

# AC Filter

FUSE 10A

INPUT

AC85V~264V

F1  
10A AC250V

FC1 FC2  
01110506Z 01110506Z  
(FUSE HOLDER)

Z1  
V20H320AUTO  
510V  
AC320V

C1  
0.22uF  
AC275V  
ECQ-UAAF224TA

L1  
7mH  
7.3A

C2  
0.22uF  
AC275V  
ECQ-UAAF224TA

L2  
7mH  
7.3A

C3  
0.22uF  
AC275V  
ECQ-UAAF224TA

RT1  
10D2-18

RY1  
G5CA-1A-HDC12  
250V 10A

D1  
RB168MM-60TF  
60V/1A

Q1  
2SC2712-BL

R8  
22K

C9  
0.01uF

C10  
1000pF  
440Vac  
X1, Y1

C11  
1000pF  
440Vac  
X1, Y1

C5  
4700pF  
250Vac  
5750

C6  
4700pF  
250Vac  
5750

C7  
4700pF  
250Vac  
5750

C8  
4700pF  
250Vac  
5750

FG  
OT-047-M3

Through hole

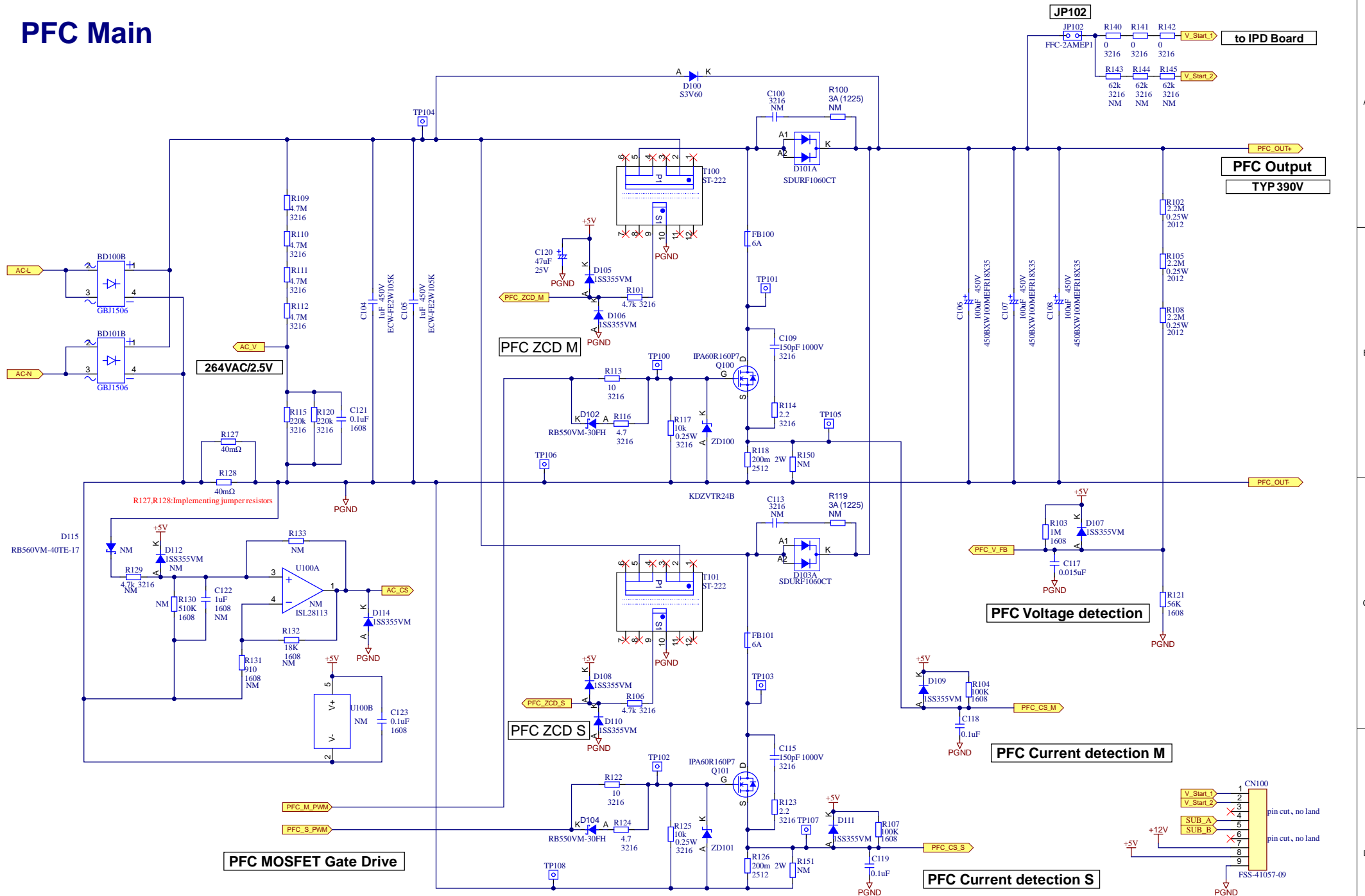
RL78/G24 Interleave CrM PFC + LLC board

MADE IN JAPAN

:Silkscreen

Approved By:	Checked By:	Drawn By:	Title: AP-221 AC Filter
*			Rev: 2.3 Sheet: 1 of 6
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			File: AP-221_AC_Filter_V2.2.SchDoc

# PFC Main

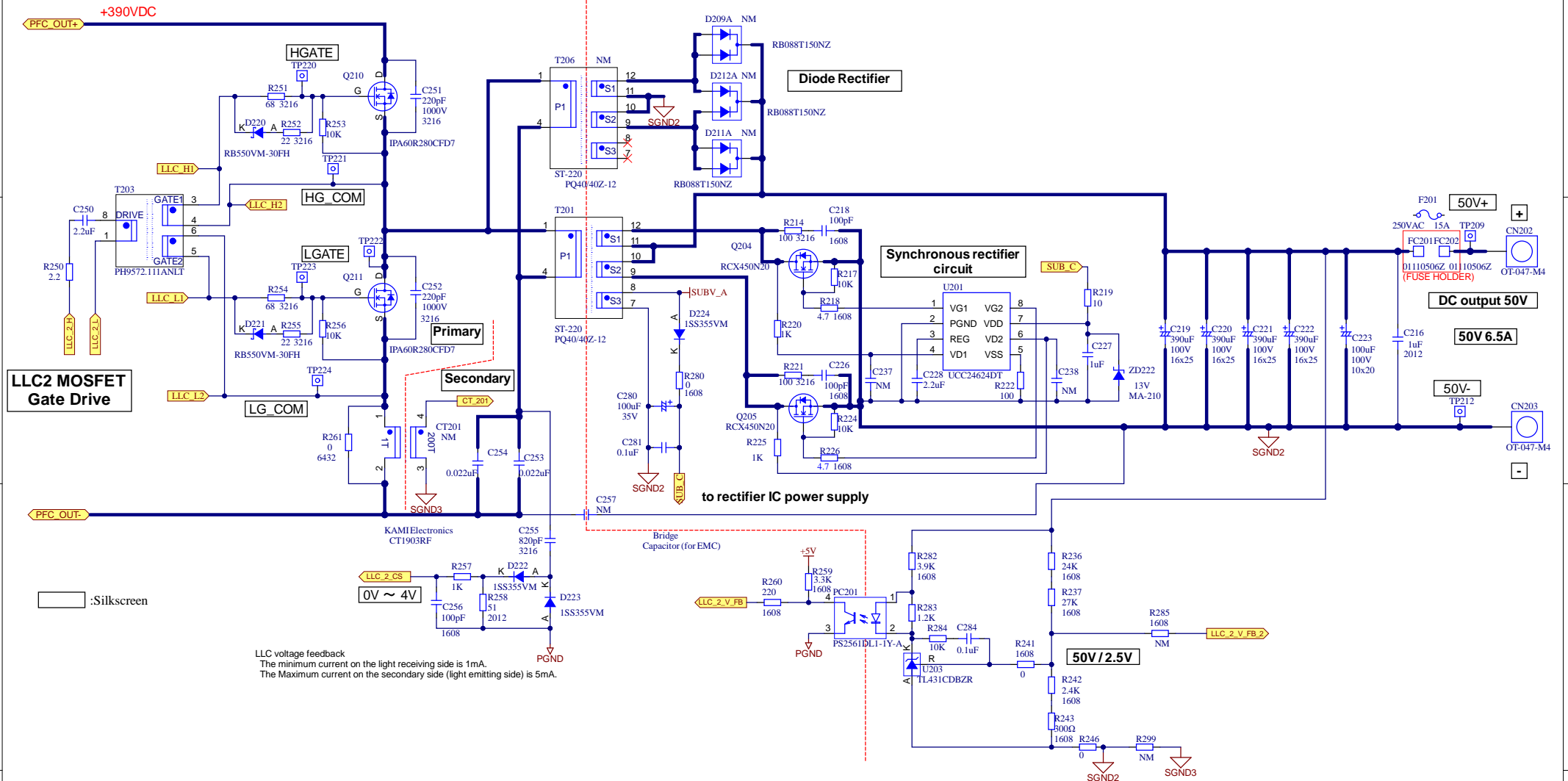


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## LLC\_2 Power 325W



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# Digital Control Circuit

**DANGER!**

Be sure to isolate when connecting to a PC

Primary Side  
For PFC+LLC\_1+LLC\_2  
RL78/G24

Control power  
supply voltage  
3.8V/12V

From AC Input

MCU, RL78/G24

P\_GM P\_GS

PFC MOSFET Gate Drive

L1\_GH L1\_GL

LLC\_1 MOSFET Gate Drive

LLC\_2 EN

L2\_GH L2\_GL

LLC\_2 MOSFET Gate Drive

E2 Lite  
Non-isolated

UART  
Non-isolated

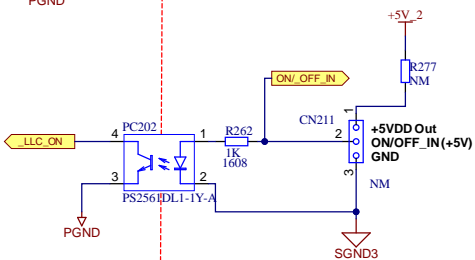
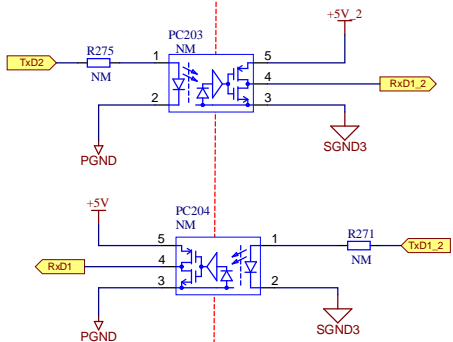
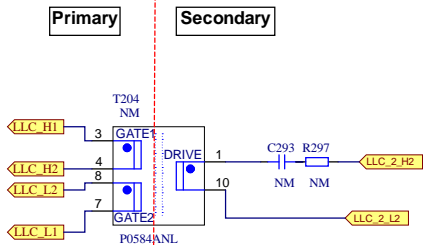
SW1

SW2

IR

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LLC\_2\_Secondary  
Side Control

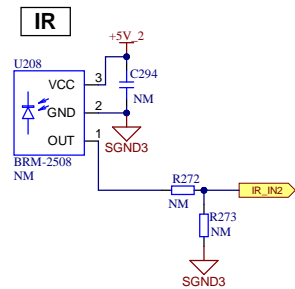
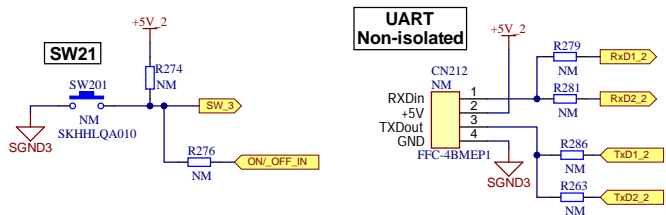
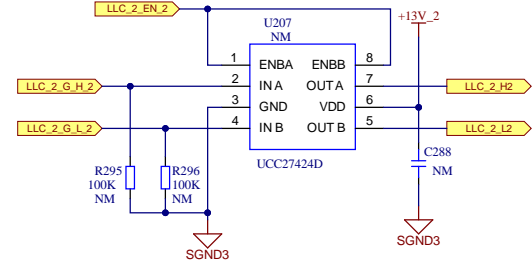
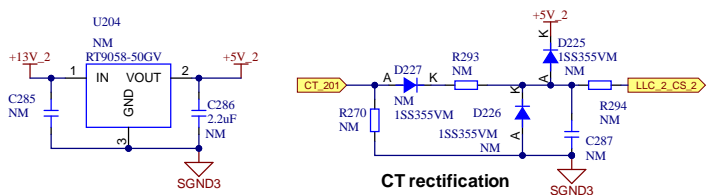
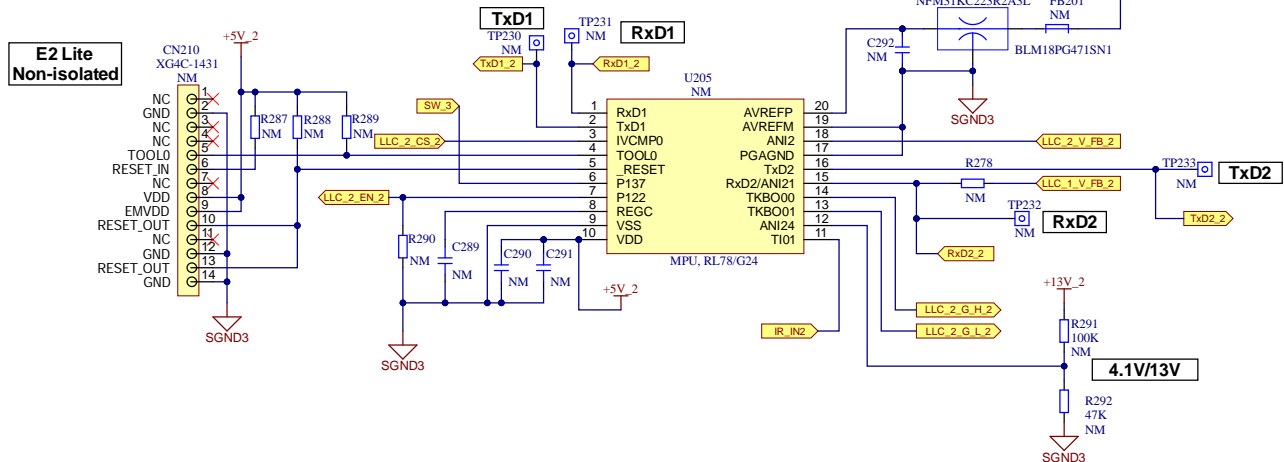
**CN211:**

**When using the +5VDD output, please populate the following components:**

U204  
R277  
C285,C286  
JP201

**When the ON/OFF\_IN (+5 V) signal is input from an external source, please populate the following components:**

CN211  
R298,R276  
PC202



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