AT51EE

PRODUCTS

NEA

AT51EE/PE

AT31_ADDON

8031 Core

LCD Controller

16550 Core

SDRAMC

SERVICES

- IP design, development,
- Softcore and Firmcore development
- ASIC Design services
- Architecture verification
- System level simulation and testing
- FPGA design and technology conversion
- Firmware development in communication , consumer and DSP areas
- Driver development in multiple RTOS
- Assembly level language for Intel and Motorola

INTRODUCTION

AT51 Elite Edition (AT51EE) MDE is a cost -effective, 8051 microcontroller based Development Environment for R&D setups, Industrial Control System Manufactures, Engineering Colleges & other educational institutes. It provides an ideal base for developing and testing software in 8051 ALP and C language.

The **AT51 Elite Edition** supports RS232C interface to a PC. **AT51 Software Development Environment (AT51SDE)** provides a very powerful GUI based software development environment for developing software using 'C' or 8051 Assembly Level Language (ALP). AT51SDE enables the user to easily download, execute and debug an application program.

All processor I/O lines, additional decoder lines etc., are bought out of AT51EE to facilitate easy enhancement for complex system development. AT51EE comes with a 16KB onboard Memory that can be expanded to 48KB.

External interfacing is simple and easy since all the 8051 pins have been extended outside. Six 7-segment LED displays and 20 soft keys are provided that can be configured by the user for any application.

All processor interrupts, internal counters and timers are available to the user for their design application. This unique feature will allow the user to extract the maximum power of 8051 Microcontroller.

FEATURES

- GUI based SDE
- ALP or C programming
- Powerful Debugging Features
- Full remote execution
- Easy circuit expansion

- All Interrupts Extended
- Onboard general purpose display and key board
- Expandable Memory with battery backup

APPLICATIONS

- College Laboratory Trainer
- Study of 8051 Microcontroller
- Development kit for student project
- Prototype development for industrial projects
- Electronic Hobbyist

DELIVERABLES

- AT51EE MDE
- AT51SDE - Monitor software, Application software, Assembler, Cross Compiler, Object/Binary Converter software and Simulator
- User Manual
- Technical Manual
- RS 232 interface cable

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ACCEL Software & Technologies Limited
#37, Nelson Manickem Road, Chennai 600 029
Phone : 91-44-374 1710, Fax: 91-44-374 2665

e-mail : products@techaccel.com
www.accelstl.com

AT51EE

PRODUCTS

NEA

AT51EE/PE

AT31_ADDON

8031 Core

LCD Controller

16550 Core

SDRAMC

SERVICES

- IP design, development,
- Softcore and Firmcore development
- ASIC Design services
- Architecture verification
- System level simulation and testing
- FPGA design and technology conversion
- Firmware development in communication , consumer and DSP areas
- Driver development in multiple RTOS
- Assembly level language for Intel and Motorola

HARDWARE SPECIFICATIONS

- ATMEL 89C51 Micro-controller
- 4K FLASH ROM
- 16K RAM expandable up to 48KB
- 11.0592MHz clock which gives standard baud rates
- Six 7 segment LED display
- 20 soft keys
- All address, data, control and decoding lines extended outside for user expansion through connectors
- 24 I/O lines via 8255
- 9 pin RS232C Interface
- All on-chip interrupts available for user applications
    - Timer interrupts 0 and 1
    - External interrupts 0 and 1
    - Serial interrupts – RxD and TxD
- Provision for Battery backup for RAM
- Keys and display can be used for user interface
- Foolproof power socket
- General purpose power supply +5V 15 A, +12, 3 A, and -12V, - 5V 500 mA

SOFTWARE SPECIFICATIONS

- GUI based front end application AT51SDE
- Code memory similar to Internal 8051 memory.
- Reset address at 0x4000h
- Supported Software commands
    - UPLOAD – to load the program from PC to AT51EE
    - EXECUTE - To run the program in AT51EE
    - DEBUG – view 128 bytes of code simultaneously
    - VIEW REGISTERS – All the 127 internal registers and SFRs can be viewed simultaneously
    - FILL / CLEAR
    - BREAKPOINT Execution can be halted at any instruction and the contents of the registers can be viewed
    - SINGLE STEP – Execution can be done instruction by instruction and the contents of the registers can be viewed.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ACCEL Software & Technologies Limited
#37, Nelson Manickem Road, Chennai 600 029
Phone : 91-44-374 1710, Fax: 91-44-374 2665

e-mail : products@techaccel.com
www.accelstl.com