operation	the microcontroller so need for manual operation.
Not possible to get the accurate ml of blood from the blood donator	It is possible to get the accurate ml of blood from the blood
Not efficient and flexible to use in all the places.	Efficient and proper system for continuous Monitoring
Not portable and not convenient	Portable and convenient.

A. APPLICATION:

In hospital this system can be used to collect the blood from the blood donator and get the data of blood donator and as well as to get the data of the boll collector is possible using this system. In blood collecting camps these systems can be used to monitor the blood collection and to ensure the fast process.

B. RS232 Logic:

1) VOLTAGE RANGE IS -25V TO +25V
2) REPRESENTATION OF '1'- BETWEEN -25V AND -3V
3) REPRESENTATION OF '0'- BETWEEN +3V AND +25V

C. RFID Tag and Reader:

1) Type- Passive (No Power Source is available) and Active (With power source, Example- Battery)
2) Power Source for Passive tag- Inductive or Radioactive Coupling is employed
3) Frequency Range- Frequencies of 125/134 KHz (LF) or 13.56 MHz (HF) is used.
4) We use Passive RFID Tag with a frequency of 125 KHz

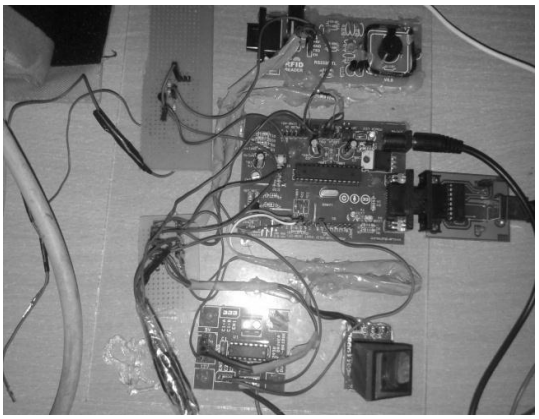
VII. FUTURE ENHANCEMENT

The system can be expanded in future by increasing the number of sensors to measure the other parameters of the body to make this an more suitable and appropriate one for blood collecting and for other health care purposes.

VIII. EXPERIMENTAL RESULTS

Using this apparatus we can collect the blood automatically by reducing the man power. Here this apparatus is operated by Arduino Software.

A. When the apparatus is connected to PC using Max232 cable and power is given

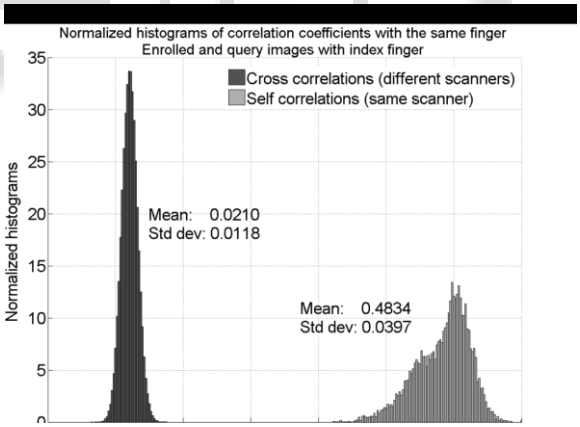


B. When the apparatus is connected if the donor is valid then it will ask for measuring Blood Pressure

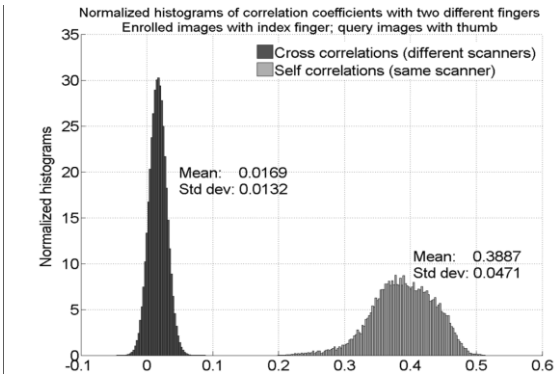
C. If BP is normal then we are going to collect the blood shown below

By using weight sensor we going to collect accurate ml of blood and finally fingerprint authentication for doctor is to collect blood

D. Figure shown is the image representation of fingerprint



E. Comparing with enrolled image if the previous image is matched with enrolled image then it will give message to collect blood.



F. Finally collecting the blood with given safety precautions

IX. CONCLUSION

The automatic collect-blood apparatus uses the advanced technology of MCU, fingerprint identifying and barcode. So the degree of the automation is enhanced greatly. It controls the operator of collect-blood strictly to prevent the errors caused by man. It strengthens the scientific management of the message of the blood donator and the collected blood to prove the safety of the blood collecting. This apparatus makes automatic collect-blood and high reliability come true and lay a foundation for automatic management of blood. A remote-controlled system for collecting blood and messages management can be made up based on these apparatus.

A. Advantages of Proposed System:

1) Can get the accurate ml of blood from the blood donator.
2) Efficient and suitable for continuous monitoring.
3) Low cost and less time consuming
4) Secured and portable.

REFERENCES

[1] Pan Zuojin, Shi Guojun Principle of C8051FXXX High Speed SOC and its Application, 2002.
[2] Atmel Corporation. AT29C256, 2002.
[3] Atmel Corporation. AT29 Flash memories, 1998.
[4] Veridicom Inc. Solid-state Fingerprint Sensor, 1998.
[5] Douglas E. Comer. Internetworking With TCP/IP Vol I: Principles, Protocols, and Architecture, Third Edition [M]. Qinghua University Press, 1998.
[6] M. Tim Jones. TCP/IP Application Layer Protocols for Embedded Systems [M]. Electronic Industry Press, 2003.
[7] W3100A technical datasheet v1.1.

