Power Supply with on/off Switch

POWER-IT-1
POWER-IT-2
GND

SW1
IC2
7805TV
VI   VO
GND

+12V
+5V   +5V
+5V

GND   GND   GND

IC3P
VCC   GND

FRQ.SCALED-1
FRQ.SCALED-2

+5V

IC3
CKA   QA   12
CKB   QB   9
       QC   8
R0(1) QD   11
R0(2)

GND

74HC93N

Freq. Divider by (8)

ARDUINO-IN

Freq.Counter V.1.1 (9-2014)

Bandwidth up to: 64 Mhz with (74HC93)
Bandwidth up to: 42 Mhz with (74LS93)

Please review the counter datasheet to know the maximum clock input for the chip

GND

RESET

R1
10k
+5V

GND

MEGA8-P

1   PC6(/RESET)   PC0(ADC0)   23
                   PC1(ADC1)   24
22 GND   PC2(ADC2)   25
21 AREF   PC3(ADC3)   26
20 AVCC   PC4(ADC4/SDA) 27
                   PC5(ADC5/SCL) 28
9   PB6(XTAL1/TOSC1)

10 PB7(XTAL2/TOSC2) PD0(RXD)   2   D0
                      PD1(TXD)   3   D1
                      PD2(INT0) 4   D2
                      PD3(INT1) 5   D3
8   GND   PD4(XCK/T0) 6   D4
                      PD5(T1)   11
7   VCC   PD6(AIN0) 12   D6
                      PD7(AIN1) 13   D7

                      PB0(ICP)   14   D8
                      PB1(OC1A) 15   D9
                      PB2(SS/OC1B) 16 D10
                      PB3(MOSI/OC2) 17 D11
                      PB4(MISO) 18   D12
                      PB5(SCK)   19   D13

IC1

Use only atmega328

C1 22p
C2 22p
Q1 16M

GND
+5V

GND
+5V

ARDUINO-IN

Arduino-IN = Digital Pin 5
(Uno mapping)

Control LCD brightness

+5V

R2

POT

GND

GND
+5V

U$1

POT

D12
D11

D6
D4
D3
D2

VSS
VDD
VO
RS
R/W
E
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
A
K

HD44780 LCD

LCD-HD447804-HOLES16X2-4-HOLES

To Initate LCD in arduino with this connections:
LiquidCrystal lcd(12,11,6,4,3,2);