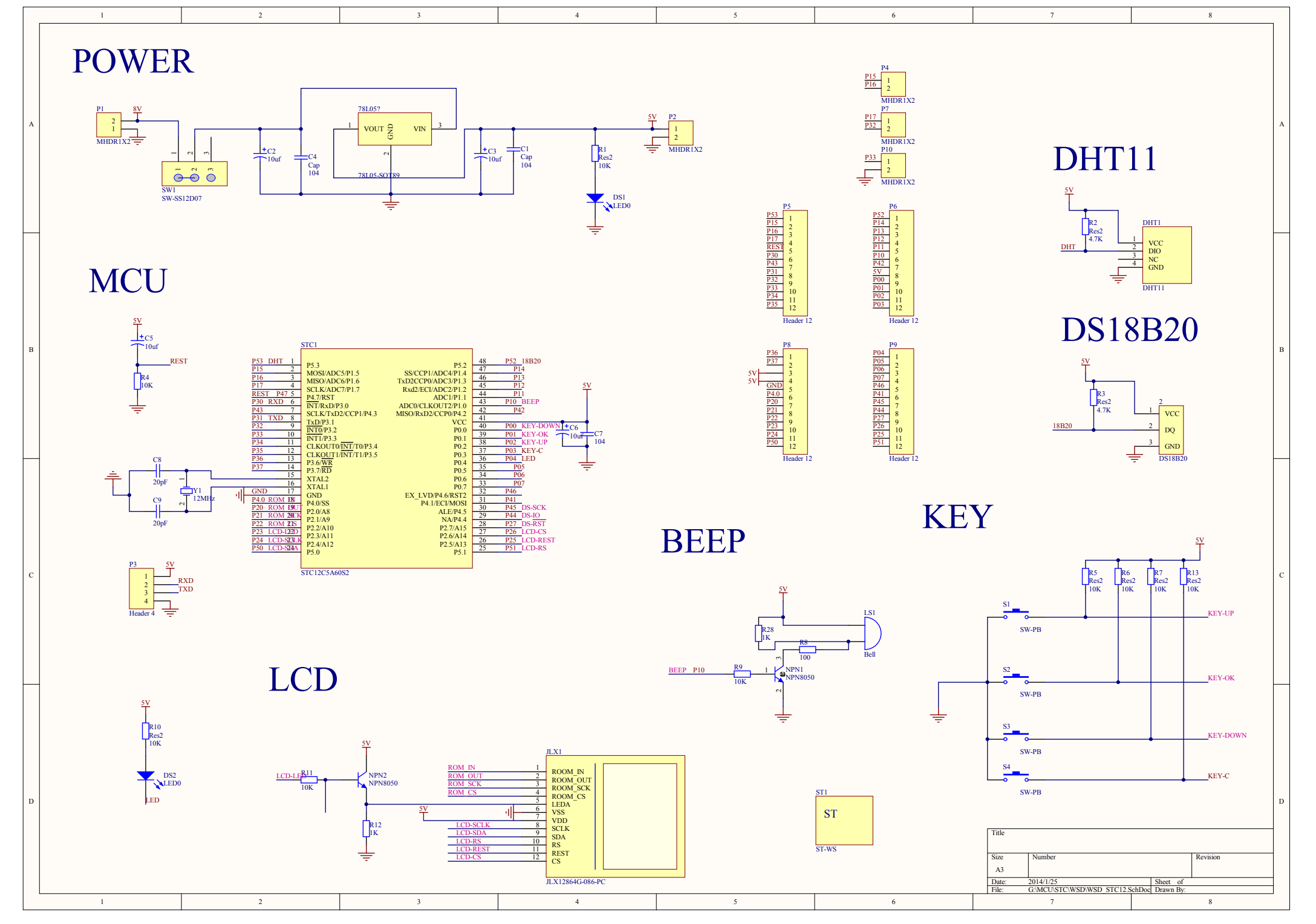
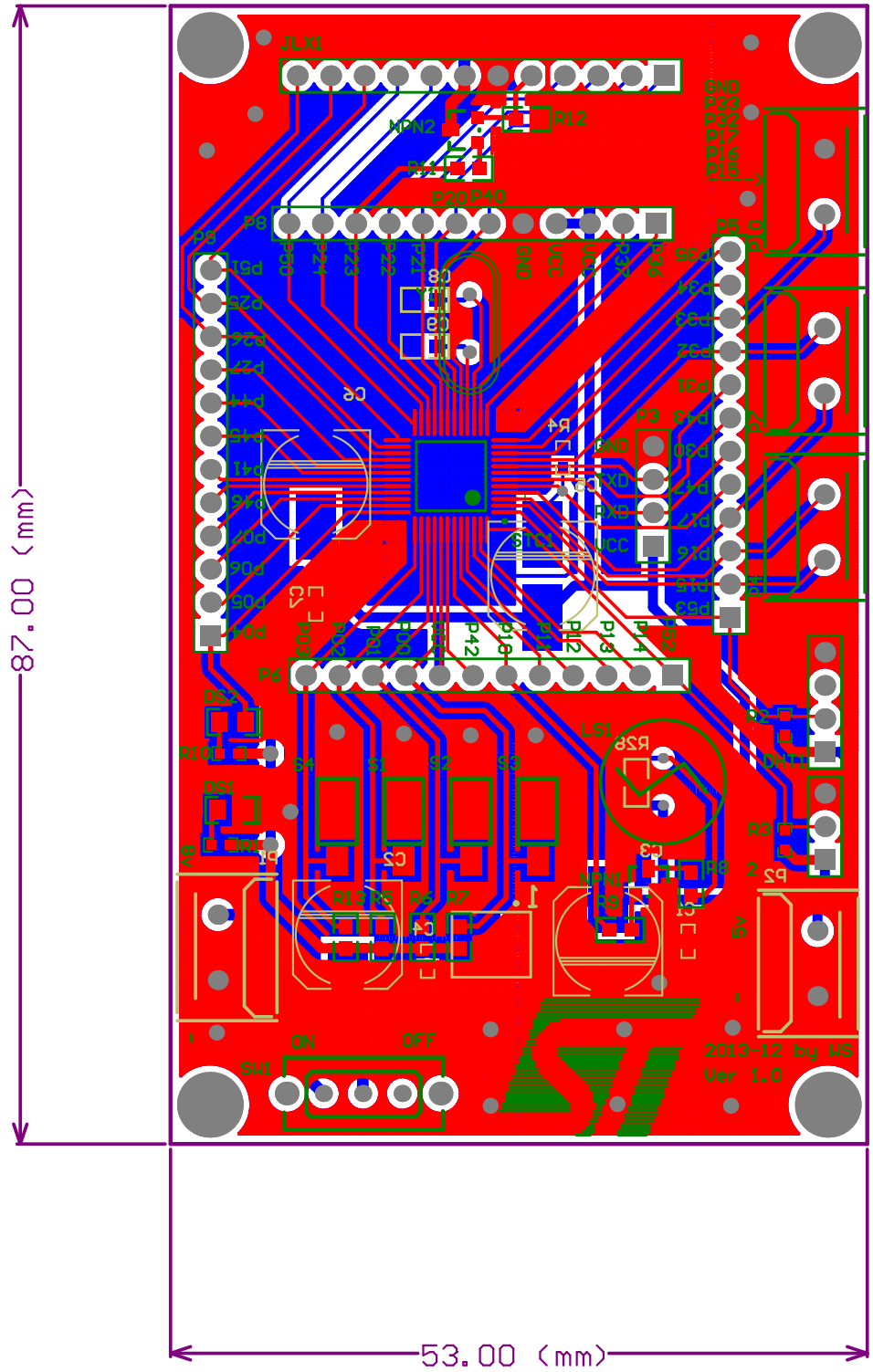

POWER
MCU
DHT11
DS18B20
BEEP
KEY
LCD
P1
MHDR1X2
SW1
SW-SS12D07
78L05?
VOUT
GND
VIN
78L05-SOT89
C2
10uf
C4
Cap
104
C3
10uf
C1
Cap
104
R1
Res2
10K
DS1
LED0
P2
MHDR1X2
P4
MHDR1X2
P7
MHDR1X2
P10
MHDR1X2
P5
Header 12
P6
Header 12
P8
Header 12
P9
Header 12
R2
Res2
4.7K
DHT1
VCC
DIO
NC
GND
DHT11
R3
Res2
4.7K
DS18B20
C5
10uf
R4
10K
REST
STC1
STC12C5A60S2
C6
10uf
C7
104
C8
20pF
C9
20pF
Y1
12MHz
P3
Header 4
RXD
TXD
R28
1K
R8
100
LS1
Bell
R9
10K
NPN1
NPN8050
BEEP P10
R10
Res2
10K
DS2
LED0
LED
R11
10K
NPN2
NPN8050
R12
1K
LCD-LED
JLX1
JLX12864G-086-PC
ST1
ST
ST-WS
R5
Res2
10K
R6
Res2
10K
R7
Res2
10K
R13
Res2
10K
S1
SW-PB
KEY-UP
S2
SW-PB
KEY-OK
S3
SW-PB
KEY-DOWN
S4
SW-PB
KEY-C
Title
Size
A3
Number
Revision
Date: 2014/1/25
Sheet of
File: G:\MCU\STC\WSD\WSD_STC12.SchDoc
Drawn By:


87.00 (mm)
53.00 (mm)
JLX1
GND
P33
P32
P17
P16
P15
R12
NPN2
P20
P40
P5
P3
P6
LS1
R26
R3
P2
SW1
ON
OFF
2013-12 by WS
Ver 1.0

| Comment | Description | Designator | Footprint | LibRef | Quantity |
|---|---|---|---|---|---|
| DS18B20 | | 2 | HDR1X3 | DS18B20 | 1 |
| 78L05-SOT89 | | 78L05? | SOT89 | 78L05-SOT89 | 1 |
| Cap | Capacitor | C1, C4 | 0603 | Cap | 2 |
| 10uf | Polarized Capacitor (Surface Mount) | C2, C3, C5, C6 | C310M | Cap Pol3 | 4 |
| 104 | Capacitor | C7 | 0603 | Cap | 1 |
| 20pF | Capacitor | C8, C9 | P0603 | Cap | 2 |
| DHT11 | | DHT1 | HDR1X4 | DHT11 | 1 |
| LED0 | Typical INFRARED GaAs LED | DS1, DS2 | LED2012 | LED0 | 2 |
| JLX12864G-086-PC | | JLX1 | HDR1X12 | JLX12864G-086-PC | 1 |
| Bell | Electrical Bell | LS1 | BEEP | Bell | 1 |
| NPN8050 | | NPN1, NPN2 | SOT23-T | NPN8050 | 2 |
| MHDR1X2 | Header, 2-Pin | P1, P2, P4, P7, P10 | KF301-2P | MHDR1X2 | 5 |
| Header 4 | Header, 4-Pin | P3 | HDR1X4 | Header 4 | 1 |
| Header 12 | Header, 12-Pin | P5, P6, P8, P9 | HDR1X12 | Header 12 | 4 |
| Res2 | Resistor | R1, R2, R3, R10 | 0603 | Res2 | 4 |
| 10K | Resistor | R4 | 0603 | Res2 | 1 |
| Res2 | Resistor | R5, R6, R7, R13 | P0603 | Res2 | 4 |
| 100 | Resistor | R8 | P0603 | Res2 | 1 |
| 10K | Resistor | R9, R11 | P0603 | Res2 | 2 |
| 1K | Resistor | R12, R28 | P0603 | Res2 | 2 |
| SW-PB | Switch | S1, S2, S3, S4 | KEY-SMD | SW-PB | 4 |
| ST-WS | | ST1 | ST2 | ST-WS | 1 |
| STC12C5A60S2 | | STC1 | LQFP48_M | STC12C5A60S2 | 1 |
| SW-SS12D07 | | SW1 | SS-12F44 | SW-SS12D07 | 1 |
| 12MHz | Crystal Oscillator | Y1 | XTA | XTAL | 1 |