LCD

LCD 2x16 (LED backlight)

LCD_2X16_SIL

LCD1

VSS VCC V0 RS R/W E DB0 DB1 DB2 DB3 DB4 DB5 DB6 DB7 LEDA LEDK

+5V
POT
RV1

GND +5V   RS R/W E   D4 D5 D6 D7 +5V

1k R2

GND

POWER

PWR P1   1 +5V   2 GND

SERIAL

UART P2   1 TXD   2 RXD

RESET SECTION

+5V

R1 10k

SW1 RESET

RST

10uF
C1

GND

CONTROLLER

IC1

RS	1	(T0/XCK)PB0	(ADC0)PA0	40
R/W	2	(T1)PB1	(ADC1)PA1	39
E	3	(AIN0/INT2)PB2	(ADC2)PA2	38
	4	(AIN1/OC0)PB3	(ADC3)PA3	37
D4	5	(SS)PB4	(ADC4)PA4	36
D5	6	(MOSI)PB5	(ADC5)PA5	35
D6	7	(MISO)PB6	(ADC6)PA6	34
D7	8	(SCK)PB7	(ADC7)PA7	33
TXD	14	(RXD)PD0	(SCL)PC0	22
RXD	15	(TXD)PD1	(SDA)PC1	23
	16	(INT0)PD2	(TCK)PC2	24
	17	(INT1)PD3	(TMS)PC3	25
	18	(OC1B)PD4	(TDO)PC4	26
	19	(OC1A)PD5	(TDI)PC5	27
	20	(ICP)PD6	(TOSC1)PC6	28
	21	(OC2)PD7	(TOSC2)PC7	29
RST	9	RESET	XTAL1	13
+5V	10	VCC	XTAL2	12
	30	AVCC	GND	11
	32	AREF	AGND	31

DIL40

EE_ATMEGA32

10uF
C4

GND

POT

GND   R3 10k   LDR U1   +5V

CRYSTAL

X1

C2   16Mhz   C3
22pF   GND   22pF

File: AVR Interfacing ADC_Interface.sch
Sheet: /
Title:
Size: A4   Date: 23 jun 2014   Rev:
KiCad E.D.A.   Id: 1/1