TED University Department of Computer Engineering

CMPE 451, Section-1

Lab-7
ARM7: GPIO and Led Blinking

Before starting to Lab

 https://developer.arm.com/documentation/101407/0539/Creating- <u>Applications/Tips-and-Tricks/Use-MDK-Version-4-Projects</u> (Go to this link and download the <u>Arm7, Arm9, Cortex-R</u>)

Legacy Pack Download

Download the MDK v5.25 legacy pack for:

- Arm Cortex-M
- Arm7, Arm9, Cortex-R

The legacy pack for MDK v5.25 is the last one. This means that there will be no:

• https://developer.arm.com/downloads/view/ACOMP5 (Go to this link and download the *Arm Compiler 5.06 update 7(build 960) Win32*)

A- In this LAB, you will use

- I. Keil μvision.
- II. Proteus simulation software

B-Steps

- I. Use LPC2148/ LPC2138 microcontroller and connect eight LEDs to P0.9– P0.16 using Proteus simulation software.
- II. Program the microcontroller by using C programming on Keil μvision IDE. When your program runs, it should display binary number 100-255 on the LEDs in circular way. Use sufficient delay between two numbers so that the numbers are clearly visible.