LED DON

VCC
SWD1
SW POWER LED DON
R1 1K
R4 1K
L1 PD 0
L2 PD 1
L3 PD 2
L4 PD 3
L5 PD 4
L6 PD 5
L7 PD 6
L8 PD 7

LED 7

DS1 A-SEG7 0.36
R2 200
R3 200
PD 0 PD 1 PD 2 PD 3 PD 4 PD 5 PD 6 PD 7

LCD 128X64

LCD12864
VSS VDD VO DI RW EN D0 D1 D2 D3 D4 D5 D6 D7 CS1 CS2 RST VEE LED+ LED-
GND VCC PB 1 PC 2 PD 0 PD 1 PD 2 PD 3 PD 4 PD 5 PD 6 PD 7 PC 4 PC 5 VCC VCC GND
VCC VR1 10K

LCD 16X2

LCD16x2
VSS VDD V0 RS R/W E D0 D1 D2 D3 D4 D5 D6 D7 A K
GND VCC PB 1 PC 2 PC 3 PD 4 PD 5 PD 6 PD 7 VCC GND
VCC VR2 10K GND

ATMEGA8

U1 ATmega8-16PC
P1 Header 14X2AH
RST RESET
PD 0RX PD0
PD 1TX PD1
PD 2 PD2
PD 3 PD3
PD 4 PD4
VCC VCC
GND GND
XT1 PB 6 PB6
XT2 PB 7 PB7
PD 5 PD5
PD 6 PD6
PD 7 PD7
PB 0 PB0

PB0 (ICP)
PB1 (OC1A)
PB2 (SS/OC1B)
PB3 (MOSI/OC2)
PB4 (MISO)
PB5 (SCK)
PB6 (XTAL1/TOSC1)
PB7 (XTAL2/TOSC2)
PD0 (RXD)
PD1 (TXD)
PD2 (INT0)
PD3 (INT1)
PD4 (XCK/T0)
PD5 (T1)
PD6 (AIN0)
PD7 (AIN1)
PC0 (ADC0)
PC1 (ADC1)
PC2 (ADC2)
PC3 (ADC3)
PC4 (ADC4/SDA)
PC5 (ADC5/SCL)
PC6 (RESET)
VCC AVCC AREF GND GND

P2 Header 14X2AH
16MHz Y2
C50 22P C51 22P
XT1 XT2
C4 104 C5 104
AREF VCC
SW1 RST R5 10k VCC
C7 104

MAX232

U2 MAX232ACPE
C1+ VDD
C1- VCC
C2+
C2-
T1IN T1OUT
T2IN T2OUT
R1OUT R1IN
R2OUT R2IN
GND VEE
104 C2 104 C3 104 C1 104 C6
TX RX
COM

RF / CC1101 / NRF24L01

RFP1 RF TRANSMITTER
DATA PB 2
VCC VCC
GND GND
C11011 C1101
GND GND
CSN PB 5
GOI0 PB 0
GOI2 PB 2
SO/GOI1 PB 3
SCK PB 4
SI PB 4
VCC 3.3V
CC1101 / NRF 24L01
3.3V VCC NC 3.3V
SI SCK PB 3
SO/GOI1 GOI2 PB 6
CSN GOI0 PB 0
GND GND
RFT1 RF RECEIVER
VCC VCC
DATA PB 3
DATA PB 3
GND GND

ADC / LM35

P19 ADC / LM35
LM35
PC 0
ADC
VCC VR3 10K ADC
C10 104
VCC P18 LM35
1 2 3
GND

IR / DS18B20

P3 IR/DS18B20
IR PC 1
DS18B20
R8 10k VCC
DS18B20
P4 DS18S20
VDD DQ GND
IR1 IR 1838
IR IR
R9 10K
GND

KEY

VCC
R6 10K R7 10K
SW2 PC 4
SW3 PC 5
GND

KHOI NGUON

JDC1 Jac DC
D2 1N5819 5V
1A
SW4A SW6 VCC
R10 1K L9 GND
VCC
C13 100uF
AMS1117
VIN GND VOUT VOUT 3.3V
C11 106 C12 104
5V D1 1N5819
H1 USB_MH
VCC D- D+ GND
P5 VCC
Header 3X2A
3.3V P30
Header 3X2A

KHOI NAP

ISP1 JP-ISP
PB3 MOSI VCC 5V
XTAL1 GND GND
RST RESET GND GND
PB5 SCK GND GND
PB4 MISO GND GND

Title
Size B
Number
Revision
Date: 12/17/2013
Sheet of
File: C:\Users\..\KIT_AVR_V2_17_12_13.SchDoc
Drawn By:

Comment	Description	Designator	Footprint	LibRef	Quantity
COM		*1	DSB 9-M	COM	1
AMS1117	AMS	AMS 1	SOT223-4N	AMS1117	1
104	Capacitor, Capacitor (Semiconductor SIM Model)	C1, C2, C3, C4, C5, C6, C7, C10, C12	0805_MH	CAP, Cap 104, Cap 104_SMD	9
106	Capacitor (Semiconductor SIM Model)	C11	0805_MH	Cap 104	1
100uF		C13	Tu Tatalium 7343 SMD	Cap100uF 50V	1
22P	Tu 0805	C50, C51	0805_MH	Tu 0805	2
C1101		C11011	C1101 2mm	C1101	1
C1101 200mil	C1101 200mil	CC1101 / NRF 24L01	HDR2X5	C1101 200mil	1
1N5819	Diode 1A	D1, D2	SMB	D1A	2
A-SEG7 0.36	Four 7 Seg Dipslay	DS1	LED7seg4S_MH	LED7Q	1
1A	Fuse	F1	CAU TRI	Fuse	1
USB_MH	USB conector	H1	USB-B-Mini	USB_MH	1
IR 1838	Receiver Infraed IC	IR1	IR	IR1	1
JP-ISP	ISP 10 PIN	ISP1	HDR2X5	ISP	1
Jac DC	Jac DC input	JDC1	DC-IN	DCIN	1
	LED 3mm	L1, L2, L3, L4, L5, L6, L7, L8	LED0805_MH	LED 3mm	8
LED3	LED 3mm	L9	LED_phi 3	LED 3mm	1
LCD12864		LCD1	HDR1X20	LCD12864	1
LCD16x2		LCD2	HDR1X16	LCD Text	1
Header 14X2AH	Header, 14-Pin, Dual row	P1, P2	HDR2X14	Header 14X2AH	2
IR/DS18B20	Header, 3-Pin	P3	HDR1X3	Header 3	1
DS18S20	High Precision 1-Wire® Digital Thermometer	P4	HDR1X3	DS18S20	1
Header 3X2A	Header, 3-Pin, Dual row	P5, P30	HDR2X3	Header 3X2A	2
LM35	Header, 3-Pin	P18	HDR1X3	Header 3	1
ADC / LM35	Header, 3-Pin	P19	HDR1X3	Header 3	1
1K	RES	R1, R4	0603X4_MH	RES Pack 4	2
200	RES	R2, R3	0603X4_MH	RES Pack 4	2
10k	Resistor 1/4W	R5, R6, R7, R8, R9	0805_MH	Res	5
1K	Resistor 1/4W	R10	0805_MH	Res	1
RF TRANSMITTER		RFP1	HDR1X3	RF 443MHZ PHAT	1
RF RECEIVER		RFT1	HDR1X4	RF 443MHZ THU	1
	Switch button 2 pin	SW1, SW2, SW3	SW-SMD	SW2	3
SW6	SW-DTDP - 6 Pin	SW4	SW6	SW6	1
SW POWER LED DON		SWD1	dip1	SW DIP-1	1
ATmega8-16PC	8-Bit AVR Microcontroller with 8K Bytes of In-System Programmable Flash Memory	U1	ZIP28	ATmega8-16PC	1
MAX232ACPE	+5V Powered, Multi-Channel RS-232 Driver/ Receiver	U2	SOP16	MAX232ACPE	1
10K	Var Resistor	VR1, VR2, VR3	Bien Tro Vuong_MH	Var Resistor	3
16MHz	Thach Anh Cam	Y2	Thach anh cam	Thach Anh Cam	1