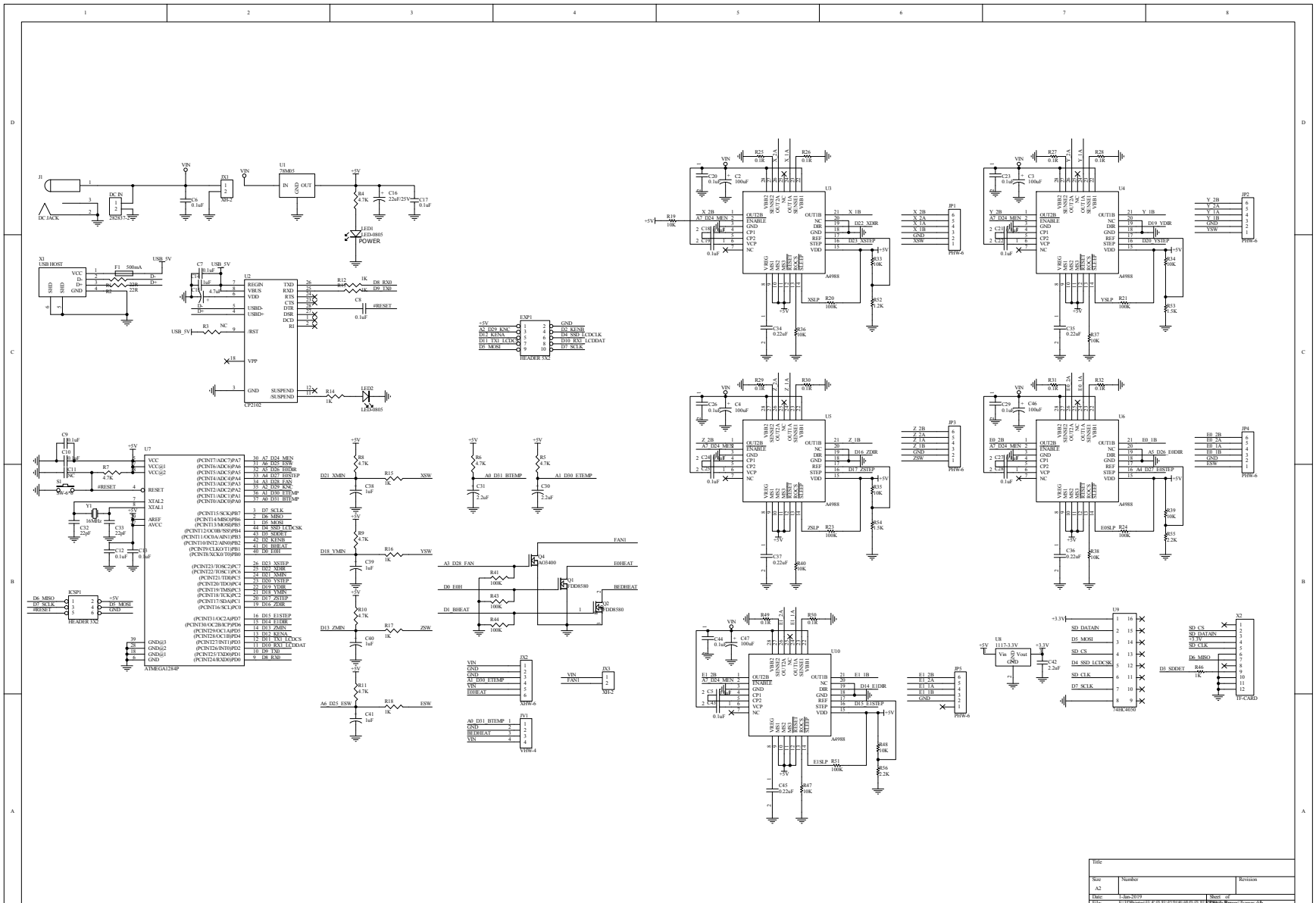
J1
DC JACK
DC IN
2825-2
VIN
C6
0.1uF
JX1
XH-2
U1
78M05
IN
GND
OUT
+5V
R4
4.7K
C16
22uF/25V
C17
0.1uF
LED1
LTD-4805
POWER
X1
USB HOST
VCC
D-
D+
GND
SHD
F1
500mA
R1
22R
R2
22R
USB_5V
C7
0.1uF
C11
4.7uF
U2
CP2102
REGIN
VBUS
VDD
USBD-
USBD+
/RST
VPP
GND
TXD
RXD
RTS
CTS
DTR
DSR
DCD
RI
SUSPEND
/SUSPEND
R12
1K
D8_RX0
D9_TX0
C8
0.1uF
#RESET
R3
NC
R14
1K
LED2
LTD-4805
EXP1
HEADER 5X2
A2_D29_KNC
D12_KENA
D11_TXI_LCDCS
D9_MOSI
GND
D4_SSD_LCDCLK
D10_RXI_LCDDAT
D7_SCLK
C9
0.1uF
C10
0.1uF
R7
4.7K
#RESET
S1
SW-6
Y1
16MHz
C32
22pF
C33
22pF
C12
0.1uF
C13
0.1uF
U7
ATMEGA1284P
VCC
VCC@1
VCC@2
NC
RESET
XTAL2
XTAL1
AREF
AVCC
GND@3
GND@2
GND@1
GND
(PCINT17/ADC7)PA7
(PCINT6/ADC6)PA6
(PCINT5/ADC5)PA5
(PCINT4/ADC4)PA4
(PCINT3/ADC3)PA3
(PCINT2/ADC2)PA2
(PCINT1/ADC1)PA1
(PCINT0/ADC0)PA0
(PCINT15/SCK)PB7
(PCINT14/MISO)PB6
(PCINT13/MOSI)PB5
(PCINT12/OC0B/SS)PB4
(PCINT11/OC0A/AIN1)PB3
(PCINT10/INT2/AIN0)PB2
(PCINT9/CLKO/T1)PB1
(PCINT8/XCK0/T0)PB0
(PCINT23/TOSC2)PC7
(PCINT22/TOSC1)PC6
(PCINT21/TDI)PC5
(PCINT20/TDO)PC4
(PCINT19/TMS)PC3
(PCINT18/TCK)PC2
(PCINT17/SDA)PC1
(PCINT16/SCL)PC0
(PCINT31/OC2A)PD7
(PCINT30/OC2B/ICP)PD6
(PCINT29/OC1A)PD5
(PCINT28/OC1B)PD4
(PCINT27/INT1)PD3
(PCINT26/INT0)PD2
(PCINT25/TXD0)PD1
(PCINT24/RXD0)PD0
A2 D25 ESW
A3 D26 EHDIR
A4 D27 EHSTEP
A5 D28 FAN
A6 D29 KNC
A1 D30 ETEMP
A0 D31 BTEMP
D7 SCLK
D6 MISO
D5 MOSI
D4 SSD_LCDCSK
D3 SDDET
D2 KENB
D1 BHEAT
D0 EHE
D23 XSTEP
D22 XDIR
D20 YSTEP
D19 YDIR
D18 YMIN
D17 ZSTEP
D16 ZDIR
D15 E1STEP
D14 E1DIR
D13 ZMIN
D12 KENA
D11 TXI LCDCS
D10 RXI LCDDAT
D9 TX0
D8 RX0
ICSP1
D6 MISO
D7 SCLK
#RESET
D5 MOSI
GND
HEADER 5X2
D21_XMIN
R8
4.7K
R18
1K
XSW
C38
1uF
D18_YMIN
R9
4.7K
R16
1K
YSW
C39
1uF
D13_ZMIN
R10
4.7K
R17
1K
ZSW
C40
1uF
A6_D25_ESW
R11
4.7K
R18
1K
ESW
C41
1uF
R6
4.7K
C31
2.2uF
A0_D31_BTEMP
R5
4.7K
C30
2.2uF
A1_D30_ETEMP
A3_D28_FAN
R41
100K
R43
100K
R44
100K
Q4
AO3400
Q1
DD8580
Q2
DD8580
FAN1
EHHEAT
BEDHEAT
D0_EHE
D1_BHEAT
JX2
XHW-6
VIN
GND
GND
A1_D30_ETEMP
VIN
EHHEAT
JX3
XH-2
VIN
FAN1
JV1
VHW-4
A0_D31_BTEMP
GND
BEDHEAT
VIN
R21
0.1R
R56
0.1R
U3
A4988
X_2B
A7_D24_MEN
C18
0.1uF
C19
0.1uF
C20
0.1uF
C2
100uF
R19
10K
OUT2B
ENABLE
GND
CP1
CP2
VCP
NC
VBB2
SENSE2
OUT2A
NC
OUT1A
SENSE1
VBB1
OUT1B
NC
DIR
GND
REF
STEP
VDD
X_1B
D22_XDIR
D23_XSTEP
R33
10K
R52
2.2K
XSLP
R20
100K
C34
0.22uF
R36
10K
JP1
X_2B
X_2A
X_1A
X_1B
GND
XSW
PHW-6
U4
A4988
Y_2B
A7_D24_MEN
C21
0.1uF
C22
0.1uF
C23
0.1uF
C3
100uF
R57
0.1R
R28
0.1R
Y_1B
D19_YDIR
D20_YSTEP
R34
10K
YSLP
R21
100K
R53
1.5K
C35
0.22uF
R37
10K
JP2
Y_2B
Y_2A
Y_1A
Y_1B
GND
YSW
PHW-6
U5
A4988
Z_2B
A7_D24_MEN
C24
0.1uF
C25
0.1uF
C26
0.1uF
C4
100uF
R29
0.1R
R30
0.1R
Z_1B
D16_ZDIR
D17_ZSTEP
R35
10K
R54
1.5K
ZSLP
R22
100K
C37
0.22uF
R40
10K
JP3
Z_2B
Z_2A
Z_1A
Z_1B
GND
ZSW
PHW-6
U6
A4988
E0_2B
A7_D24_MEN
C27
0.1uF
C28
0.1uF
C29
0.1uF
C46
100uF
R31
0.1R
R32
0.1R
A5_D26_E0DIR
E0_1B
D27_E0STEP
R39
10K
E0SLP
R24
100K
R55
2.2K
C36
0.22uF
R38
10K
JP4
E0_2B
E0_2A
E0_1A
E0_1B
GND
ESW
PHW-6
U10
A4988
E1_2B
A7_D24_MEN
C5
0.1uF
C44
0.1uF
C47
100uF
R49
0.1R
R50
0.1R
E1_1B
D14_E1DIR
D15_E1STEP
R48
10K
R56
2.2K
E1SLP
R51
100K
C45
0.22uF
R47
10K
JP5
E1_2B
E1_2A
E1_1A
E1_1B
GND
PHW-6
U8
1117-3.3V
Vin
Vout
GND
+5V
+3.3V
C42
2.2uF
U9
74HC4050
SD_DATAIN
D5_MOSI
SD_CS
D4_SSD_LCDCSK
SD_CLK
D7_SCLK
X2
TF-CARD
SD_CS
SD_DATAIN
+3.3V
SD CLK
D6_MISO
D3_SDDET
R46
1K
Title
Size
A2
Number
Revision
Date:
1-Jan-2019
Sheet of
File:
E:\3DPrinter\主板\特岱印刷板硬件资料\Printer_Ramps\Ramps.sch