01_Revision_History.SchDoc

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Revision History

Rev.	Rel.	Date	Author	Description	Page(s)
1.0	RC00	2021-04	GW	- Initial design	

Evalboard_Base_v1.1

Default_Assembly

1.11

Infineon Technologies AG
GIP GCO CD AM
Siemensstraße 2, 9500 Villach, Austria

04/2024

U_02_Top_Level
02_Top_Level.SchDoc

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02_Top_Level.SchDoc

SELV

24V Connector

J1 — D10 S1J — V24_in

J2 — AGND

C23 Cap 100nF — V5 — U4B TSSOP8 (VCC, GND) — AGND

V5 — 74LVC1G74DP — U4A TSSOP8 (D, CP, S, C, Q, Q̄)

R17 1k — C22 Cap 1n — AGND

P2 — V5 — AGND

R18 10k — V5

Gate signal input

P3 HDR3 — V5 — AGND

X1 — AGND

R1 50R — C1 Cap 1n — J3 — AGND AGND

D15 — BAT54AL BAT54ALT — C24 Cap 1n — AGND

External OCD

P1 — V24_in

R19 100k — AGND

Mech. stability conn

P4

U_Miscellaneous
Miscellaneous.SchDoc

VDRV+ — R20 100R — D8 BAT46

VDRV- — R21 100R — D9 BAT46

V24 — P5 — VDRV+ — VDRV- — VCC2_B — VEE2_B

C31 Cap 10u — C33 Cap 10u — AUX_GND

DUT GateDriver voltage supply

U_04_SwitchingStage
04_SwitchingStage.SchDoc

P11 — I_NTC, I_Tsense1, I_Tsense2, I_Tsense3

U_03_Supply
03_Supply.SchDoc

GND_HV — P10 — AUX_GND

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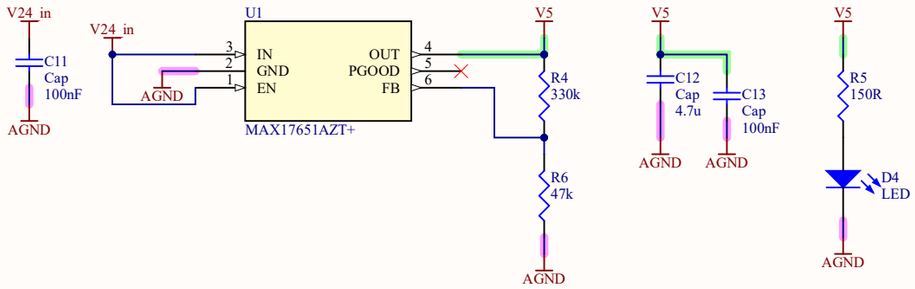
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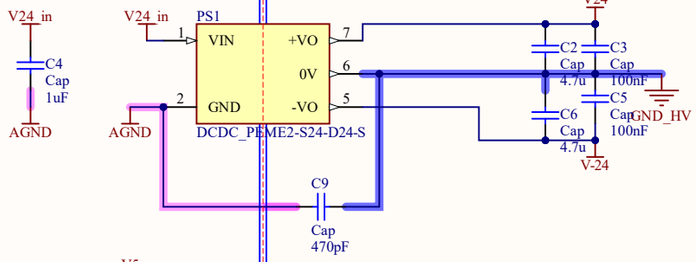
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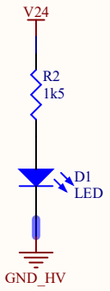
03_Supply.SchDoc

SELV

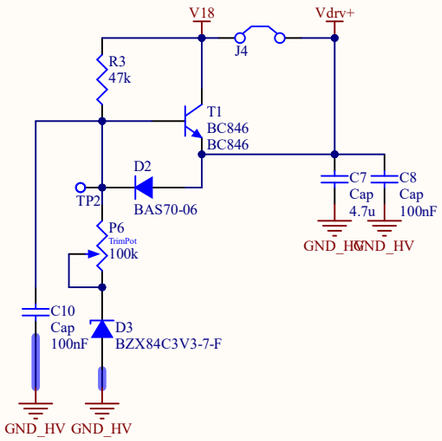
24V-->5V LDO



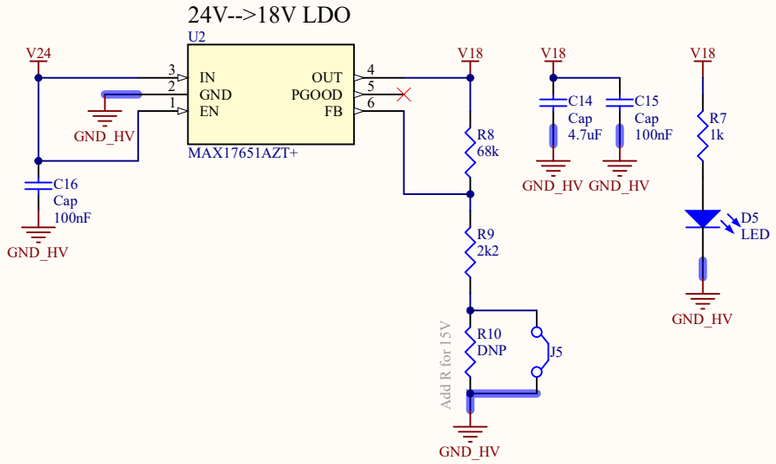




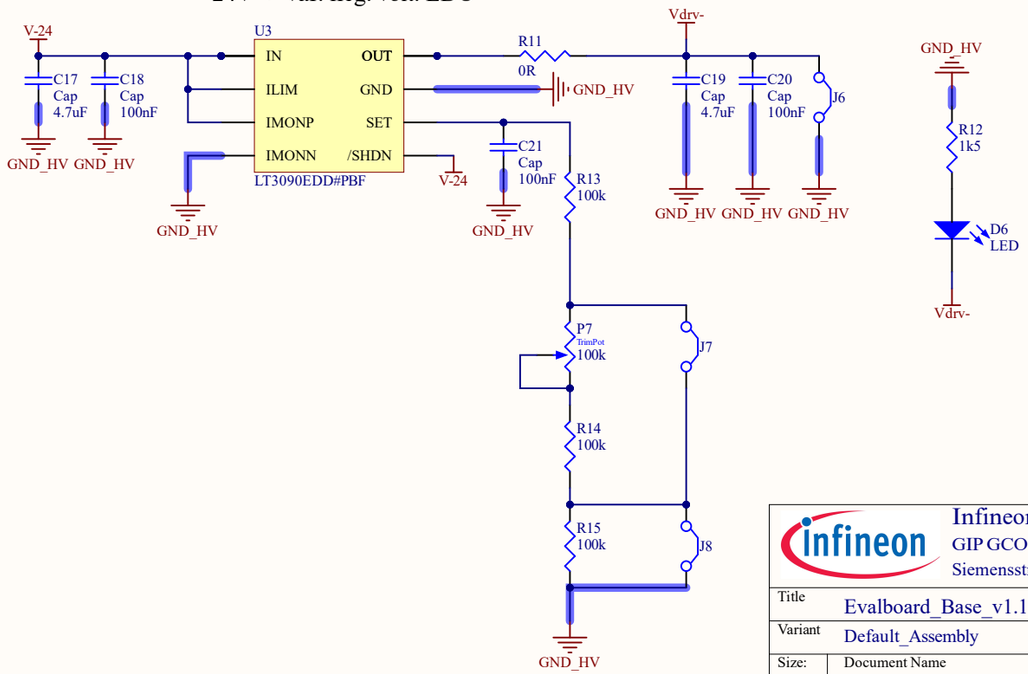
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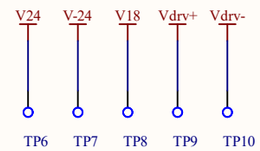


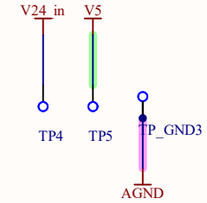
24V-->18V LDO



-24V--> var. neg. volt. LDO



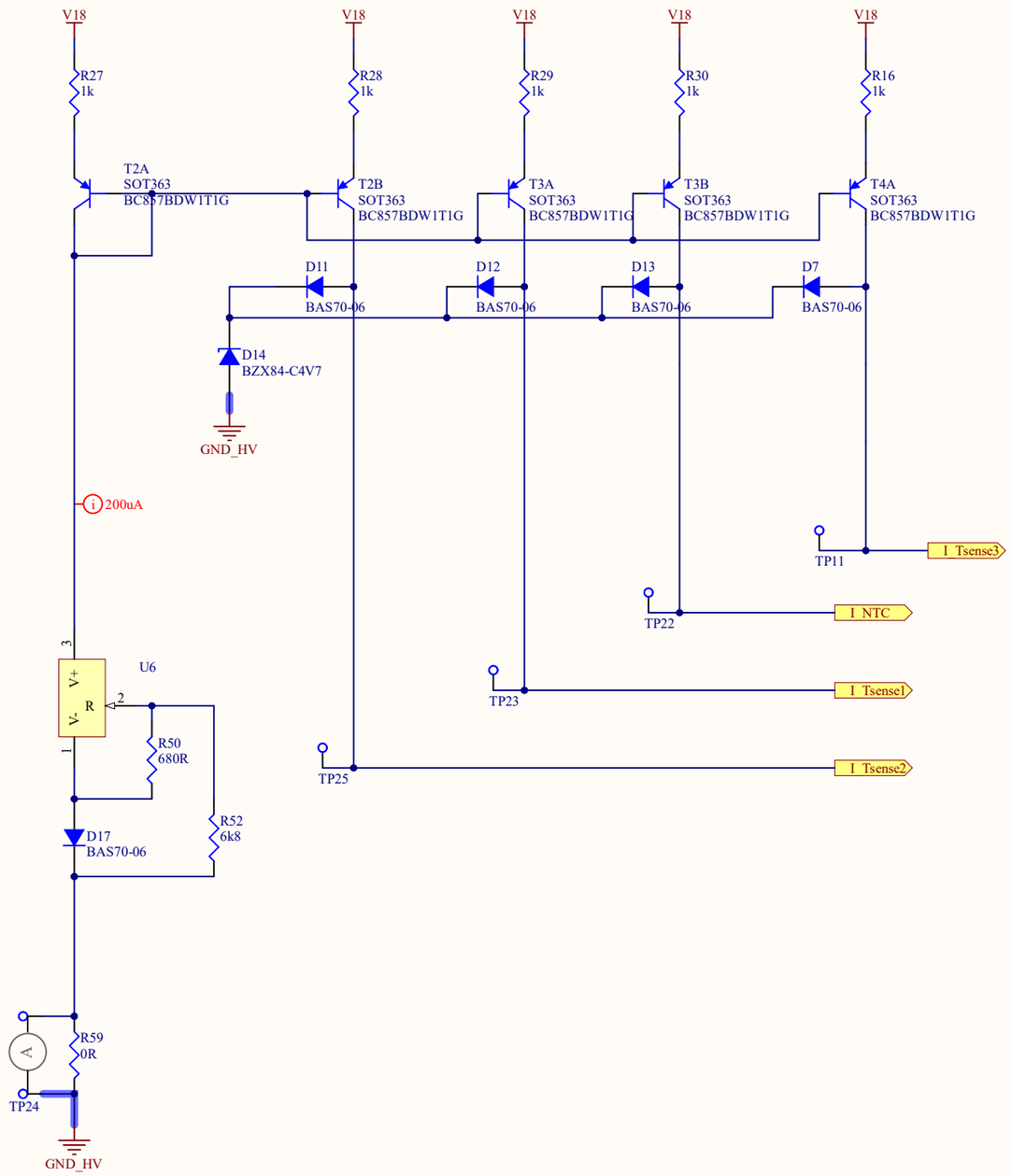




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04_SwitchingStage.SchDoc

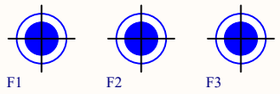


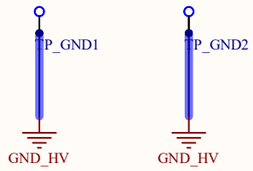
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Miscellaneous.SchDoc



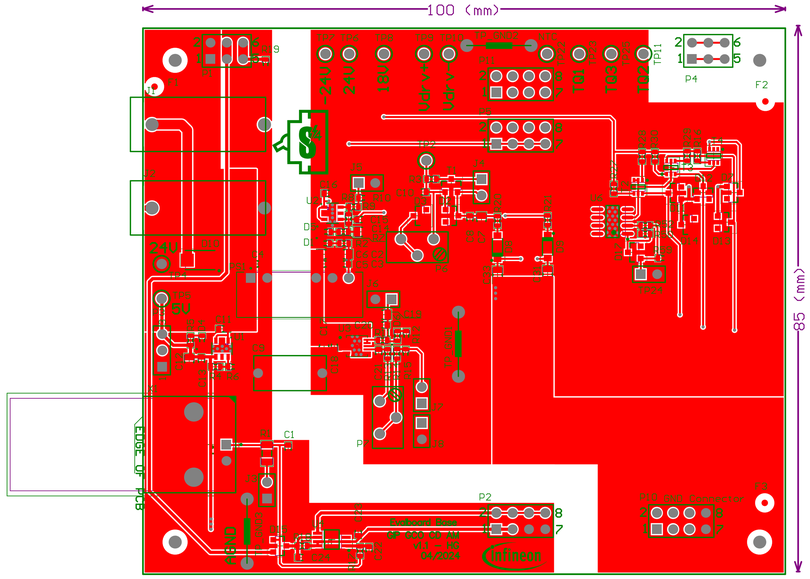




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Layer	Name	Material	Thickness
	Top Overlay		
	Top Solder	Solder Resist	0,79mil
1	L1_Top		2,76mil
	Dielectric 2	PP-006	2,80mil
	Core	FR-4	61,02mil
	Dielectric 1	PP-006	2,80mil
2	L14_Bot		2,76mil
	Bottom Solder	Solder Resist	0,79mil
	Bottom Overlay		

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1	L1_Top		2,76mil
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	Core	FR-4	61,02mil
	Dielectric 1	PP-006	2,80mil
2	L14_Bot		2,76mil
	Bottom Solder	Solder Resist	0,79mil
	Bottom Overlay		

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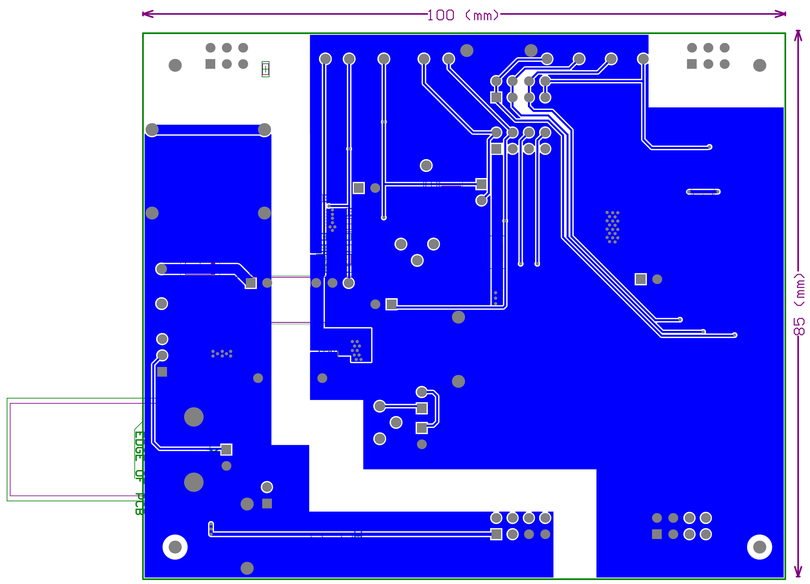


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2	L14_Bot		2,76mil
	Bottom Solder	Solder Resist	0,79mil
	Bottom Overlay		

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2	L14_Bot		2,76mil
	Bottom Solder	Solder Resist	0,79mil
	Bottom Overlay		

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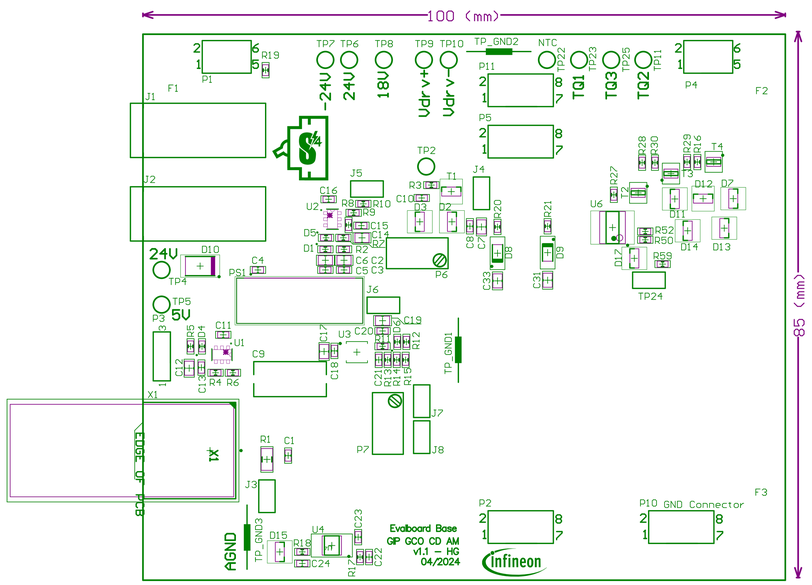
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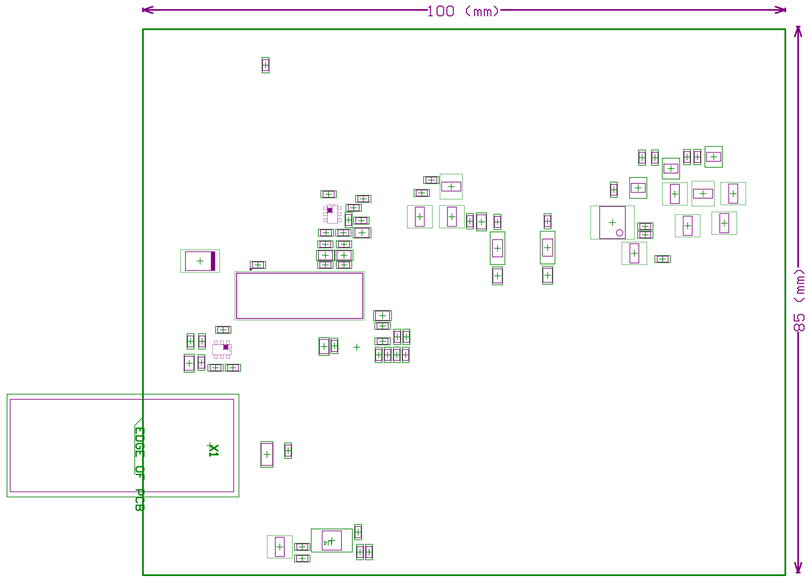
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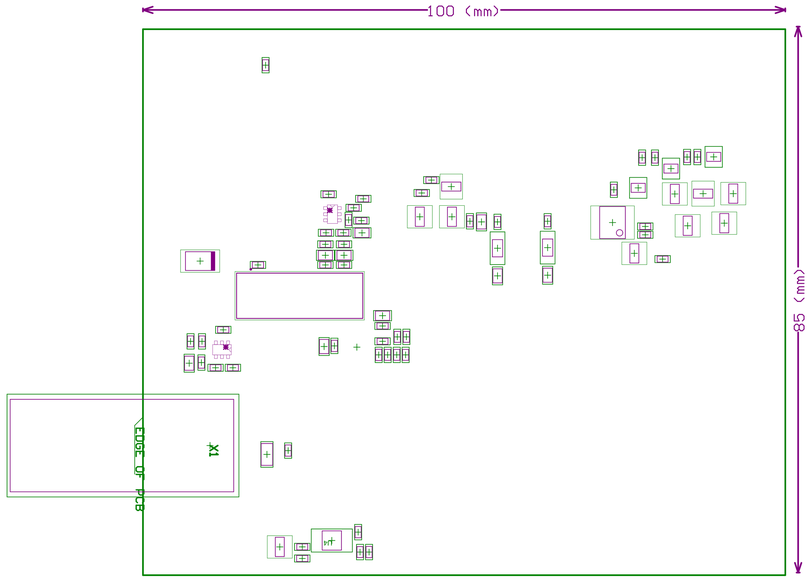
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	Bottom Solder	Solder Resist	0,79mil
	Bottom Overlay		

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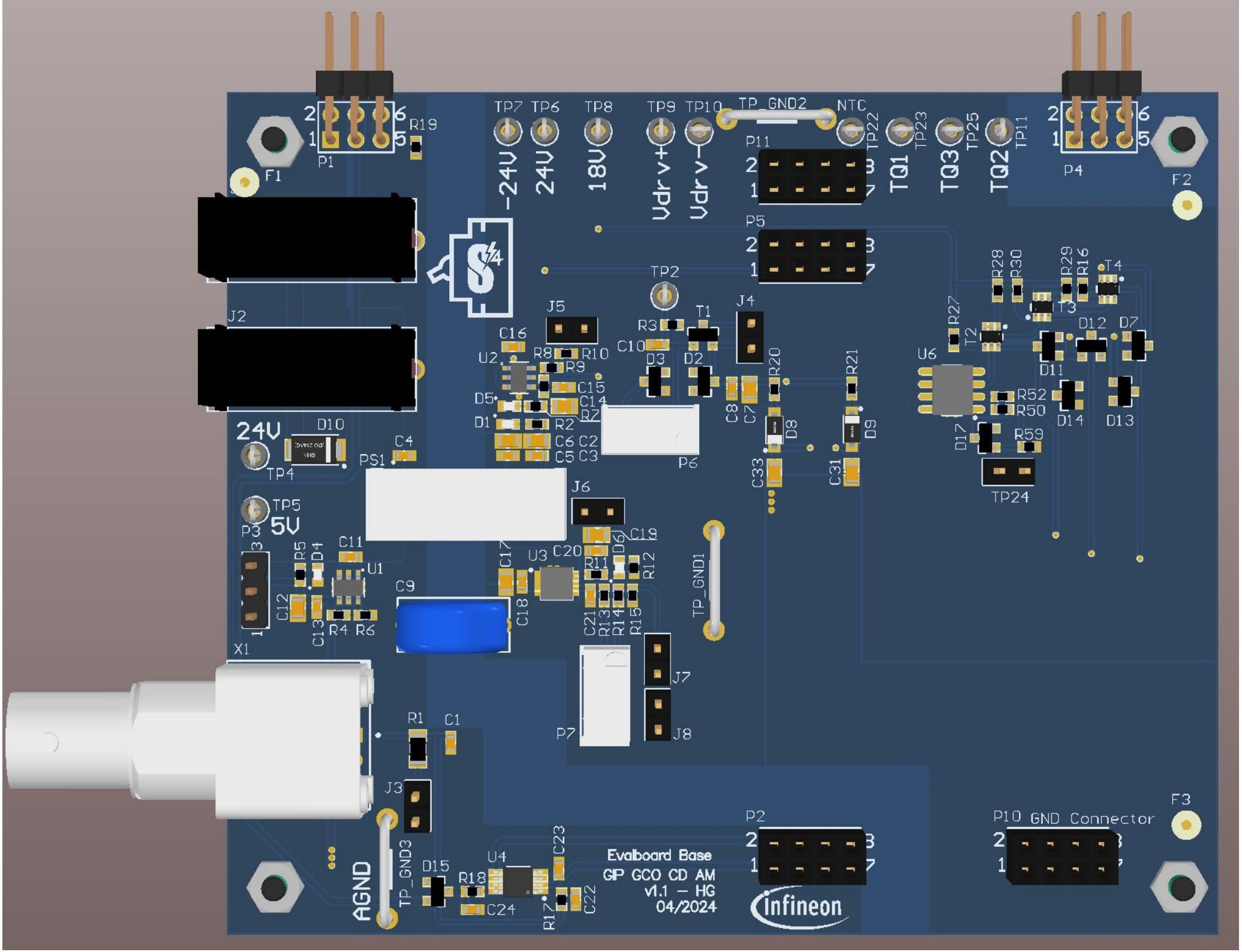
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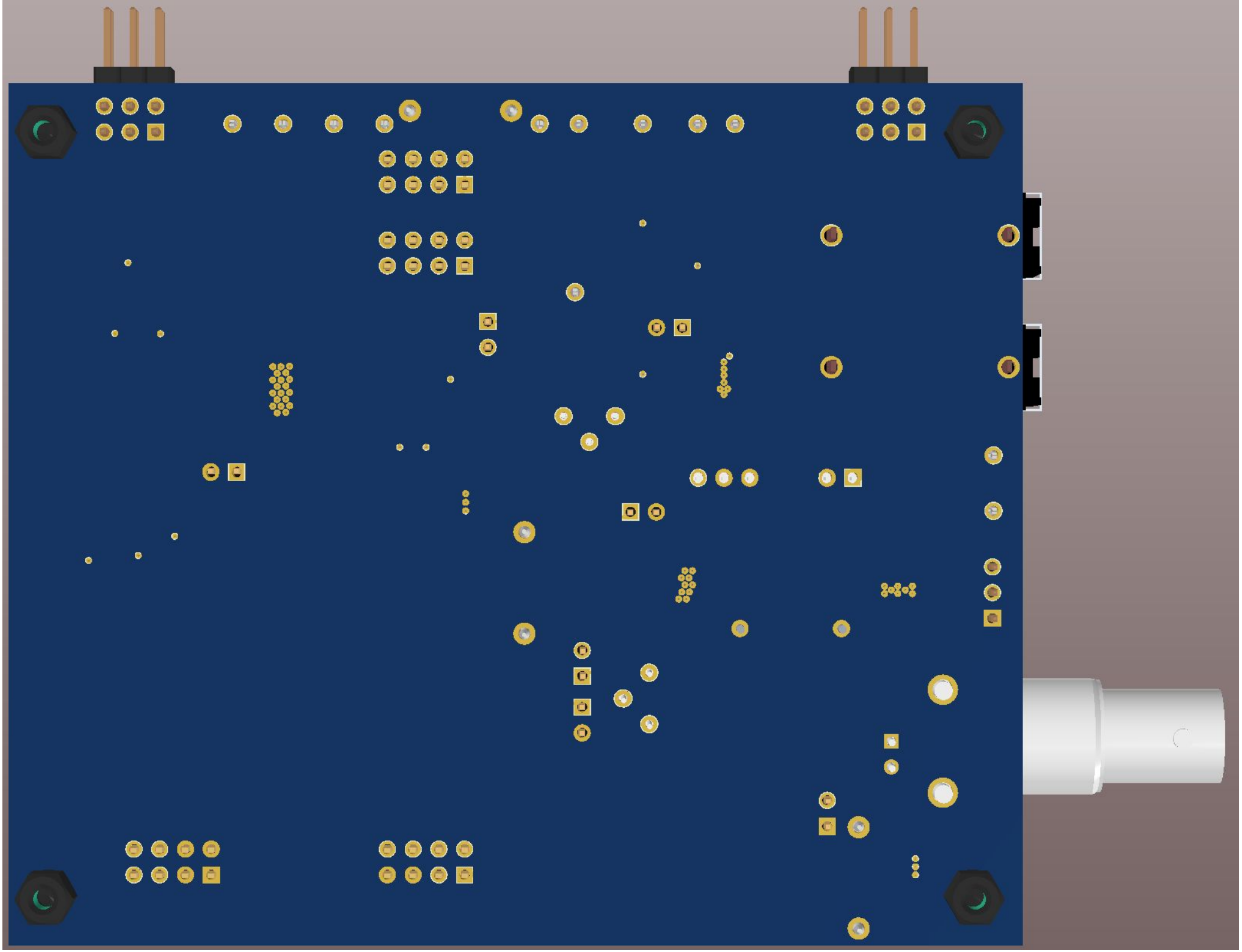
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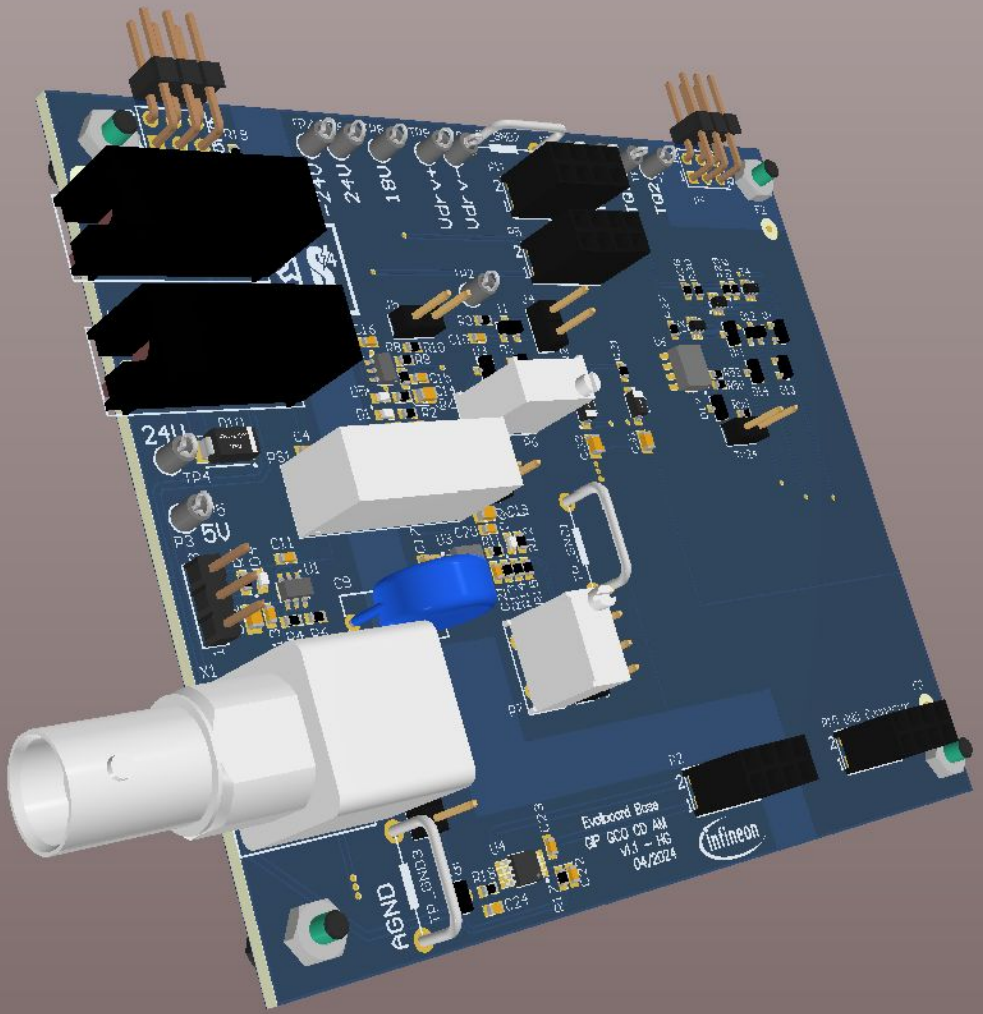
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-24V 24V 18V Vdrv+ Vdrv-
TQ1 TQ3 TQ2
TP22 TP23 TP25 TP11
P1 P4 P11 P5
F1 F2 F3
J2
24V
TP4
D10
PS1
C4
TP5
5V
P3
J5 J6 J4
TP2
T1 T2 T3 T4
R3 C10 D3 D2
C16 U2 R8 R10 R9 C15 C14 R7 R2 C6 C2 C5 C3
D5 D1
P6
C8 C7 R20 D8
R21 D9 C33 C31
U6 R28 R30 R29 R16 R27
D12 D7 D11 D14 D13
R52 R50 R59 D17
TP24
C11 U1 R5 D4 C12 C13 R4 R6
C9
C17 C18 U3 C20 C19 D6 R11 R12 C21 R13 R14 R15
TP_GND1
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24V
18V
5V
AGND
Evalboard Base
CP GCO CD AM
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