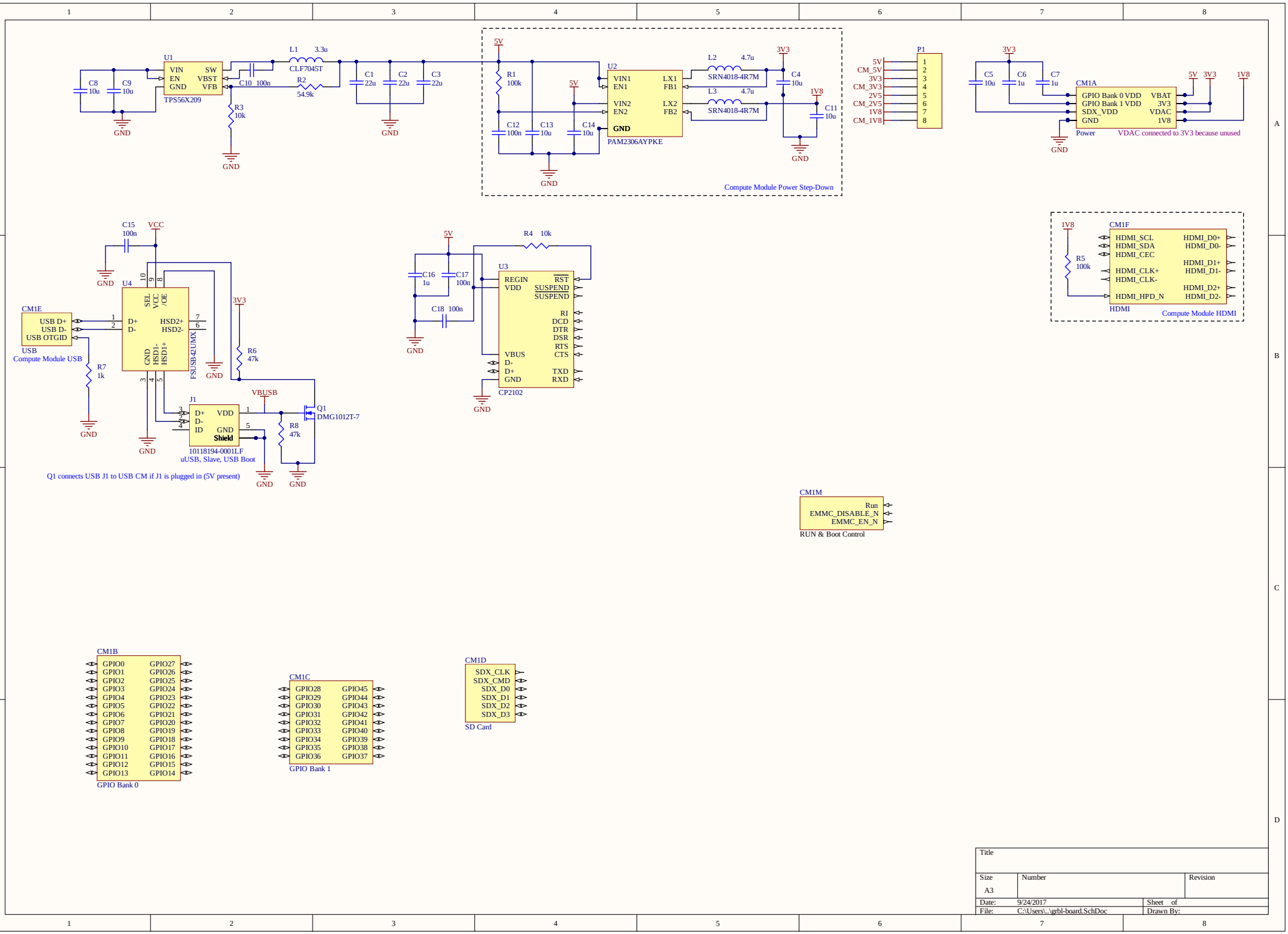
U1
VIN
EN
GND
SW
VBST
VFB
TPS56X209
C8 10u
C9 10u
C10 100n
L1 3.3u
CLF7045T
R2 54.9k
R3 10k
C1 22u
C2 22u
C3 22u
GND
5V
R1 100k
C12 100n
C13 10u
C14 10u
U2
VIN1
EN1
VIN2
EN2
GND
LX1
FB1
LX2
FB2
PAM2306AYPKE
L2 4.7u
L3 4.7u
SRN4018-4R7M
3V3
C4 10u
1V8
C11 10u
Compute Module Power Step-Down
P1
5V
CM_5V
3V3
CM_3V3
2V5
CM_2V5
1V8
CM_1V8
C5 10u
C6 1u
C7 1u
CM1A
GPIO Bank 0 VDD
GPIO Bank 1 VDD
SDX_VDD
GND
VBAT
3V3
VDAC
1V8
Power
VDAC connected to 3V3 because unused
C15 100n
VCC
U4
SEL
VCC
/OE
D+
D-
HSD2+
HSD2-
GND
HSD1-
HSD1+
FSUSB42UMX
CM1E
USB D+
USB D-
USB OTGID
USB
Compute Module USB
R7 1k
R6 47k
J1
D+
D-
ID
VDD
GND
Shield
10118194-0001LF
uUSB, Slave, USB Boot
VBUSB
Q1
DMG1012T-7
R8 47k
Q1 connects USB J1 to USB CM if J1 is plugged in (5V present)
R4 10k
C16 1u
C17 100n
C18 100n
U3
REGIN
VDD
RST
SUSPEND
SUSPEND
RI
DCD
DTR
DSR
RTS
CTS
VBUS
D-
D+
GND
TXD
RXD
CP2102
1V8
R5 100k
CM1F
HDMI_SCL
HDMI_SDA
HDMI_CEC
HDMI_CLK+
HDMI_CLK-
HDMI_HPD_N
HDMI_D0+
HDMI_D0-
HDMI_D1+
HDMI_D1-
HDMI_D2+
HDMI_D2-
HDMI
Compute Module HDMI
CM1M
Run
EMMC_DISABLE_N
EMMC_EN_N
RUN & Boot Control
CM1B
GPIO0
GPIO1
GPIO2
GPIO3
GPIO4
GPIO5
GPIO6
GPIO7
GPIO8
GPIO9
GPIO10
GPIO11
GPIO12
GPIO13
GPIO27
GPIO26
GPIO25
GPIO24
GPIO23
GPIO22
GPIO21
GPIO20
GPIO19
GPIO18
GPIO17
GPIO16
GPIO15
GPIO14
GPIO Bank 0
CM1C
GPIO28
GPIO29
GPIO30
GPIO31
GPIO32
GPIO33
GPIO34
GPIO35
GPIO36
GPIO45
GPIO44
GPIO43
GPIO42
GPIO41
GPIO40
GPIO39
GPIO38
GPIO37
GPIO Bank 1
CM1D
SDX_CLK
SDX_CMD
SDX_D0
SDX_D1
SDX_D2
SDX_D3
SD Card
Title
Size
A3
Number
Revision
Date: 9/24/2017
Sheet of
File: C:\Users\..\grbl-board.SchDoc
Drawn By: