

Prototype Board Requirements

1. Use NXP LPC1769 CPU module for the prototype board design;
 2. Given the shortage of the LPC1769 and long delay time, you may want to choose alternative Target CPU board, such as Jetson NANO, please be advised that
 - (2.1) you are required to understand all the architectural design aspects covered in the class, and be responsible for its technical details and to be able to use the technique and theory to solve engineering design questions, complete assignment, take care of tests, examinations etc.
 - (2.2) Some architecture level implementation, e.g., special purpose registers handling and programming, such as SPI interface based LCD programming for 2D and 3D graphics engine design can not be realized on NANO unless the low level LCD display library driver functions are fully ported to NANO platform which requires major/significant time and engineering resources and expertise, which is beyond the scope of this class.
 - (2.3) So as an alternative, you will have to write C/C++ code to simulate the architecture level implementation. You may use OpenGL or some graphics library in your simulation. When using the OpenGL, be sure only to choose poly or line drawing functions, so you can still maximize the experience of implementing the homework/project similar to LPC769 platform.
- (END)