Quartus Project File System Setup

Last updated 7/1/26

Quartus Project - File System Setup

- Structure
  - Quartus collects all the files and setting for a design into what it calls a Project
    - Multiple designs can be stored in a single project

      but
    - for ELE3510 I suggest you create a new project for each design
  - A single design may have more than one Block inside it
    - Quartus maintains a concept of a "top level block" to track which block is currently being worked on in the project

© tj

Quartus Project - File System Setup

- Limitations
  - Quartus was, and continues to be, developed for Linux based computer systems
    - Linux systems are commonly used for sophisticated engineering programs
    - Linux systems do not allow spaces in file paths or file names
      - Use _ (underscore) or CamelCase (caps on each word) instead
  - Quartus and OneDrive do not work well together
    - At MSOE OneDrive has been configured by IT to backup most of your personal files
      - Quartus will fail if OneDrive tries to back it up (file access issues)
    - All of your Quartus Projects must be stored in a location that OneDrive will not back up

© tj

Quartus Project - File System Setup

- Setup
  - To create a OneDrive/Quartus safe location for your project folders
    - Do this one time
    - Traverse to : File Explorer → This PC → Windows(C:) → Users → Your_User_Name
    - rt-click → New → Folder and enter the folder name ELE3510
    - Traverse into ELE3510
    - rt-click → New → Folder and enter the folder name Quartus_Projects

© tj

Quartus Project - File System Setup

- QSF setup
  - If you plan to run the project on the DE10
    and
  - you want to use the assigned pin names (recommended)
    - You need to import the DE10_Lite.qsf file from the web page
  - Do this Once
    - Rt click the link on the web page and save link as (DE10_Lite.qsf, QSF file type) in the ELE3510/Quartus_Projects folder (Not a specific project folder)

© tj

Quartus Project - File System Setup

- Final Hierarchy

This PC
  Windows(C:)
    Users
      Your_User_Name
        ELE3510
          Quartus_Projects
            DE10_Lite.qsf
            LAB4_Project /
            Project1_Project /
            Etch-a-sketch_Project /
            . . .

© tj