# Photo booth

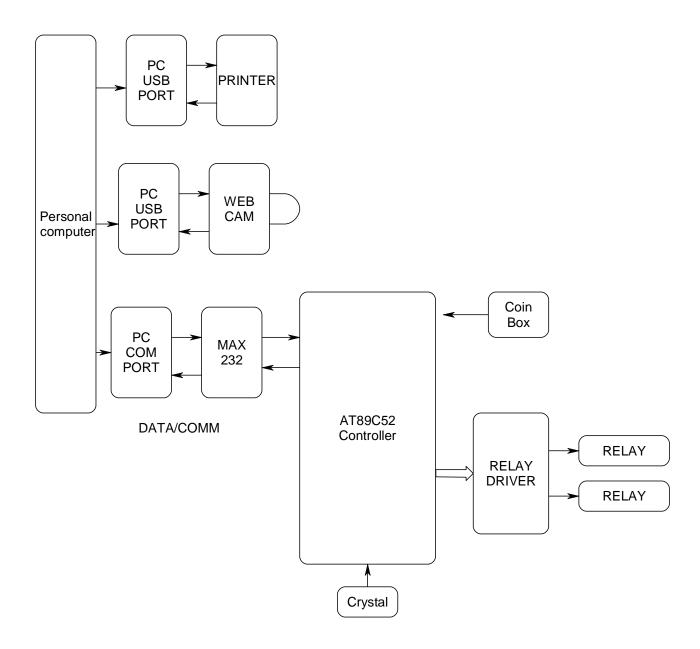
#### **Abstract**

Photo booths have become quite popular these days. Here's the thing; a photo booth is not a person standing there with a camera taking pictures of people. It's a system where a person has to stand before a web cam which will capture your photos and then the camera takes three or four pictures of you, automatically. It's like a version of a "booth", should put the photos into a strip, and print them. It runs by itself once it's set up, so the user is free to take his pictures whenever he requires. This version of photo booth can easily be set up in only a few minutes. Here's what you'll need to make your own. In this project printer is attached with some photo paper to your computer. Adding a stool or a bench to the booth is also a good idea. That will put more guests on the same level, creating a more-centered shot.

Here's what you need to set the whole system of the photo booth:

- Computer
- Webcam
- Printer (preferably for photo printing)
- Microcontroller
- Money Collection Unit

The person sits inside the booth, pushes a button or two, the Web camera takes the photo, the computer processes the photo, and the photo printer prints out a copy for the user. But before you get your pictures you have to pay some coins in money collection unit which is controlled by microcontroller. As soon as it senses coins, printer starts taking print outs of your pictures. In the mean time, the computer saves the photos on its hard drive. The computer then has the option to send photos via web server to an online website or another computer.



# **Components List:**

ITEM			REFERENCE DESIGNATORS
1	AT89C52		U4
2	10UF/16V	5	C4,C5,C6,C7,C8
	33PF 2	C9,	,C10
	0.1UF DISK 1	C1	1 [ 104 ]
3	1000UF/25V	1	C1
4	100UF/18V	2	C2,C3
5	R_CONN_2 PIN	6	J2,J4,J6,J8,J9,J10A
6	R_CONN_3 PIN	2	J11,J13
7	RELAY-12V 4	J1,	J3,J5,J7
8	R_CONN_9 PIN	1	J12
9	R_CONN_16 PIN	1	J10
10	9 PIN F_CONN	1	K1 [ D- TYPE ]
11	D1N4007	2	D5,D6
12	ICL232/MXM232	1	U2
13	MICRO_SW	1	RST_SW [2 PIN]
14	LED_R	5	D1,D2,D3,D4,D7
15	LED_Y	1	D8
16	LED_G	1	D9
17	LM7805C/TO220	1	U1
18	11.0593MHz		1 X1

# **REFERENCES**

# Books:

- 1) Kenneth Ayala, "The 8051 Microcontroller: Architecture, programming & application", PRI publication.
- 2) "Intel's MCS 51 Data Book", Intel Inc.
- 3) V.J. Vibhute, N.G. Palan, P.B. Borle, "8 bit microprocessor & Microcontroller", Techova publication.
- 4) Joan B. Peatman, "Design with Microcontroller", Mc Graw Hill.
- 5) Howard Boyet & Ron Katz, "The 8051 programming, Interfacing & Application", Microprocessor training Inc.
- 6) A. K. Sawhney, "Electrical Measurement & Measuring Instruments", measurement of power and wattmeter's, D. Rai & Co.
- 7) B. L. Theraja, "Electrical Technology", S. Chand & Co.

### Websites:

- i) www.atmel.com Atmel microcontrollers, IC 89C51.
- ii) www.fairchildsemiconductor.com Memories, EEPROM, NM 9346.www.analogdevices.com Benefits of electronic energy metering