

ABOUT THE PRODUCT

If you are learning microcontrollers or want to develop embedded solution based on standard 8051core, this board will help you quick start with the application by giving you access to everything required to run the microcontroller. Board supports RS232 Communication for P89V51RD2 series microcontroller through FLASH MAGIC.

- Ø IIC ADC(Analog to Digital Converter)/DAC(Digital to analog converter) also included in the board.
- Ø IIC RTC(Real Time Clock) (DS1307)with EEPROM(24CXX).
- Ø IIC (24CXX) EEPROM.
- Ø Two extra SWITCHES and two LEDS.

Other microcontrollers like Atmel's AT89C51, AT89C52 & 40 pin 8051 variants are supported on but capability they will be required to be programmed with an external programmer and inserted on board to run the program inside it.

LCD DISPLAY

DS1307

24C04

P89V51RD2

MAX232



FEATURES

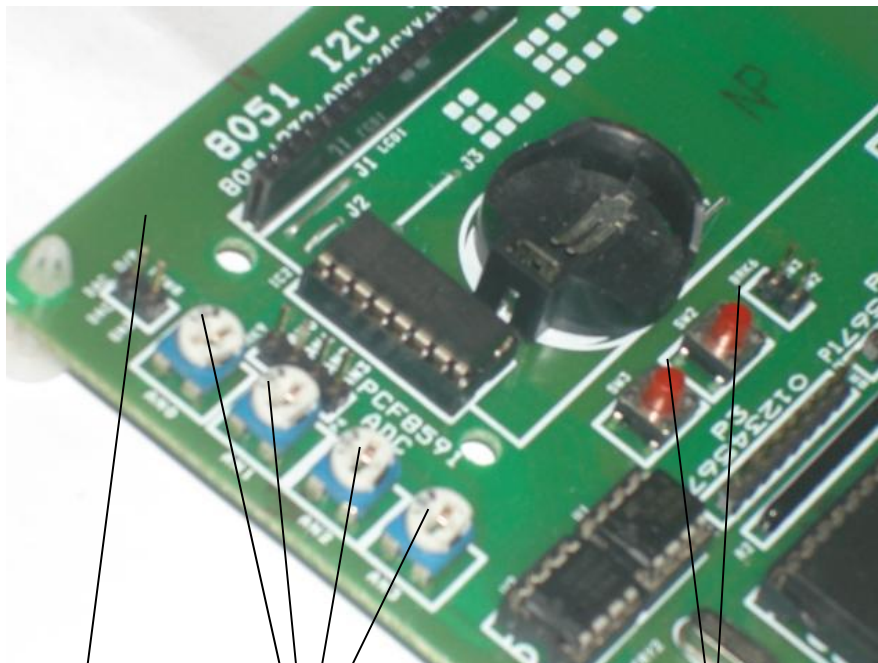
- **P89VRD2 with RS232 capability included with the board**
- **RS232 Serial Programming supported for 89CXX/89LPCXX/89VXX series microcontrollers.**
- **IIC 4 ADC/ 1 DAC result Pins also included in the board.**
- **IIC RTC(DS1307)with EEPROM(24CXX) for time.**
- **IIC (24CXX) EEPROM store in ROM.**
- **Two extra SWITCHES and two LEDS.**
- **Supports all 40 pin standard 8051 based microcontrollers**
- **Crystal, Reset Switch, Power LED ,16X2 LCD display port included on board**
- **All microcontroller I/O ports available though standard 0.1" header**
- **On board Regulated Power Supply 5v,12v supply.**
- **Easy To flash 89V51RD2 Through Flash Magic Software.**
- **Features of 89V51RD2 - 8051 based CMOS controller with PCA, Dual DPTR, WDT, 32 I/O lines, 3 Timers/Counters, 7 Interrupts/4 Priority Levels, 64K Bytes ISP FLASH, 256 Bytes on-chip RAM, 768 Bytes XRAM.**

PCF8591 Chip Features

- **Single power supply**
- **Operating supply voltage 2.5 V to 6 V**
- **Low standby current**
- **Serial input/output via I2C-bus**
- **Address by 3 hardware address pins**

IIC ADC+8051 PROJECT BOARD

- Sampling rate given by I2C-bus speed
- 4 analog inputs programmable as single-ended or differential inputs
- Auto-incremented channel selection
- Analog voltage range from VSS to VDD
- On-chip track and hold circuit
- 8-bit successive approximation A/D conversion
- Multiplying DAC with one analog output.



1 DAC O/P

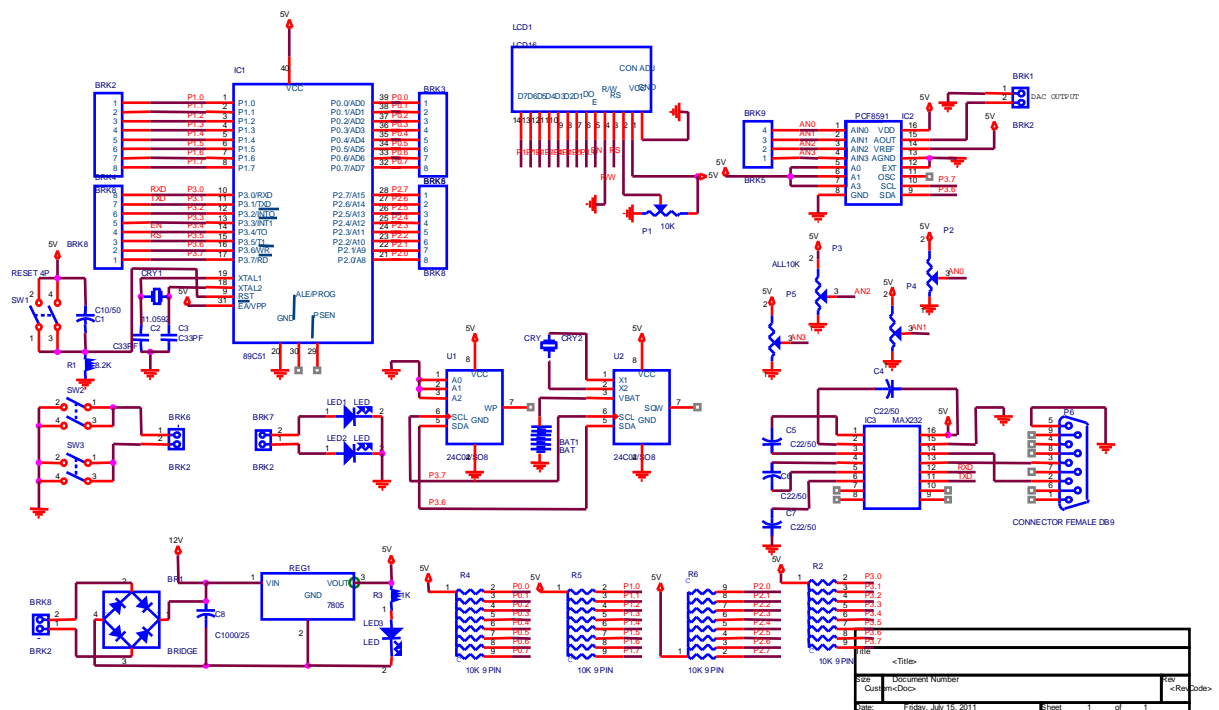
4 ADC O/P

2 SWITCHES

IIC ADC+8051 PROJECT BOARD

SCHEMATIC OF BOARD

You need to supply 12V DC supply to board.

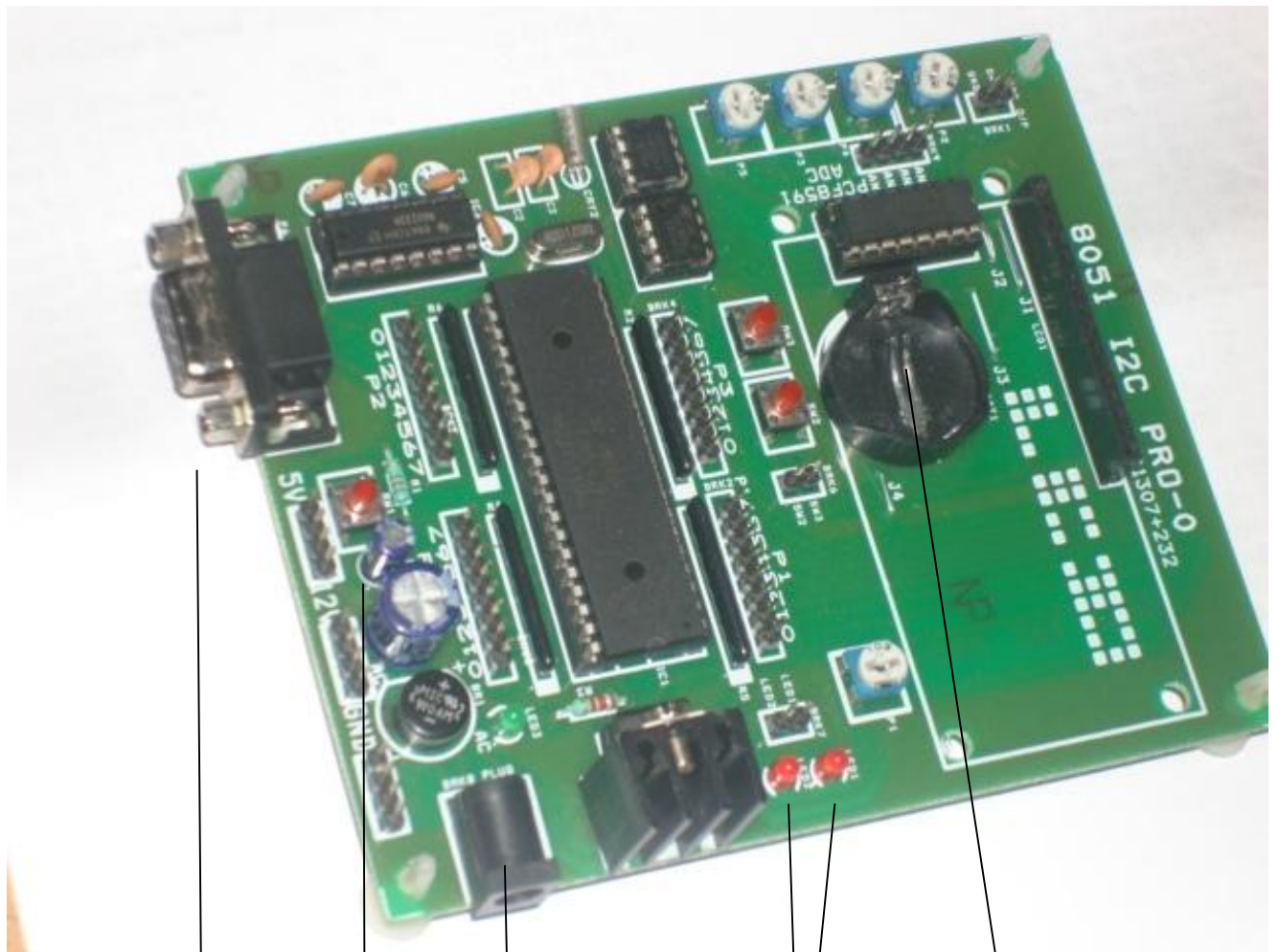


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IIC ADC+8051 PROJECT BOARD



UART **RESET** **12V POWER** **2-OUTPUT** **PCF8591**
SWITCH **SUPPLY** **LEDS**