Embedded Systems & Design

Course Duration 8-10 weeks (Sundays: 10:00 AM to 1:00 PM)

Course Contents:

1. Introduction to Embedded systems
2. System on chip fundamentals
3. 8051 Architecture
4. ARM Architecture
5. Cypress Programmable system on chip (PSoC) overview
   • PSoC architecture
   • Peripherals
6. PSoC Designer Flow
   • Hardware Project creation
   • Software application
7. Source Code Programming
   • C Code Fundamentals
   • Source code developing
8. Programming and Debugging
   • Programming of PSoC3/5
   • USB Boot Loader
   • Debugging using JTAG
9. Implementation sample designs using PSoC
   • LCD Display
   • LED and Switch Interface
   • UART Interface
   • PWM and Stepper Motor control
10. Hands on Examples with each Development Kit