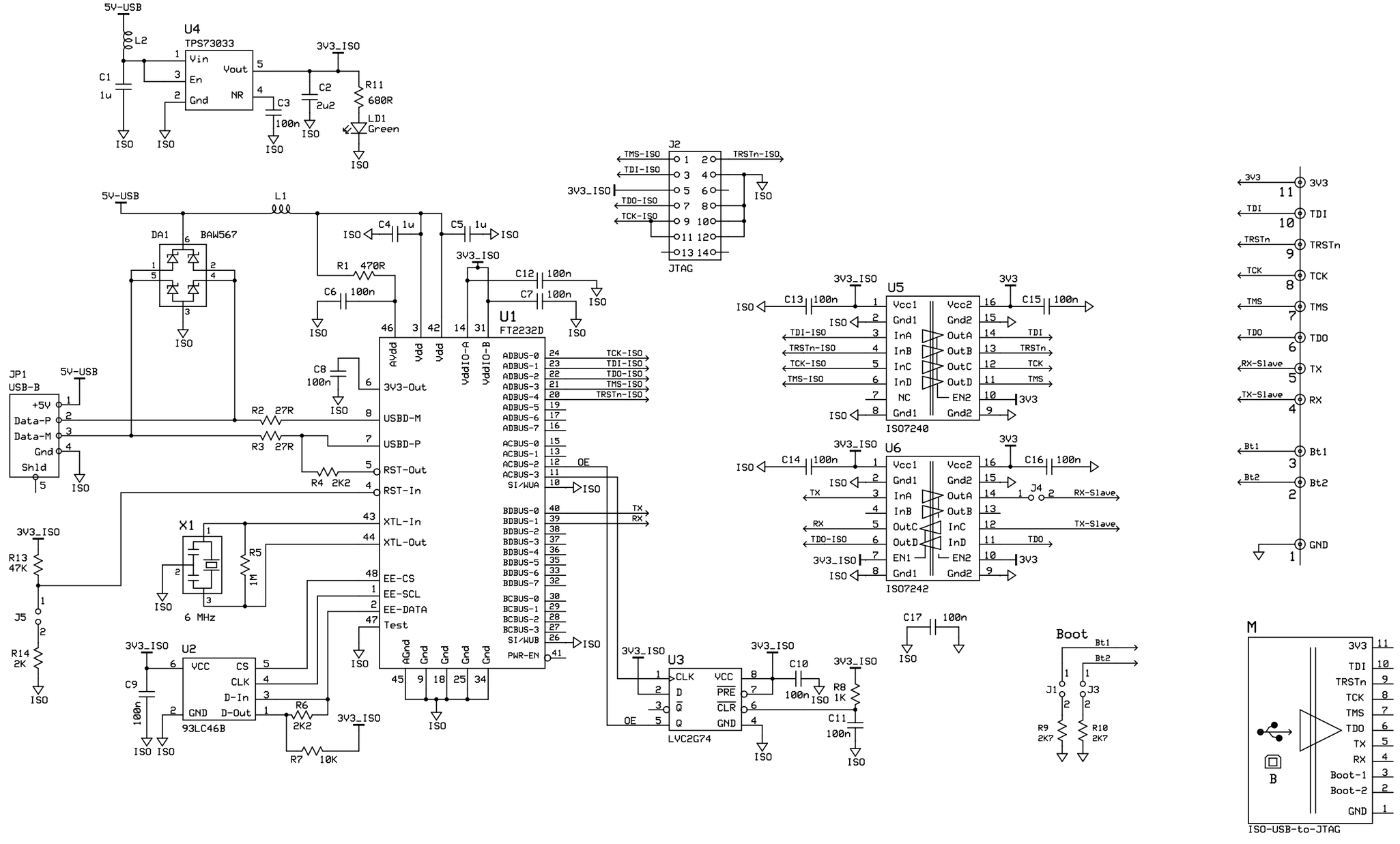

Texas Instruments		
ISO-USB-to-JTAG		
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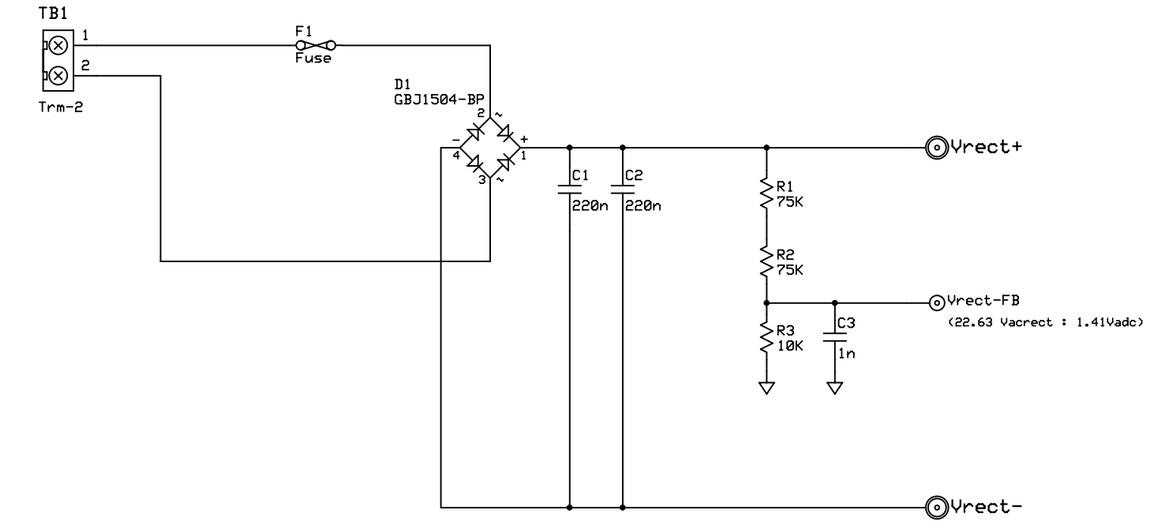
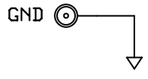
13V to 16V AC-RMS (for 24V DcBus)





Texas Instruments		
Macro-ACPwrEntry-13-16Vac		
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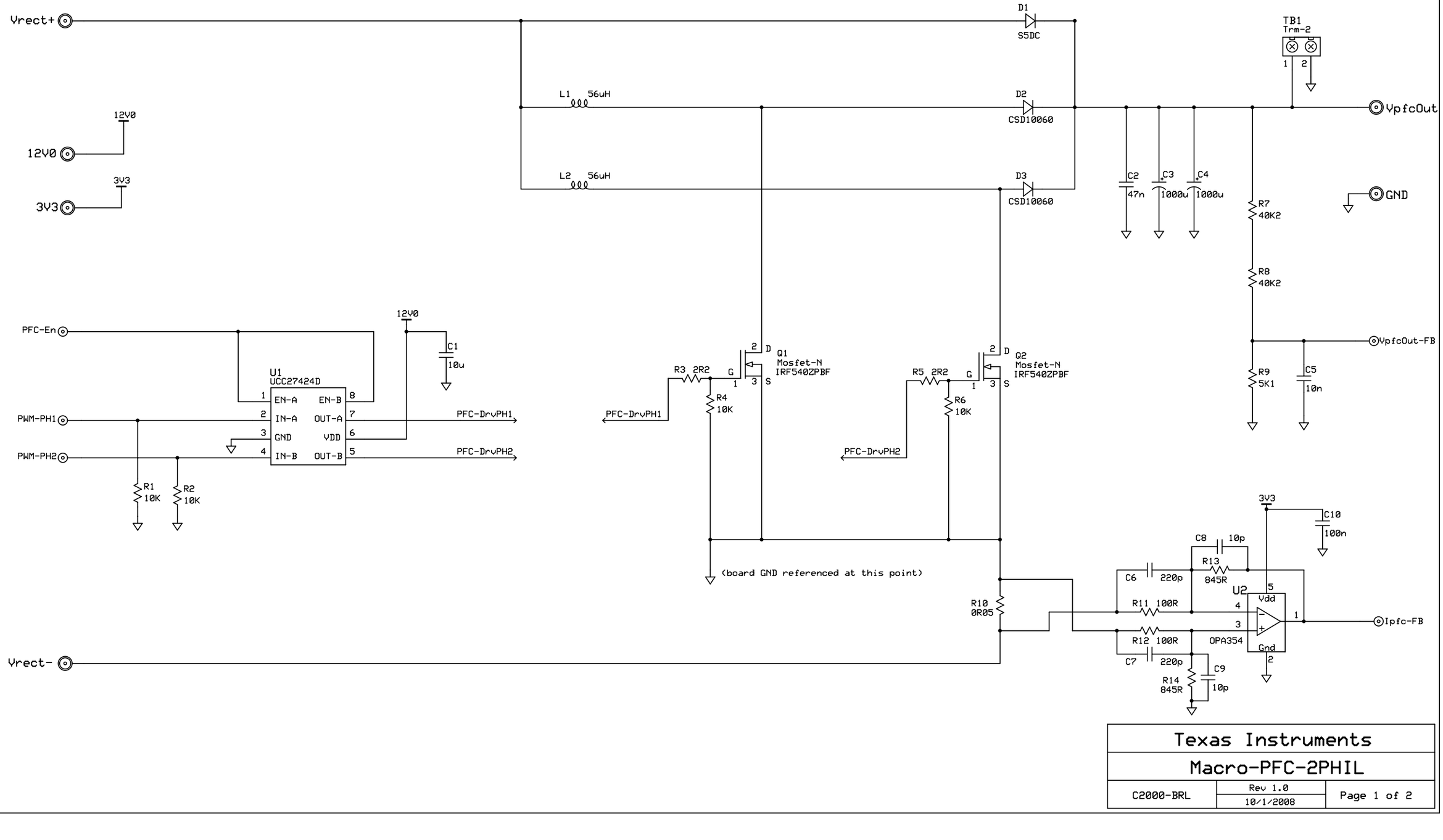

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Macro-PFC-2PHIL		
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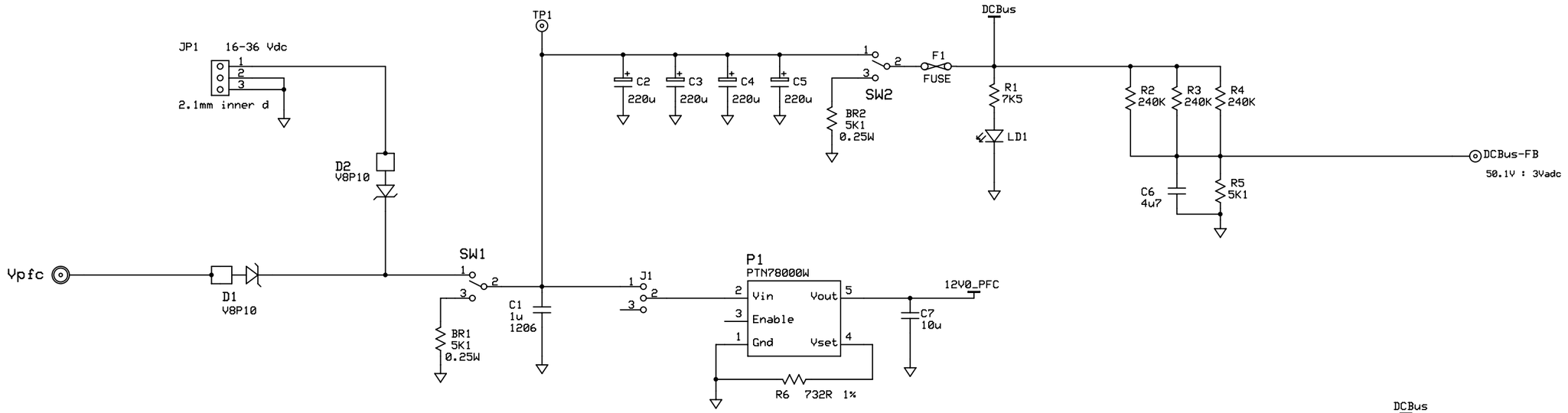

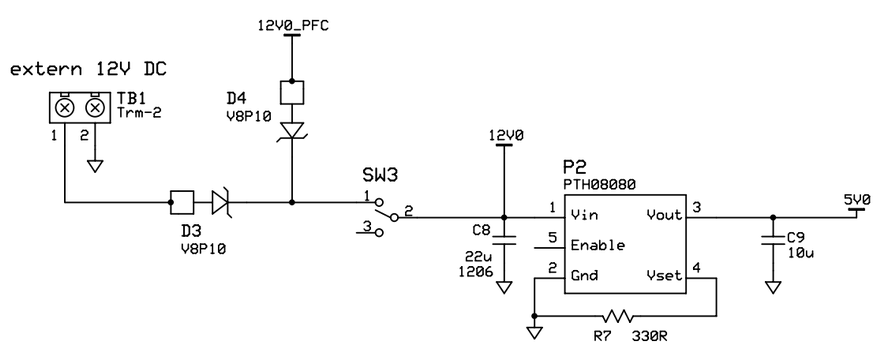

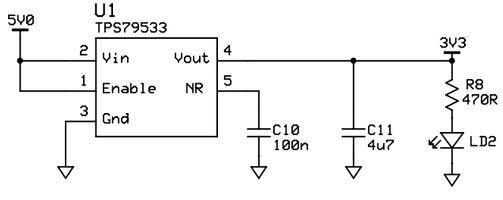

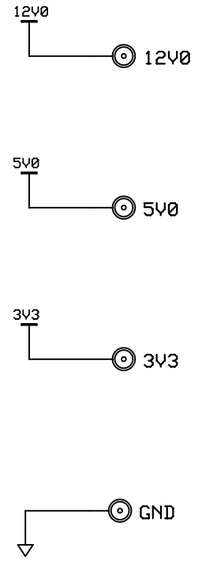

Texas Instruments		
Macro-DCPwrEntry-36V		
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DCBus
DCBus-1
DCBus-2
DCBus

12V0
12V0-1
12V0-2

3V3
3V3-1
3V3-2

GND

All 16V caps
C1 22u 1210
C2 100n
C3 100n
12V0
R2 10R
R3 10R

U1
DRV8402

36	VdGA-12v	Vdd_BrdgA 34
1	VdGB-12v	OutA 33
2	TempHi	BStrpA 35
3	ShtDwn	
4	PWM-A	OutB 30
5	ResetAB	BStrpB 28
6	PWM-B	Vdd_BrdgB 29
7	IlimSet	Vdd_BrdgC 26
8	Gnd	BStrpC 27
9	AGnd	OutC 25
10	Vreg33	GNDA 32
11	Mode3	GNDB 31
12	Mode2	GNDC 24
13	Mode1	GNDD 23
14	PWM-C	BStrpD 20
15	ResetCD	OutD 22
16	PWM-D	Vdd_BrdgD 21
17	Vd-12v	
18	VdGC-12v	
19	VdGD-12v	

PWMA
PWMB
PWMC
PWMD
Rst
R1 10K
R4 22K
C4 100n
12V0
R5 10R
R6 10R
R7 10R
C5 22u 1210
C6 100n
C7 100n
C8 100n
All 16V caps

C9 100n 50V
C10 10u 50V 1206
R8 3R3
C11 10n
C12 1000u 50V
DCBus

C13 33n
C14 33n
C15 33n
C16 33n
C17 10u 50V 1210
C18 100n 50V
DCBus

C23 100n 50V
C24 10u 50V 1206
R29 3R3
C25 10n
C26 1000u 50V
DCBus

R25 0R02 1W
R26 0R02 1W
R27 0R02 1W
R28 0R02 1W
IS-IhbA
IS-IhbB
IS-IhbC
IS-IhbD

Aout
R10 33K
R11 33K
R12 33K
R9 820R
C19 470n
VA-FB
(43Vout : 3Vadc)

Bout
R14 33K
R15 33K
R16 33K
R13 820R
C20 470n
VB-FB

Cout
R18 33K
R19 33K
R20 33K
R17 820R
C21 470n
VC-FB

Dout
R22 33K
R23 33K
R24 33K
R21 820R
C22 470n
VD-FB

3V3
C27 470n
U2
Vin
1V25
GND
REF3012
1V25

1V25
R32 6K04
R30 1K
R31 1K
R33 6K04
Connect to GND at R25.2
Connect to GND at R26.2
IS-IhbA
IS-IhbB
R34 1K
R35 1K
R36 8K25
R37 8K25
U3
OPA2350
C28 100n
3V3
R38 33R
C29 2n2
C30 2n2
R39 62R
R40 62R
IA-FB
IB-FB

|m| = 8.25
b = 1.65
-10A : 3Vadc
+10A : 0Vadc

1V25
R43 6K04
R41 1K
R42 1K
R44 6K04
Connect to GND at R27.2
Connect to GND at R28.2
IS-IhbC
IS-IhbD
R45 1K
R46 1K
R47 8K25
R48 8K25
U4
OPA2350
C31 100n
3V3
R49 33R
C32 2n2
C33 2n2
R50 62R
R51 62R
IC-FB
ID-FB

|m| = 8.25
b = 1.65
-10A : 3Vadc
+10A : 0Vadc

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Macro-4xHB-DRV8402		
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