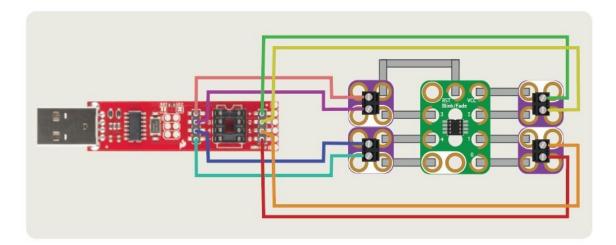


Reprogramming a Blink/Fade Board

Written By: Pete Prodoehl



INTRODUCTION

The Crazy Circuits Blink/Fade board uses an ATtiny85 chip and comes preprogrammed with various blink and fade routines assigned to each pin. You can easily reprogram the it using a compatible USB programmer.

TOOLS:

- SparkFun Tiny AVR Programmer (1)
- Computer (1)

PARTS:

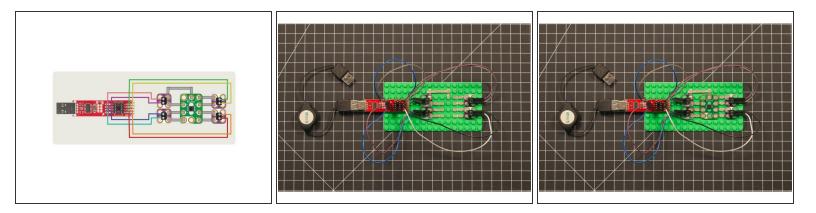
- Crazy Circuits Blink/Fade Board (1)
- Crazy Circuits Screw Terminal Chip (4)
- Jumper Wires (8)
- Maker Tape (1)

1/8''

• USB Extension Cable (1)

Optional

Step 1 — Build Your Circuit



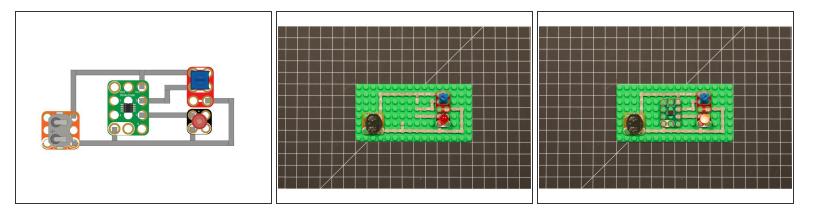
- Follow the PDF guide for building a circuit using Crazy Circuits components that will connect to the SparkFun Tiny AVR Programmer.
- With your programming jig you should be able to easily insert and remove the Blink/Fade Board for reprogramming.

Step 2 — Program the Board

	Ardulino File Edit Sketch Tools Help	Andulino File Edit Sketch Tools Help	d Andulano File Edit Skottch Tooks Help
		Auto Format NT .8.13	
			CODE C
	Manage Libraries O XI	Manage Libraries	None Units, ON
<pre>i</pre>	12* Serial Monitor OBM	1/* Serial Monitor ONM	1/* Serial Monitor ONM
<pre>Not work was also work wa</pre>			
	* Erom Dog Goderts -https://www. WFID1/WFINNA Firmware Updater	Invention Good Godorts - Interce/view, WIFIO1 / WFININA Flemware Updater	4 * Irown Dog Godorts -https://www. WiFiIO1 / WiFiNNA Riemware Updator
	S · This share and the Terry Powerd "ATting"		
<pre> f ·</pre>	7 * Simple Tones for Altiny duttar Processor: "Altiny25" Altiny25	7 * Simile Tones for #Ttime data:/ Processor "ATTime5" >>	7 * Single Tones for Aftiny Atta: Processor: "ATtiny85" >
<pre></pre>			
<pre>pi de status de statu</pre>			
Image: Section of the stands of the stand	II	10 // rat some entral 16 Mirty (external)	
<pre>ships a ships a s</pre>	13 const. (vt. Note, C = 239)	13 const. (w) Note, C = 239; 20 MHz (external)	13 const. (v) Neter C = 239; Const. C
<pre>space space s</pre>	15 (001) (01 N00E,3 = 23) 15 (001) (01 N00E,3 = 23)	15 0005 00 M002.0 = 425	15 0005 001 M0042.5 = 4351 15 0005 001 M042.5 = 4351
<pre>ship to the ship to the s</pre>	10 const int Note.25 - 2011	10 const lot Note.05 = 201;	10 const Unt Note_D5 = 201; ArduinolSP
<pre>state state s</pre>	15 const list Note, F = 179;	18 const lot Note, F = 179;	15 const lint Note, F = 179;
<pre>pip display displ</pre>	12 const int Note_F5 = 103;	19 const Unit Note. #5 = 109;	
Image:	21 const int Note.65 = 150:	21 const lot Note.55 = 150;	
<pre>pick to the start of the s</pre>	22 const int Note,A = 142;	22 const int Note,A = 342;	
Image: Set in the set is a se	23 CONTE VIT NODE, NO = 124; 24 CONTE VIT NODE, NO = 127;	2 cont UN Rec 127	
i i <td>25</td> <td>3</td> <td></td>	25	3	
<pre> A to regar any or to favore adds a to it is any or to the state is a to it it is a to it it is a to it it is a to it is a to it is a to it is a to it it is a to it it</pre>	27 Junt motel/erlay = 28:	27 ton notefulor - 28:	
Image: Section Sectio	28 (at betweenDelay = 15;	28 lost betweenfieldy = 15;	
Image:	10 // set variable name for the specker output pin	10 // set variable name for the speaker output pin	
i branche de la constanti de l	31 bet speakerPis = 1;	31 inf speakerPin = 31	31 Int speakerPin = 11
implementation implementation implementation implementation <	33 // the setup runs ance at the beginning of the sketch	33 // the setup runs ance at the beginning of the sketch	33 // the setup runs ance at the beginning of the sketch
i i i <td>34 wild setupD (</td> <td>Studie setup) (</td> <td>34 wid setso (</td>	34 wild setupD (Studie setup) (34 wid setso (
1 1 1 1 1 1 <td>20 pinkodc(speaker#in, 000001)</td> <td>pUrblob(SpeakerFin, 00TPUT);</td> <td>30 pl/Mode(SpeakerFin, 00TNT);</td>	20 pinkodc(speaker#in, 000001)	pUrblob(SpeakerFin, 00TPUT);	30 pl/Mode(SpeakerFin, 00TNT);
1 1 1 1	37 19.	37	371
circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle into C circle	22	2	22
iii iiii iiiii iiiiii iiiiiii iiiiiiiii iiiiiiiiii iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	40 41/// the loop runs forever after the setup is complete	41// the loop runs forever after the setup is complete	41// the Loop runs forever ofter the setup is complete
in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); in toylang/bits, f. y. mold(s); in Toylang/bits, f. y. mold(s); <td></td> <td>4 Open him 5</td> <td>A Creat later 14</td>		4 Open him 5	A Creat later 14
• شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستوانین • شروه مستو	41 Tim/Jare/Nete. C. 4. noteDelay);	41 Tury/com(bete.C. 4., netellalay); 61 (c)(betweenbalay); 62 (c)(betweenbalay);	Tinyfone(bits.C. 4, netelelley); dileyforteendeluy);
	Ticyfore(liste, 51, 4, notebeloy); di delog(betaesefolog);	Troyfore(bete, CS, 4, notebloy); di ohloy(beteentBrig);	Thypore(bate, CS, 4, notebilog); di dellog(batemenhilog);
	Annu contraction in the second s		Annu submittee
E Anya havadara Ma			
R May a Mary			
	12 Altrey en jabolicausterei - 14300	12 Altime on / Micclausheariel-14330	12 Aftim on (Mexicusternial-1433) -

- Use the Arduino software to re-program your Blink/Fade Board.
- Copy the code from <u>BFDimmer on GitHub</u>.
- Make sure you select the correct processor, clock, and programmer.
- SparkFun has a very helpful <u>Tiny AVR Programmer Hookup Guide</u>.

Step 3 — Test it Out



- Once you re-program your Blink/Fade Board you can test it out in a circuit.
- If you want to continue to experiment you can easily remove the board and place it back in the programmer to make more changes. Just upload new code to the board to try again.
- If you want to revert to the original code that came preprogrammed on the board, you can upload our version of the LilyTiny code.