Topics Covered in SKU- Embedded System:

Unit I - Introduction and Review of Embedded Hardware:

Terminology Gates, Timing Diagram, Memory, microprocessors Buses, Direct Memory Access, interrupts, Built, ins on the Microprocessor, Conventions Used on Schematic, Interrupts Microprocessor Architecture, Interrupt Basics, Shared Data Problem, Interrupt latency.

Unit II - Pic Micro controller and Interfacing:

Introduction, CPU architecture, registers, instruction sets addressing modes Loop timing, M, Analog to digital converter, UART, Baud Rate, Data Handling, Initialisation, Special Features, serial Programming, Parallel Slave Port.

Unit III - Embedded Microcomputer Systems:

Motorola MC68H11 Family Architecture Registers, Addressing modes Programs. Interfacing methods parallel I/O interface, Parallel Port interfaces, Memory Interfacing, High Speed I/o Interfacing, Interrupts, interrupt service routing, features of interrupts, Interrupt vector and Priority, timing generation and measurements, Input capture, Output compare, Frequency Measurement, Serial I/O devices RS. 232, RS. 485. Analog Interfacing Applications.

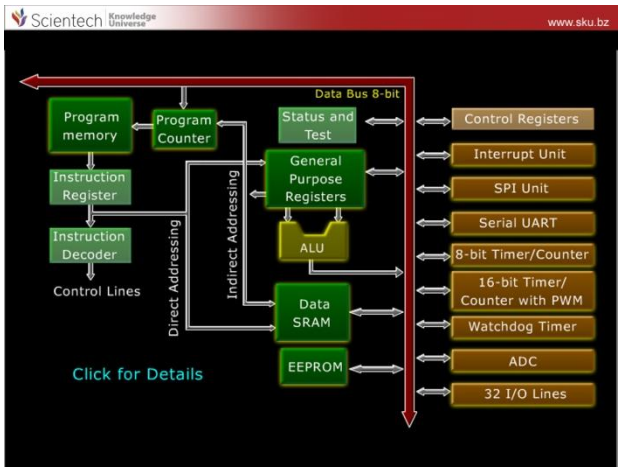
Unit IV - Software Development and Tools

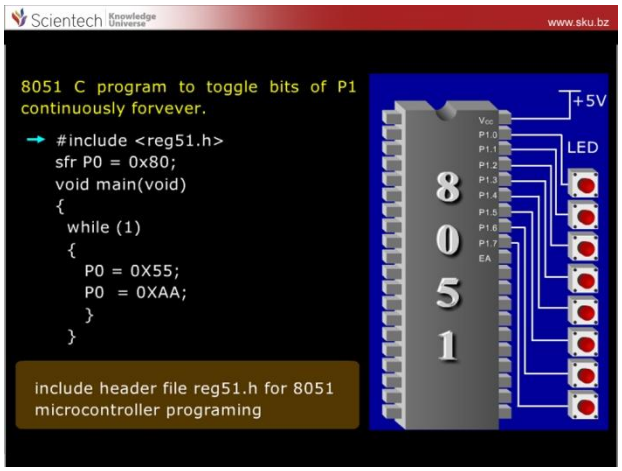
Embedded system evolution trends. Round, Robin, robin with Interrupts, function, One, Scheduling Architecture, Algorithms. Introduction to assembler, compiler, cross compilers and Integrated Development Environment (IDE) Object Oriented Interfacing, Recursion, Debugging strategies, Simulators.

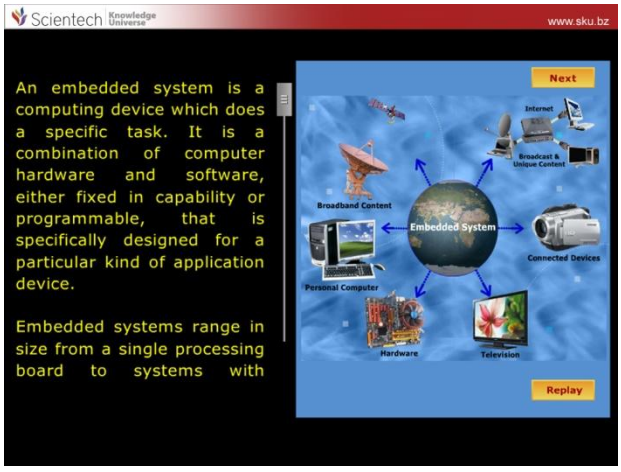
Unit V - Real Time Operating Systems

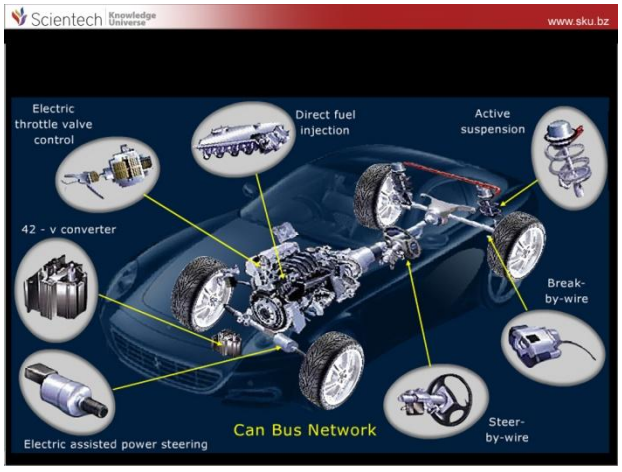
Task and Task States, tasks and data, semaphores and shared Data Operating system Services, Message queues, Timer Function, Events, Memory Management, Interrupt Routines in an RTOS environment, Basic design using RTOS.

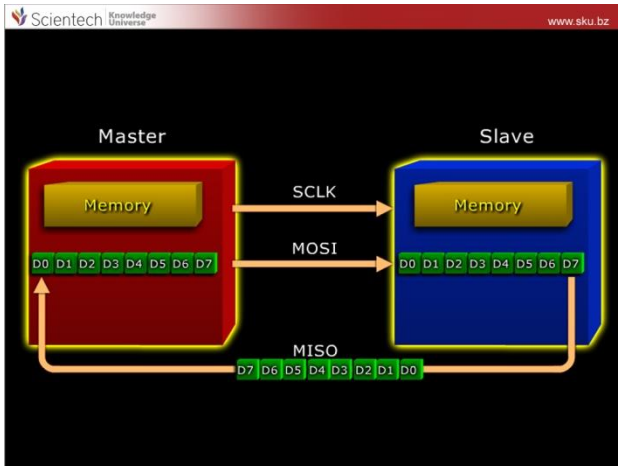
Print Shots of SKU- Embedded System:

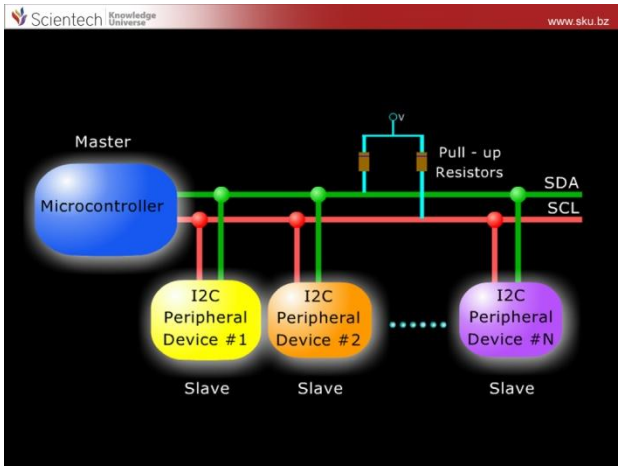


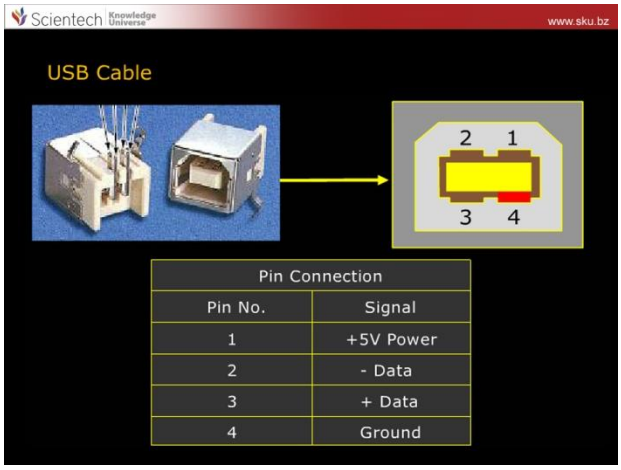












Pin Connection	
Pin No.	Signal
1	+5V Power
2	- Data
3	+ Data
4	Ground