GND

22p
C1

22p
C2

3v3

R2
10k

Q1
1 2
14.7456MHz

AREF

L1
10µH

3v3

3v3

3v3

3v3

100n 100n 100n 100n
C7 C5 C3 C4

GND GND GND GND GND

PD7

R5
xk

Status
LD1
green
red
GND

R8
xk

PD6

IC2
3v3 Regulator
VI VO
GND
Bat
VCC

GND

IC1

4 RESET

7 XTAL2
8 XTAL1

29 AREF
27 AVCC

5 VCC
17 VCC
38 VCC

6 GND
18 GND
28 GND
39 GND

(ADC0/PCINT0)PA0   37 D0
(ADC1/PCINT1)PA1   36 D1
(ADC2/PCINT2)PA2   35 D2
(ADC3/PCINT3)PA3   34 D3
(ADC4/PCINT4)PA4   33 D4
(ADC5/PCINT5)PA5   32 D5
(ADC6/PCINT6)PA6   31 D6
(ADC7/PCINT7)PA7   30 D7

(XCK0/T0/PCINT8)PB0   40 /RESET
(CLKO/T1/PCINT9)PB1   41 /CS
(INT2/AIN0/PCINT10)PB2 42 RS
(OC0A/AIN1/PCINT11)PB3 43
(OC0B/SS/PCINT12)PB4   44
(MOSI/PCINT13)PB5   1 SDI
(MISO/PCINT14)PB6   2 SDO
(SCK/PCINT15)PB7   3 RW_WRB

(SCL/PCINT16)PC0   19 D8
(SDA/PCINT17)PC1   20 D9
(TCK/PCINT18)PC2   21 D10
(TMS/PCINT19)PC3   22 D11
(TDO/PCINT20)PC4   23 D12
(TDI/PCINT21)PC5   24 D13
(TOSC1/PCINT22)PC6 25 D14
(TOSC2/PCINT23)PC7 26 D15

(RXD0/PCINT24)PD0   9 TX
(TXD0/PCINT25)PD1   10 RX
(RXD1/INT0/PCINT26)PD2 11 E_RDB
(TXD1/INT1/PCINT27)PD3 12 SPB
(XCK1/OC1B/PCINT28)PD4 13 ID_MIB
(OC1A/PCINT29)PD5   14 POWER
(OC2B/ICP/PCINT30)PD6 15 PD6
(OC2A/PCINT31)PD7   16 PD7

644P-AU

GND

3v3 D1 3v3 D3 3v3 D2

1k
R3
SDI

M8-6
RESET_5V M8-5
SDI   M8-4
RW_WRB   M8-3
          M8-2
          M8-1
ISP

GND

Bat 3v3 5v

3v3 D5

Display
M13-1
M13-2
M13-3
1k   TX_5V M13-4
R4   M13-5
GND   M13-6

1k
R7
2v7
D7
GND

1k
R6
2v7
D6
GND

10k
R1   3v3

GND

SPB_2V7 ID_MIB_2V7 POWER /CS /RESET

GND

VCC

D15 D14 D13 D12 D11 D10 D9 D8 D7 D6 D5 D4 D3 D2 D1 D0   E_RDB RS RW_WRB SDI SDO

Display1 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1   JP1

Display2 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1   JP2