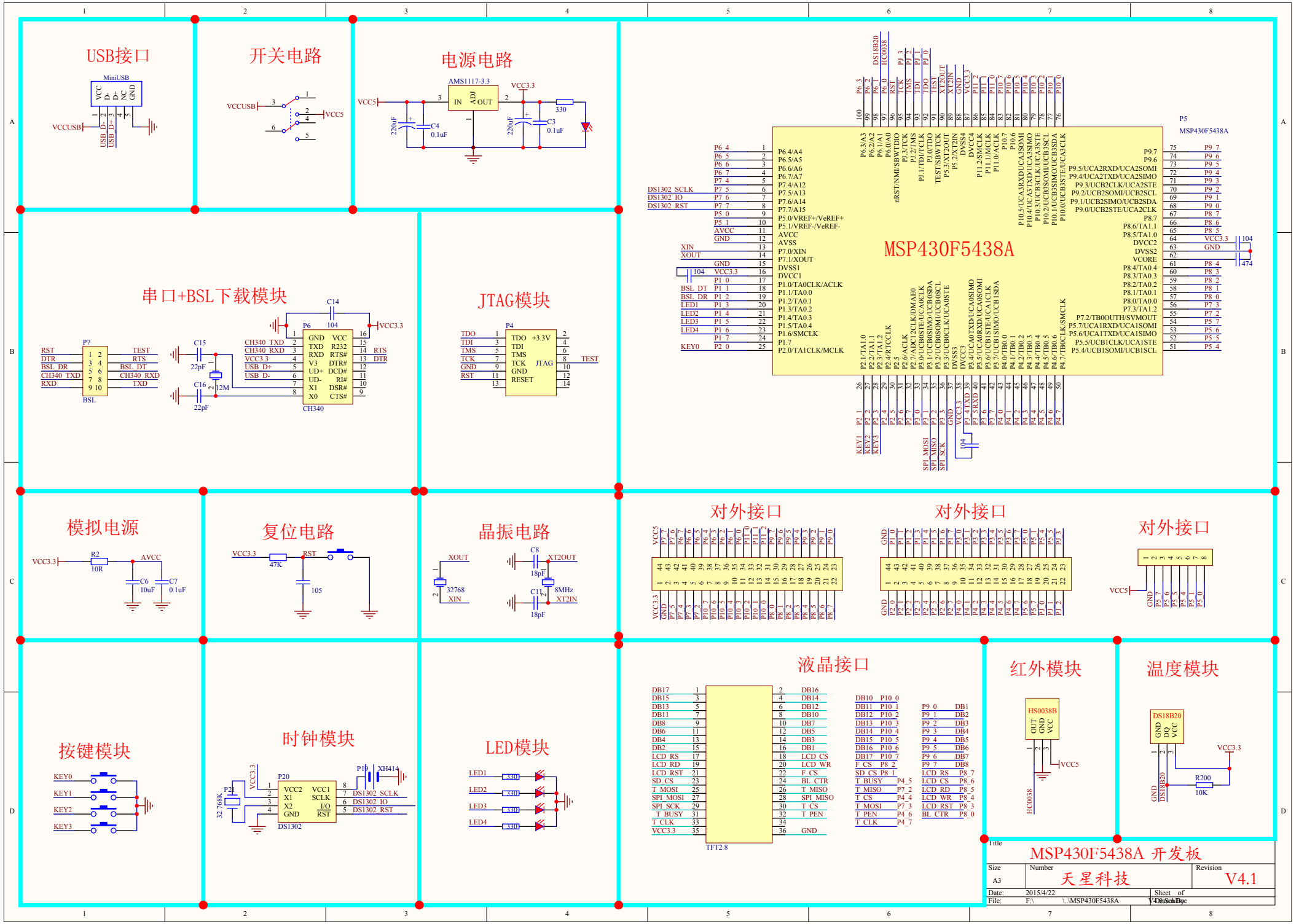
USB接口
MiniUSB
VCC
D-
D+
NC
GND
VCCUSB
USB_D-
USB_D+
开关电路
VCCUSB
VCC5
电源电路
AMS1117-3.3
IN
ADJ
OUT
VCC5
VCC3.3
220uF
C4
0.1uF
C3
0.1uF
330
串口+BSL下载模块
P7
RST
DTR
BSL_DR
CH340_TXD
RXD
TEST
RTS
BSL_DT
CH340_RXD
TXD
BSL
C15
22pF
C16
22pF
12M
C14
104
P6
GND
TXD
RXD
V3
UD+
UD-
X1
X0
VCC
R232
RTS#
DTR#
DCD#
RI#
DSR#
CTS#
CH340
CH340_TXD
CH340_RXD
VCC3.3
USB_D+
USB_D-
RTS
DTR
JTAG模块
P4
TDO
TDI
TMS
TCK
GND
RST
+3.3V
JTAG
RESET
TEST
MSP430F5438A
P5
P6_4
P6_5
P6_6
P6_7
P7_4
P7_5
P7_6
P7_7
P5_0
P5_1
AVCC
GND
XIN
XOUT
GND
VCC3.3
P1_0
P1_1
P1_2
P1_4
P1_5
P1_6
P1_7
P2_0
DS1302_SCLK
DS1302_IO
DS1302_RST
BSL_DT
BSL_DR
LED1
LED2
LED3
LED4
KEY0
P6.4/A4
P6.5/A5
P6.6/A6
P6.7/A7
P7.4/A12
P7.5/A13
P7.6/A14
P7.7/A15
P5.0/VREF+/VeREF+
P5.1/VREF-/VeREF-
AVCC
AVSS
P7.0/XIN
P7.1/XOUT
DVSS1
DVCC1
P1.0/TA0CLK/ACLK
P1.1/TA0.0
P1.2/TA0.1
P1.3/TA0.2
P1.4/TA0.3
P1.5/TA0.4
P1.6/SMCLK
P1.7
P2.0/TA1CLK/MCLK
P2.1/TA1.0
P2.2/TA1.1
P2.3/TA1.2
P2.4/RTCCLK
P2.5
P2.6/ACLK
P2.7/ADC12CLK/DMAE0
P3.0/UCB0STE/UCA0CLK
P3.1/UCB0SIMO/UCB0SDA
P3.2/UCB0SOMI/UCB0SCL
P3.3/UCB0CLK/UCA0STE
P3.4/UCA0TXD/UCA0SIMO
P3.5/UCA0RXD/UCA0SOMI
P3.6/UCB1STE/UCA1CLK
P3.7/UCB1SIMO/UCB1SDA
P4.0/TB0.0
P4.1/TB0.1
P4.2/TB0.2
P4.3/TB0.3
P4.4/TB0.4
P4.5/TB0.5
P4.6/TB0.6
P4.7/TB0CLK/SMCLK
P5.4/UCB1SOMI/UCB1SCL
P5.5/UCB1CLK/UCA1STE
P5.6/UCA1TXD/UCA1SIMO
P5.7/UCA1RXD/UCA1SOMI
P9.0/UCB2STE/UCA2CLK
P9.1/UCB2SIMO/UCB2SDA
P9.2/UCB2SOMI/UCB2SCL
P9.3/UCB2CLK/UCA2STE
P9.4/UCA2TXD/UCA2SIMO
P9.5/UCA2RXD/UCA2SOMI
P9.6
P9.7
P8.7
P8.6/TA1.1
P8.5/TA1.0
DVCC2
DVSS2
VCORE
P8.4/TA0.4
P8.3/TA0.3
P8.2/TA0.2
P8.1/TA0.1
P8.0/TA0.0
P7.3/TA1.2
P7.2/TB0OUTH/SVMOUT
P1.0/TA0CLK/ACLK
P1.1/TA0.0
P1.2/TA0.1
P1.3/TA0.2
P1.4/TA0.3
P1.5/TA0.4
P1.6/SMCLK
P1.7
P2.0/TA1CLK/MCLK
P2.1/TA1.0
P2.2/TA1.1
P2.3/TA1.2
P2.4/RTCCLK
P2.5
P2.6/ACLK
P2.7/ADC12CLK/DMAE0
P3.0/UCB0STE/UCA0CLK
P3.1/UCB0SIMO/UCB0SDA
P3.2/UCB0SOMI/UCB0SCL
P3.3/UCB0CLK/UCA0STE
P3.4/UCA0TXD/UCA0SIMO
P3.5/UCA0RXD/UCA0SOMI
P3.6/UCB1STE/UCA1CLK
P3.7/UCB1SIMO/UCB1SDA
P4.0/TB0.0
P4.1/TB0.1
P4.2/TB0.2
P4.3/TB0.3
P4.4/TB0.4
P4.5/TB0.5
P4.6/TB0.6
P4.7/TB0CLK/SMCLK
P5.4/UCB1SOMI/UCB1SCL
P5.5/UCB1CLK/UCA1STE
P5.6/UCA1TXD/UCA1SIMO
P5.7/UCA1RXD/UCA1SOMI
P9.0/UCB2STE/UCA2CLK
P9.1/UCB2SIMO/UCB2SDA
P9.2/UCB2SOMI/UCB2SCL
P9.3/UCB2CLK/UCA2STE
P9.4/UCA2TXD/UCA2SIMO
P9.5/UCA2RXD/UCA2SOMI
P9.6
P9.7
P8.7
P8.6/TA1.1
P8.5/TA1.0
DVCC2
DVSS2
VCORE
P8.4/TA0.4
P8.3/TA0.3
P8.2/TA0.2
P8.1/TA0.1
P8.0/TA0.0
P7.3/TA1.2
P7.2/TB0OUTH/SVMOUT
P7.1/XOUT
P7.0/XIN
DVSS1
DVCC1
P6.0/A0
P6.1/A1
P6.2/A2
P6.3/A3
nRST/NMI/SBWTDIO
P3.3/TCK
P2.2/TMS
P1.1/TDI/TCLK
P1.0/TDO
TEST/SBWTCK
P5.3/XT2OUT
P5.2/XT2IN
DVSS4
DVCC4
P11.2/SMCLK
P11.1/MCLK
P11.0/ACLK
P10.7
P10.6
P10.5/UCA3RXD/UCA3SOMI
P10.4/UCA3TXD/UCA3SIMO
P10.3/UCB3CLK/UCA3STE
P10.2/UCB3SOMI/UCB3SCL
P10.1/UCB3SIMO/UCB3SDA
P10.0/UCB3STE/UCA3CLK
P6_3
P6_2
P6_1
P6_0
RST
TCK
TMS
TDI
TDO
TEST
XT2OUT
XT2IN
GND
VCC3.3
P11_2
P11_1
P11_0
P10_7
P10_6
P10_5
P10_4
P10_3
P10_2
P10_1
P10_0
P9_7
P9_6
P9_5
P9_4
P9_3
P9_2
P9_1
P9_0
P8_7
P8_6
P8_5
P8_4
P8_3
P8_2
P8_1
P8_0
P7_3
P7_2
P7_5
P7_6
P5_6
P5_5
P5_4
P2_1
P2_2
P2_3
P2_4
P2_5
P2_6
P2_7
P3_0
P3_1
P3_2
P3_3
P3_4
P3_5
P3_6
P3_7
P4_0
P4_1
P4_2
P4_3
P4_4
P4_5
P4_6
P4_7
KEY1
KEY2
KEY3
SPI_MOSI
SPI_MISO
SPI_SCK
104
474
模拟电源
VCC3.3
R2
10R
AVCC
C6
10uF
C7
0.1uF
复位电路
VCC3.3
47K
RST
105
晶振电路
XOUT
32768
XIN
C8
18pF
XT2OUT
8MHz
C11
18pF
XT2IN
对外接口
VCC5
VCC3.3
GND
对外接口
GND
对外接口
VCC5
GND
P5_7
P5_6
P5_5
P5_4
P5_0
按键模块
KEY0
KEY1
KEY2
KEY3
时钟模块
VCC3.3
P21
32.768K
P20
VCC2
X1
X2
GND
VCC1
SCLK
I/O
RST
DS1302
P19
XH414
DS1302_SCLK
DS1302_IO
DS1302_RST
LED模块
LED1
LED2
LED3
LED4
330
液晶接口
DB17
DB15
DB13
DB11
DB8
DB6
DB4
DB2
LCD_RS
LCD_RD
LCD_RST
SD_CS
T_MOSI
SPI_MOSI
SPI_SCK
T_BUSY
T_CLK
VCC3.3
DB16
DB14
DB12
DB10
DB7
DB5
DB3
DB1
LCD_CS
LCD_WR
F_CS
BL_CTR
T_MISO
SPI_MISO
T_CS
T_PEN
GND
TFT2.8
DB10 P10_0
DB11 P10_1
DB12 P10_2
DB13 P10_3
DB14 P10_4
DB15 P10_5
DB16 P10_6
DB17 P10_7
F_CS P8_2
SD_CS P8_1
T_BUSY P4_5
T_MISO P7_2
T_CS P4_4
T_MOSI P7_3
T_PEN P4_6
T_CLK P4_7
P9_0 DB1
P9_1 DB2
P9_2 DB3
P9_3 DB4
P9_4 DB5
P9_5 DB6
P9_6 DB7
P9_7 DB8
LCD_RS P8_7
LCD_CS P8_6
LCD_RD P8_5
LCD_WR P8_4
LCD_RST P8_3
BL_CTR P8_0
红外模块
HS0038B
OUT
GND
VCC
VCC5
HC0038
温度模块
DS18B20
GND
DQ
VCC
VCC3.3
R200
10K
Title
MSP430F5438A 开发板
Size
A3
Number
天星科技
Revision
V4.1
Date: 2015/4/22
File: F:\
Sheet of