ATMEL 89 Series Flash Microcontroller Programmer Ver 2.0

Revised: Saturday, March 22, 2003
Revision: 1

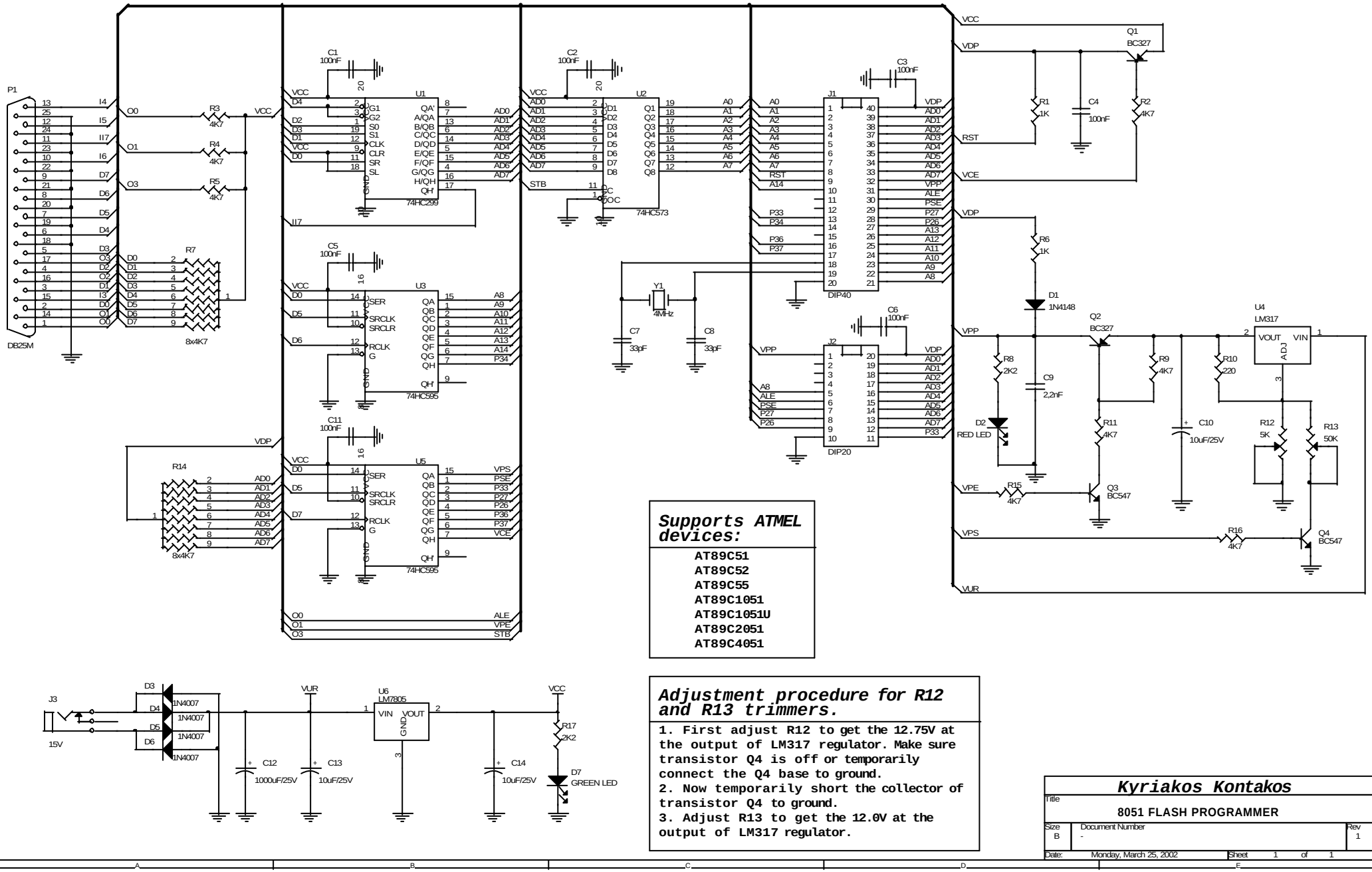
Bill Of Materials March 22,2003 20:07:58

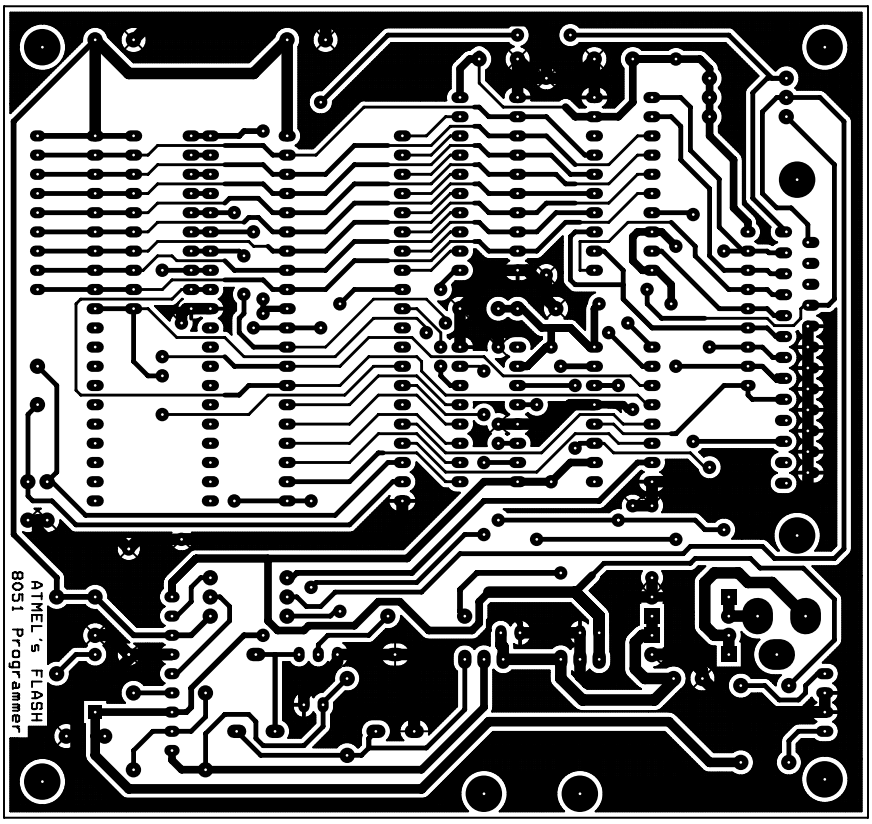
Item	Quantity	Reference	Part
1	7	C1,C2,C3,C4,C5,C6,C11	100nF
2	2	C7,C8	33pF
3	1	C9	2,2nF
4	3	C10,C13,C14	10uF/25V
5	1	C12	1000uF/25V
6	1	D1	1N4148
7	1	D2	RED LED (PROGRAM)
8	4	D3,D4,D5,D6	1N4007
9	1	D7	GREEN LED (POWER ON)
10	1	J1	ZIF40 (or DIP40)
11	1	J2	ZIF20 (or DIP20)
12	1	J3	Power Jack (15V DC or 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.

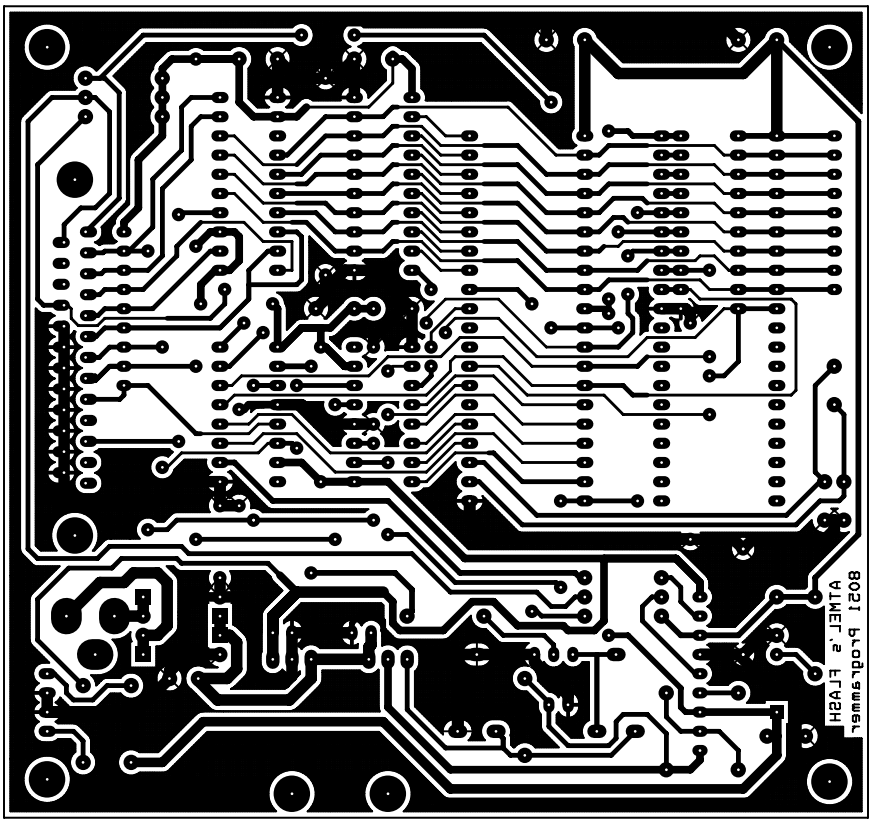
The original and true author of this programmer is **M Asim Khan**. asimkhan@sat.net.pk
Original plans can be found at:
http://chaokhun.kmitl.ac.th/~kswichit/Pgm89v2/Pgm89_2v0.html
The required software for this programmer is located at:
http://chaokhun.kmitl.ac.th/~kswichit/Pgm89v2/Pgm89w.zip

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.

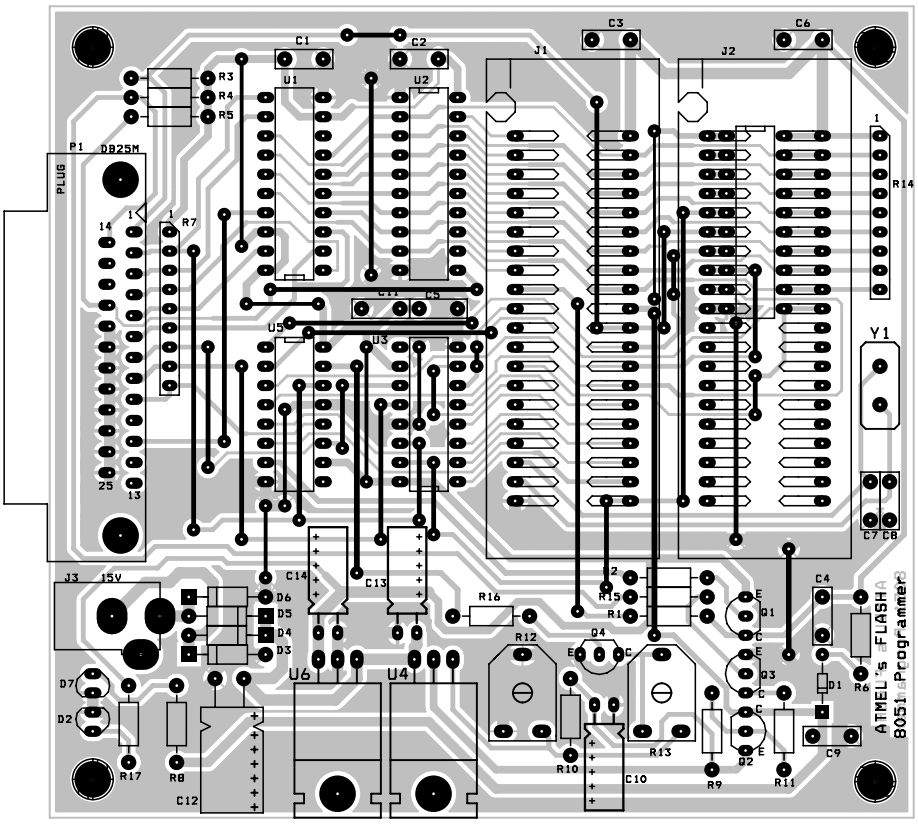

P1
DB25M
8x4K7
R3
R4
R5
R7
R14
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
C12
C13
C14
U1
U2
U3
U4
U5
U6
74HC299
74HC573
74HC595
LM317
LM7805
J1
J2
J3
DIP40
DIP20
Y1
4MHz
Q1
Q2
Q3
Q4
BC327
BC547
D1
D2
D3
D4
D5
D6
D7
1N4148
RED LED
GREEN LED
1N4007
R1
R2
R6
R8
R9
R10
R11
R12
R13
R15
R16
R17
1K
2K2
4K7
220
5K
50K
100nF
33pF
2,2nF
10uF/25V
1000uF/25V
VCC
VDP
VPP
VPE
VPS
VUR
RST
VCE
STB
ALE
15V
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.
Kyriakos Kontakos
Title
8051 FLASH PROGRAMMER
Size B
Document Number -
Rev 1
Date: Monday, March 25, 2002
Sheet 1 of 1



PCB



PCB reflected



PCB and Silcscreen