Burning Arduino Bootloader using ZeptoProgll and AVR Studio

Requires Arduino Duemilanove, AVR Studio 4.18 and ZeptoProg II with ISP cable

Insert the ZeptoProg II into your computer's USB slot.

Press the PROG button on the ZeptoProg II so that LED A is ON and LED B pulses.

Connect the ISP cable to the Duemilanove. Note the position of the red wire in relation to the pins on the ZeptoProg II and Duemilanove.



Start AVR Studio, and press the Connect button: select AVRISP mkll, USB Port.

Select ATMEGA328P. Read the signature: It should be 0x1E 0x95 0x0F.



In the Program tab, Input HEX file: ATmegaBOOT_168_atmega328.hex

Main	Program	Fuene	Look Bite	Advanced	HW Ca	ttinge	HW Info	Auto		
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FF	PROM									
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Fuses tab: EXTENDED: 0xFD HIGH: 0xDA LOW: 0xFF

Nain Program F	uses LockBits Advanced HW Settings HW Info Auto	
Fuse	Value	
BODLEVEL	Brown-out detection at VCC=2.7 V	I
RSTDISBL		
DWEN		
SPIEN	M	
WDTON		
EESAVE		
BOOTSZ	Boot Flash size=1024 words start address=\$3C00	[
BOOTRST	✓	
CKDIV8		
CKOUT		1
SUT CKSEL	Ext. Crystal Osc. 8.0- MHz: Start-up time PWRDWN/RESET: 16K CK/1	4
EXTENDED	0xFD	
	0xDA	
HIGH		
LOW	0xFF	
LOW	0xFF	
LOW	QxFF	
LOW	0xFF	
LOW	0xFF	
V Auto read	QxFF	
Variation of the second	OxFF	
Auto read Smart warnings Verify after progra	0xFF	
Auto read Smart warnings Verify after progra	0xFF	
Auto read Smart warnings Verify after program	CxFF	
Auto read Smart warnings Verify after programming	CxFF amming Program Verify Read ice parameters OK! mode. OK!	

Lockbits tab: LOCKBIT 0xCF

Main	Program F	uses	LockBits	Advanced	HW Settings	HW Info	Auto			_
Fus	e	Va	lue							
LB		No	memory lo	ck features	enabled					
BLE	30	No	lock on S	PM and LPM	I in Application	Section				
BLE	31	LP	M and SPI	M prohibited	in Boot Section					
_			_							
LOC	CKBIT	0x(F							
LOC	CKBIT	0x0	F							
LOC	CKBIT	0x0	CF)							
Loc	CKBIT	۵x۵	Lockbits n	ot read				Mairt		
↓ LOC	CKBIT to read art warnings	Ox(CF Lockbits no	ot read To	clear lockbits, u	se Erase D	evice or	n Main t	ab	
✓ Aut ✓ Sm ✓ Ver	CKBIT to read art warnings iffy after progr	Ox(CF) Lockbits no	ot read To	clear lockbits, u: Program	se Erase D Verify	evice or	n Main t Read	ab	
♥ Aut ♥ Sm ♥ Ver	CKBIT to read art warnings rify after progr	0x0	CF Lockbits n	ot read To	clear lockbits, u Program (se Erase D Verify	evice or	n Main t Read	ab	

Auto tab: Erase Device, Program FLASH, Verify FLASH, Program Fuses, Verify Fuses, Program Lock bits, Verify Lock bits are turned ON.

Main	Program	Fuses	LockBits	Advanced	HW Settings	HW Info	Auto	
•	Erase Devic	e					Start	
	Check signa	ature						
•	Program FL	ASH						
•	Verify FLAS	н						
	Read FLAS	н						
	Program EE	PROM						
	Verify EEPF	ROM						
	Read EEPF	ROM						
	Write osc. o	al. byte						
₽	Program fus	es						
☑	Verify fuses							
	Read fuses						Log to file	
☑	Program loc	k bits					(a) Ovenwrite	
₽	Verify lock b	oits					Overwrite	
	Read lock b	oits					Append	
							Browse	
E	inable fuse w	vamings						
etting	revisions H	IW: 0x00), FW Major	: <mark>0</mark> x01, FW N	1inor: 0x11 O	к		

Press START button!