



Bill Of Materials

U1: ATMEGA8/88
C1, C2, C5: 0.1uF
C3 C4: 22pF
E1: 47uF/10V
D1, D2: 1N4007
D3: LED (green)
D4: LED (red)
R1, R10: 10K
R3, R4: 47 Ohms
R2: 1.5K
R7, R8: 330 Ohms
R5, R6, R9: 1K
Q1: 2N3904 (NPN)
X: 12.0MHz crystal
USB: USB (type-B) connector

NOTE: (1) J1 is for updating/upgrading FW of on-board MCU
 (2) J3 is for USBasp option (SPI speed selection)

Title			AVRISP-mkII/USBasp programmer		
Size	Number	Revision			
B		http://www.fun4diy.com			
Date:	20-Feb-2011	Sheet of			
File:	C:\USBasp_v2\USBasp.dtb	Drawn By:	www.fun4diy.com		