

ATMEL 89 Series Flash Microcontroller Programmer Ver 2.0

Revised: Saturday, March 22, 2003

Revision: 1

Bill Of Materials March 22,2003 20:07:58

Item	Quantity	Reference	Part
1	7	C1,C2,C3,C4,C5,C6,C11	100nF
2	2	C7,C8	33pF
3	1	C9	2,2nF
4	3	C10,C13,C14	10uF/25V
5	1	C12	1000uF/25V
6	1	D1	1N4148
7	1	D2	RED LED (PROGRAM)
8	4	D3,D4,D5,D6	1N4007
9	1	D7	GREEN LED (POWER ON)
10	1	J1	ZIF40 (or DIP40)
11	1	J2	ZIF20 (or DIP20)
12	1	J3	Power Jack (15V DC or AC)
13	1	P1	DB25Male
14	2	Q1,Q2	BC327
15	2	Q3,Q4	BC547
16	2	R1,R6	1K
17	8	R2,R3,R4,R5,R9,R11,R15,R16	4K7
18	2	R7,R14	8x4K7 SIL
19	2	R8,R17	2K2
20	1	R10	220
21	1	R12	5K
22	1	R13	50K
23	1	U1	74HC299
24	1	U2	74HC573
25	2	U3,U5	74HC595
26	1	U4	LM317
27	1	U6	LM7805
28	1	Y1	4MHz

(*) Or use only one ZIF40 socket and switch it between the two positions.

The original and true author of this programmer is **M Asim Khan**. asimkhan@sat.net.pk

Original plans can be found at:

http://chaokhun.kmitl.ac.th/~kswichit/Pgm89v2/Pgm89_2v0.html

The required software for this programmer is located at:

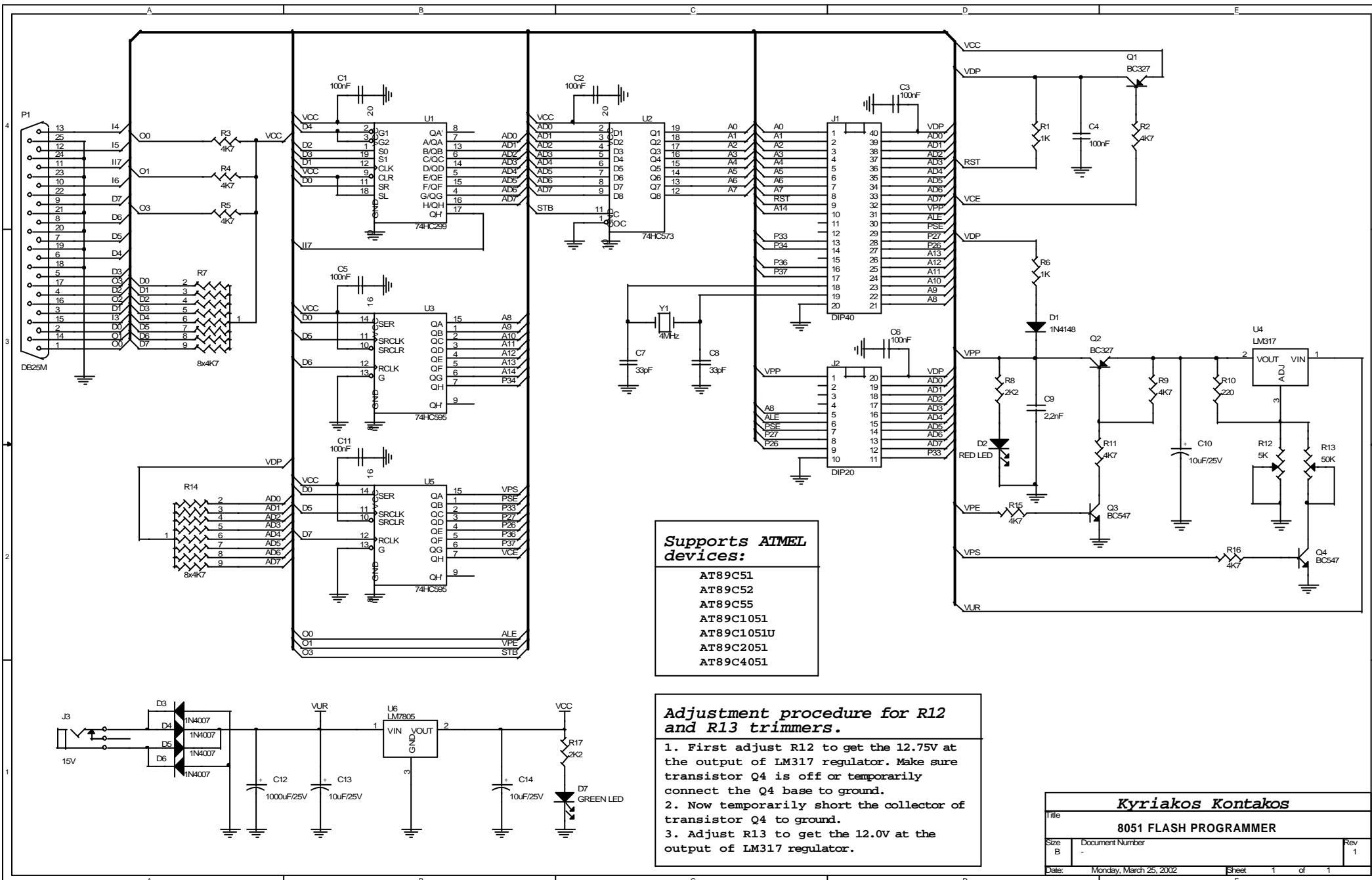
<http://chaokhun.kmitl.ac.th/~kswichit/Pgm89v2/Pgm89w.zip>

With an optional adapter at J1 and a different software it is possible to program some parallel EPROMs like the 28C16, 28C17, 28C64, 28C256, 29C256.

The software for this adapter is located here:

http://chaokhun.kmitl.ac.th/~kswichit/E2RomPgm_web/PgmE2w.zip

More info for the EPROM adapter in another document.

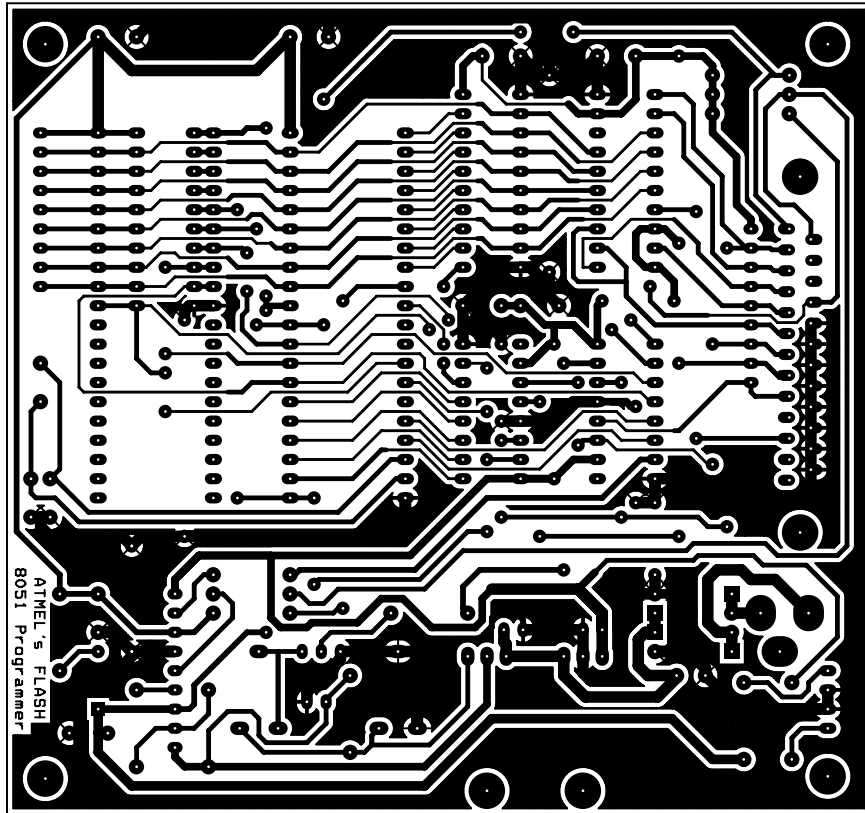


Supports ATMEL devices:

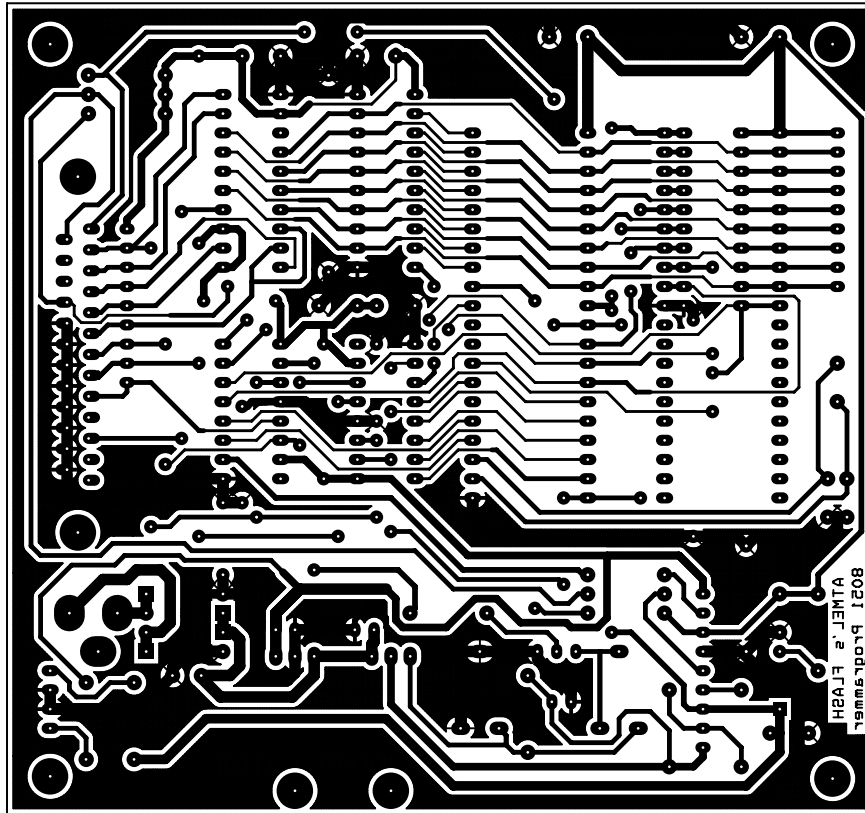
- AT89C51
- AT89C52
- AT89C55
- AT89C1051
- AT89C1051U
- AT89C2051
- AT89C4051

Adjustment procedure for R12 and R13 trimmers.

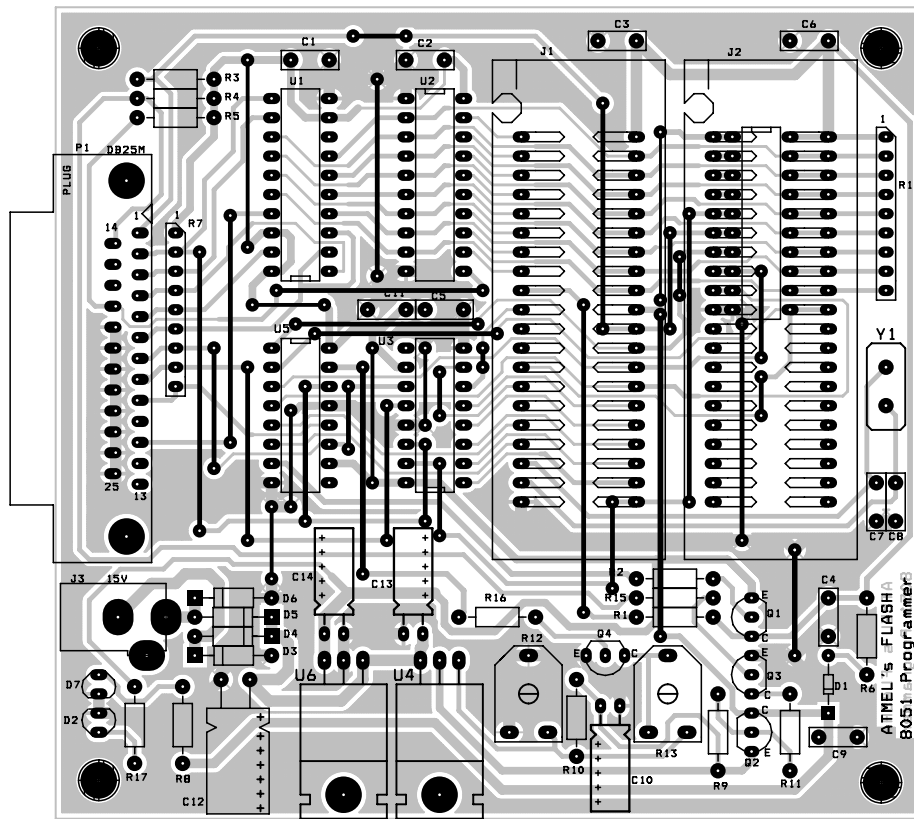
1. First adjust R12 to get the 12.75V at the output of LM317 regulator. Make sure transistor Q4 is off or temporarily connect the Q4 base to ground.
2. Now temporarily short the collector of transistor Q4 to ground.
3. Adjust R13 to get the 12.0V at the output of LM317 regulator.



PCB



PCB reflected



PCB and Silcscreen