

# University of Engineering and Technology

## Taxila

### CP-309 Embedded System Design

#### Lab # 01: *Introduction to VDSP++*

**Motivation:** When learning about an embedded system, you begin by learning how to program it: how to supply input and how to produce system output. On the Blackfin, you might wonder how a language you know (like C) behaves on the system and what simple I/O is available.

In this lab, we examine the functionality and different features available in VDSP++ and some basic C programs for VDSP familiarization.

#### Lab Questions:

- Q1. Write a program of factorial and display the result
- Q2. Write a program in C language to sort the given array and show result using the VDSP plot utility?
- Q3. Write a program in C language to generate the sine wave using the maclorn series.
- Q4. Write a program in C that can calculate the sine, cosine and Tan of a given angle using the look-up table technique.