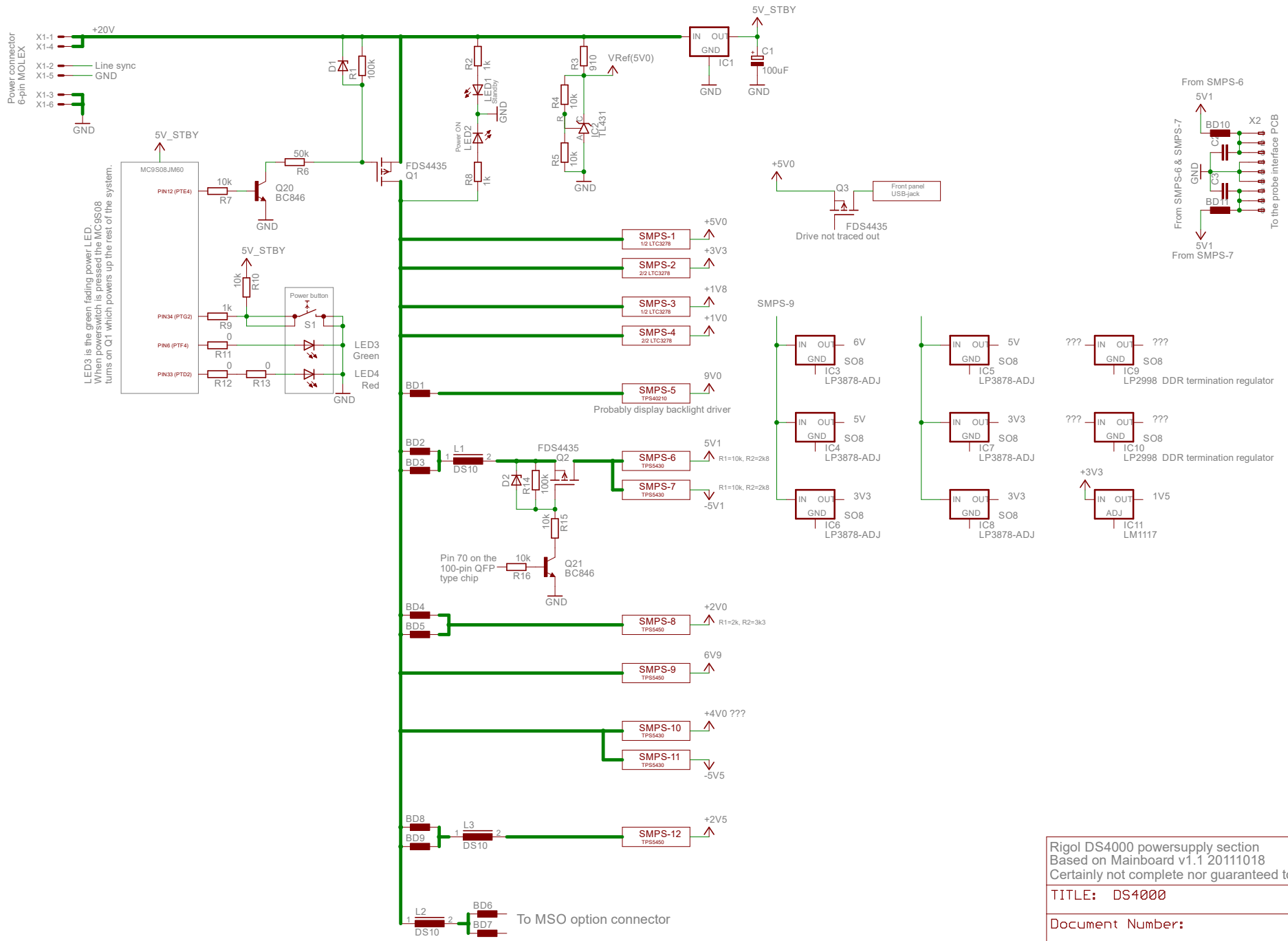
Power connector 6-pin MOLEX
X1-1
X1-4
X1-2
X1-5
X1-3
X1-6
+20V
Line sync
GND
5V_STBY
IC1
C1
100uF
D1
R1
100k
R2
1k
LED1 Standby
LED2 Power ON
R8
1k
R3
910
VRef(5V0)
R4
10k
R5
10k
IC2 TL431
MC9S08JM60
PIN12 (PTE4)
PIN34 (PTG2)
PIN6 (PTF4)
PIN33 (PTD2)
10k
R7
50k
R6
Q20 BC846
FDS4435 Q1
LED3 is the green fading power LED
When powerswitch is pressed the MC9S08 turns on Q1 which powers up the rest of the system.
10k
R10
1k
R9
0
R11
0
R12
0
R13
Power button
S1
LED3 Green
LED4 Red
+5V0
Q3
Front panel USB-jack
FDS4435
Drive not traced out
From SMPS-6
5V1
BD10
X2
C4
C3
GND
BD11
From SMPS-6 & SMPS-7
To the probe interface PCB
5V1
From SMPS-7
SMPS-1
1/2 LTC3278
+5V0
SMPS-2
2/2 LTC3278
+3V3
SMPS-3
1/2 LTC3278
+1V8
SMPS-4
2/2 LTC3278
+1V0
SMPS-5
TPS40210
9V0
Probably display backlight driver
BD1
BD2
BD3
L1
DS10
FDS4435
Q2
D2
R14
100k
10k
R15
SMPS-6
TPS5430
5V1
R1=10k, R2=2k8
SMPS-7
TPS5430
-5V1
R1=10k, R2=2k8
Pin 70 on the 100-pin QFP type chip
10k
R16
Q21 BC846
BD4
BD5
SMPS-8
TPS5450
+2V0
R1=2k, R2=3k3
SMPS-9
TPS5450
6V9
SMPS-10
TPS5430
+4V0 ???
SMPS-11
TPS5430
-5V5
BD8
BD9
L3
DS10
SMPS-12
TPS5460
+2V5
L2
DS10
BD6
BD7
To MSO option connector
SMPS-9
IC3 LP3878-ADJ
6V
SO8
IC4 LP3878-ADJ
5V
SO8
IC6 LP3878-ADJ
3V3
SO8
IC5 LP3878-ADJ
5V
SO8
IC7 LP3878-ADJ
3V3
SO8
IC8 LP3878-ADJ
3V3
SO8
??? IC9 LP2998 DDR termination regulator
??? IC10 LP2998 DDR termination regulator
+3V3
IC11 LM1117
1V5
Rigol DS4000 powersupply section
Based on Mainboard v1.1 20111018
Certainly not complete nor guaranteed to be correct
H.O 2017
TITLE: DS4000
Document Number:
REV: A
Date: 2017-09-13 20:24:25
Sheet: 1/1