

uMECH Remote Control Module:

V2.00 5-24-04

base3.s01

2: Display drivers / interface

3: USB to Async Serial

TODO:

measure USB current during various phases.

UD1 ATMEGA8-TQFP				
OPTENC.B	1	PB3/INT1	32	OPTENC.A
SW.C0	2	PD4/XCK/T0	31	TX
GND	3	GND	30	RX
VCC.C	4	VCC	29	/RESET
GND	5	GND	28	SCL
VCC.C	6	GND	27	SDA
/RTS	7	X1/TS1/PB6	26	FET.COM1
/CTS	8	X2/TS2/PB7	25	FET.COM0
SW.C1	9	PD5/T1	24	/PWRENB
SW.C2	10	PD6/AIN0	23	/SLEEP
SW.C3	11	PD7/AIN1	22	USB.D1
SW.R0	12	PB0/ICP	21	GND
SW.R1	13	PB1/OC1A	20	VCC.C
SW.R2	14	PB2 / OC1 B / SS	19	USB.D2
MOSI	15	MB3/MOSI/OC2	18	VCC
MISO	16	PB4/MISO	17	SCK

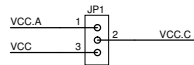
Also drive low to enable LED drivers

Also the RCLK for the TPIC6C

Also SW.R3

VAL

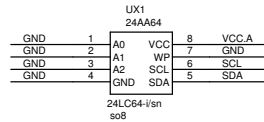
select source of CPU power.



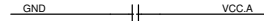
VCC.A is disabled during USB suspend.

VCC comes from USB cable

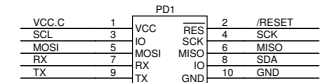
Module PROM



24LC64-1/sn
so8

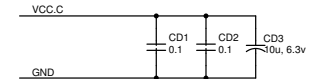
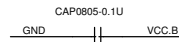
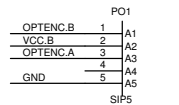


AVR PROGRAMMER HEADER

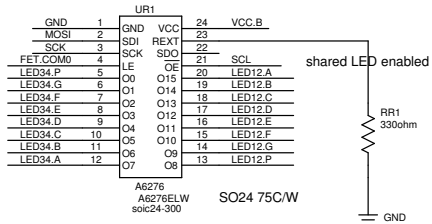


HEADER_AVR11

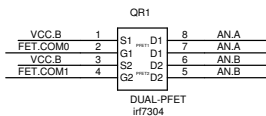
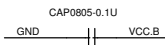
Optical Encoder Interface



Title		
Size	Number	Rev
B		
Date	Drawn by	
Filename	Sheet of	



Sets LED current.
 210ohm = 90mA
 330=60mA
 600=30mA
 900=20mA

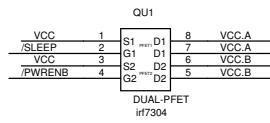
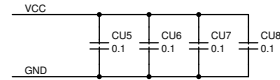
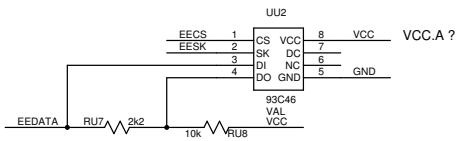
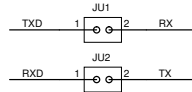
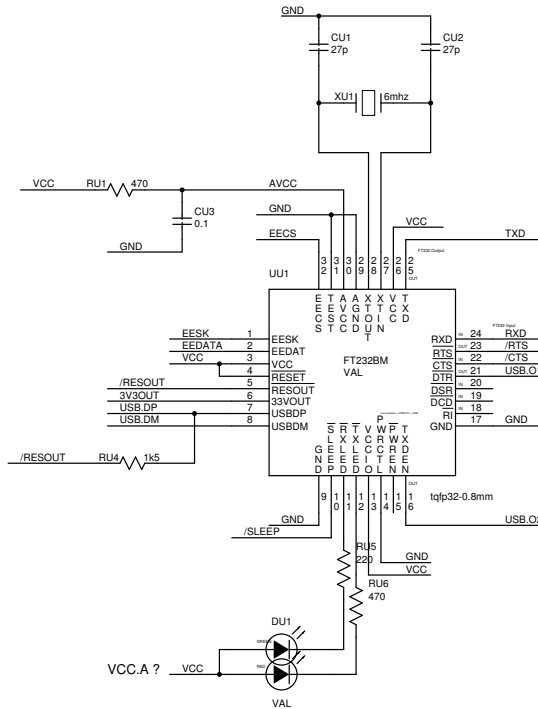
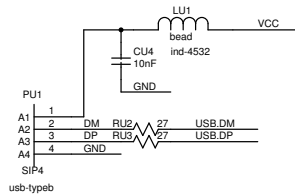


P1			
LED12.G	1	2	LED12.E
LED12.F	3	4	LED12.D
LED12.A	5	6	LED12.C
LED12.B	7	8	LED12.P
LED12.G	9	10	LED12.E
LED12.F	11	12	LED12.D
LED12.A	13	14	LED12.C
LED12.B	15	16	LED12.P
LED34.G	17	18	LED34.E
LED34.F	19	20	LED34.D
LED34.A	21	22	LED34.C
LED34.B	23	24	LED34.P
ANA	25	26	AN.B
LED34.A	27	28	LED34.B
LED34.C	29	30	LED34.D
LED34.E	31	32	GND
SW.R0	33	34	SW.C0
SW.R1	35	36	SW.C1
SW.R2	37	38	SW.C2
MISO	39	40	SW.C3

Shared SW.R3

IDC40
AMP 104338-8

Title		
Size	Number	Rev
B		
Date	Drawn by	
Filename	Sheet of	



Vcc.A enabled by USB (when not suspended)
Vcc.B enabled by CPU (enter full power mode)

Title		
Size	Number	Rev
B		
Date	Drawn by	
Filename	Sheet of	