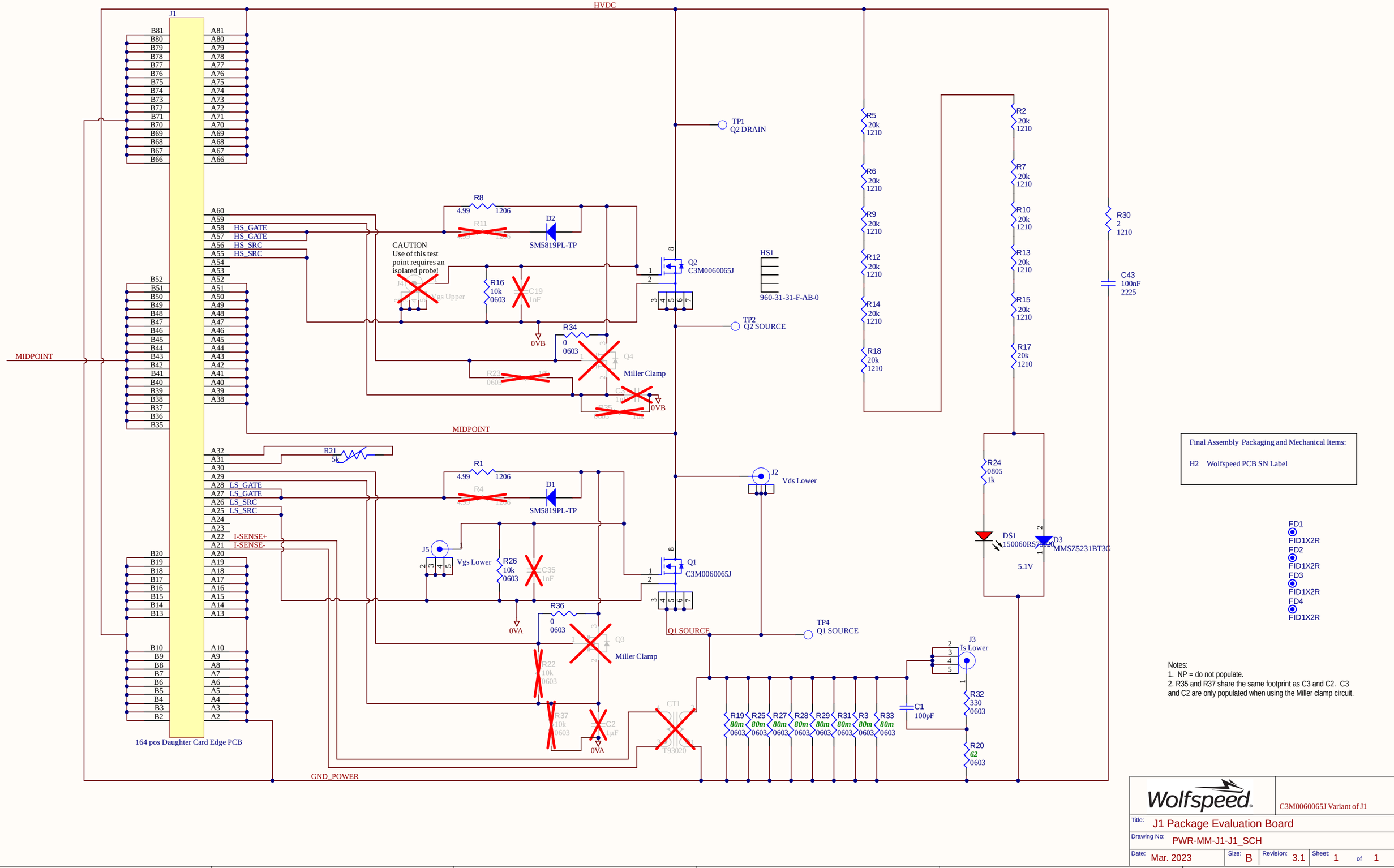
HVDC
J1
B81 B80 B79 B78 B77 B76 B75 B74 B73 B72 B71 B70 B69 B68 B67 B66
A81 A80 A79 A78 A77 A76 A75 A74 A73 A72 A71 A70 A69 A68 A67 A66
A60
A59
A58 HS_GATE
A57 HS_GATE
A56 HS_SRC
A55 HS_SRC
A54
A53
A52
B52 B51 B50 B49 B48 B47 B46 B45 B44 B43 B42 B41 B40 B39 B38 B37 B36 B35
A51 A50 A49 A48 A47 A46 A45 A44 A43 A42 A41 A40 A39 A38
MIDPOINT
A32 A31 A30 A29
A28 LS_GATE
A27 LS_GATE
A26 LS_SRC
A25 LS_SRC
A24 A23
A22 I-SENSE+
A21 I-SENSE-
B20 B19 B18 B17 B16 B15 B14 B13
A20 A19 A18 A17 A16 A15 A14 A13
B10 B9 B8 B7 B6 B5 B4 B3 B2
A10 A9 A8 A7 A6 A5 A4 A3 A2
164 pos Daughter Card Edge PCB
GND_POWER
R8
4.99
1206
R11
D2
SM5819PL-TP
CAUTION
Use of this test point requires an isolated probe!
J4
Vgs Upper
R16
10k
0603
C19
1nF
0VB
R34
0
0603
Q4
Miller Clamp
R23
0603
C3
1nF
R35
0603
0VB
MIDPOINT
R21
5k
R1
4.99
1206
R4
D1
SM5819PL-TP
J5
Vgs Lower
R26
10k
0603
C35
1nF
0VA
R36
0
0603
Q3
Miller Clamp
R22
10k
0603
R37
10k
0603
C2
1µF
0VA
CT1
T93020
TP1
Q2 DRAIN
J2
Vds Lower
Q2
C3M0060065J
HS1
960-31-31-F-AB-0
TP2
Q2 SOURCE
Q1
C3M0060065J
Q1 SOURCE
TP4
Q1 SOURCE
R5
20k
1210
R6
20k
1210
R9
20k
1210
R12
20k
1210
R14
20k
1210
R18
20k
1210
R2
20k
1210
R7
20k
1210
R10
20k
1210
R13
20k
1210
R15
20k
1210
R17
20k
1210
R30
2
1210
C43
100nF
2225
R24
0805
1k
DS1
150060RS75000
D3
MMSZ5231BT3G
5.1V
J3
Is Lower
R32
330
0603
R20
62
0603
R19 R25 R27 R28 R29 R31 R3 R33
80m
0603
C1
100pF
Final Assembly Packaging and Mechanical Items:
H2 Wolfspeed PCB SN Label
FD1
FID1X2R
FD2
FID1X2R
FD3
FID1X2R
FD4
FID1X2R
Notes:
1. NP = do not populate.
2. R35 and R37 share the same footprint as C3 and C2. C3 and C2 are only populated when using the Miller clamp circuit.
Wolfspeed
C3M0060065J Variant of J1
Title: J1 Package Evaluation Board
Drawing No: PWR-MM-J1-J1_SCH
Date: Mar. 2023
Size: B
Revision: 3.1
Sheet: 1 of 1