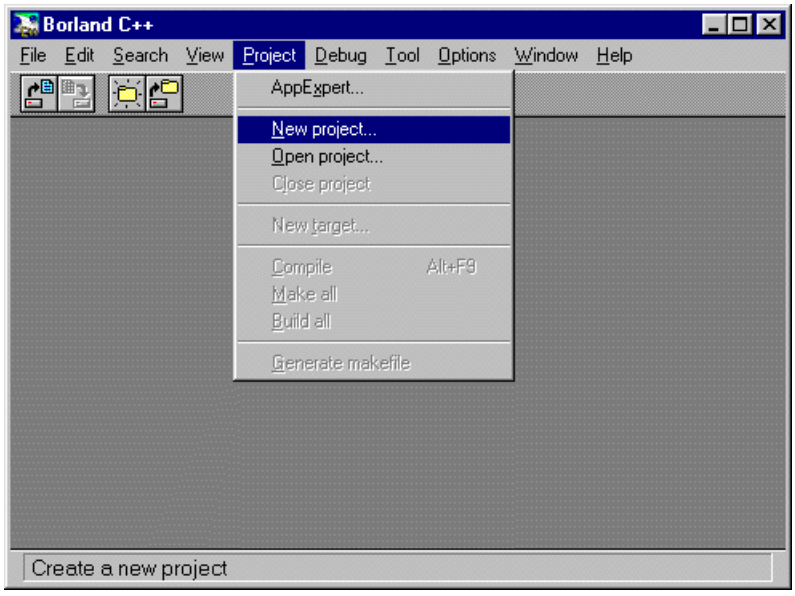
Getting Started with the Borland IDE

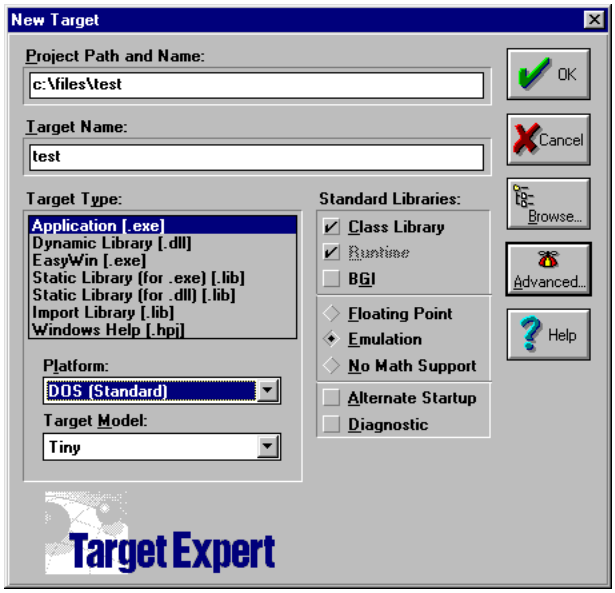
Setting up a project in the Borland Integrated Development Environment (IDE) is a critical step in beginning development for the Flashlite products. The following pages outline the necessary steps to successfully start a new project, define the target system, and include libraries and object code. These steps are the same for V-25 or 386Ex based products.

Directories for all files should be specified using a relative path (`..\..\lib\mylib.lib`) whenever possible. This will help to reduce difficulties if the project directory is moved.

To begin, select Project, New from the menu bar.



Then enter the Project information.



The path can be specified as an absolute location, the project and target names are usually identical.

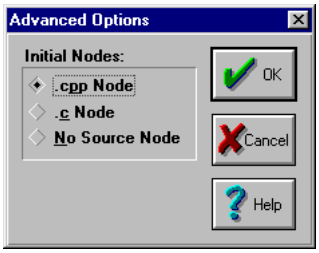
The Target Type will generally be an application (.exe) although static libraries (.lib) are also common.

When programming for the Flashlite, the Platform will always be DOS (Standard).

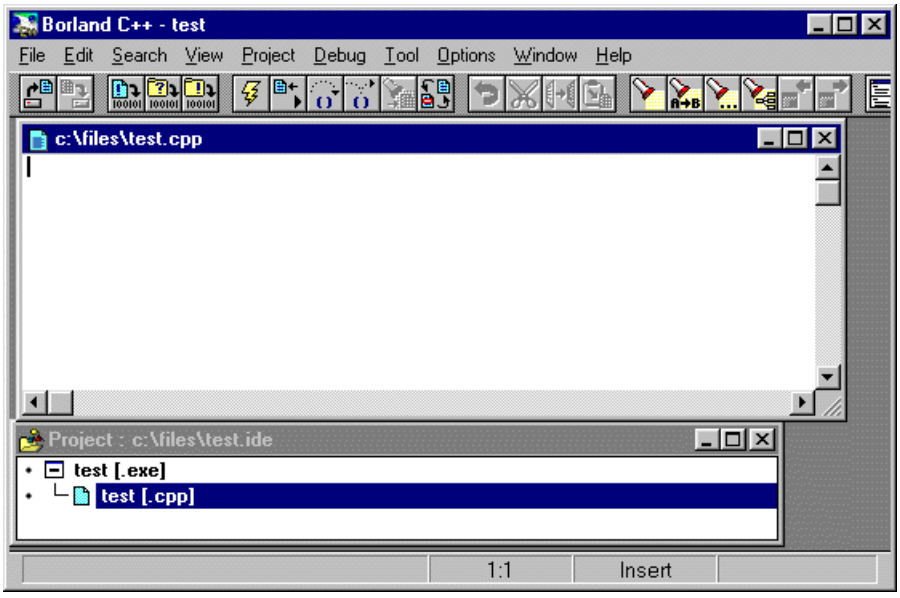
The memory model is a function of the application size. Tiny or Small models are frequently used for small to medium sized applications, the Large model for bigger applications. The Tiny model will generate the smallest executable due to its constraints on size (both code and data are located in the same segment). Remember that all project nodes (specifically libraries) need to have the same memory model.

In the Standard Libraries section, be sure that Emulation or No Math Support is chosen. The Flashlites do not have hardware floating point support and therefor emulation must be used. If no floating point will be required, the application will be smaller if the libraries are excluded.

Verify that the appropriate initial node is selected by pressing the advanced button and checking the desired node type.



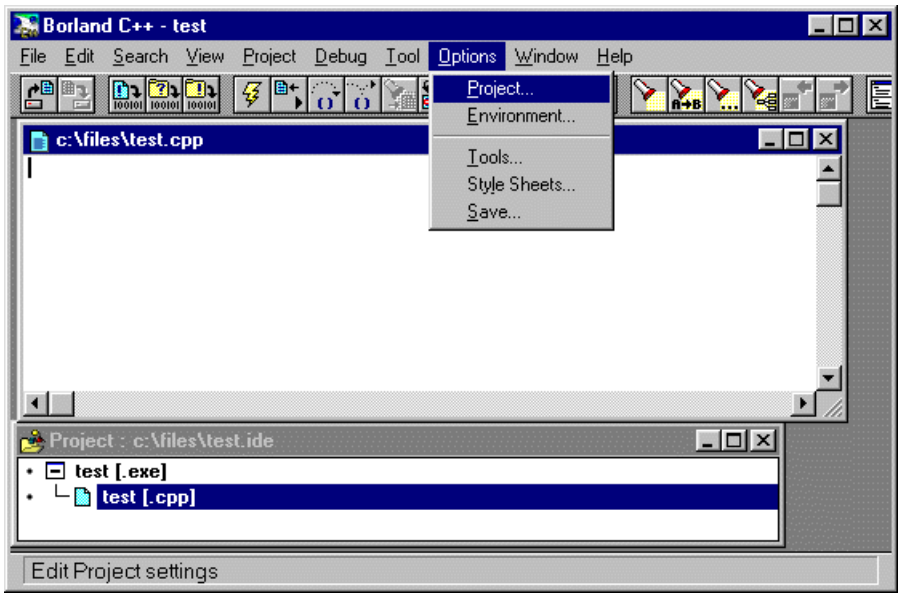
After the above information has been entered, press OK. A new project will be created and the project window (bottom of the screen) will show the project and the initial node.



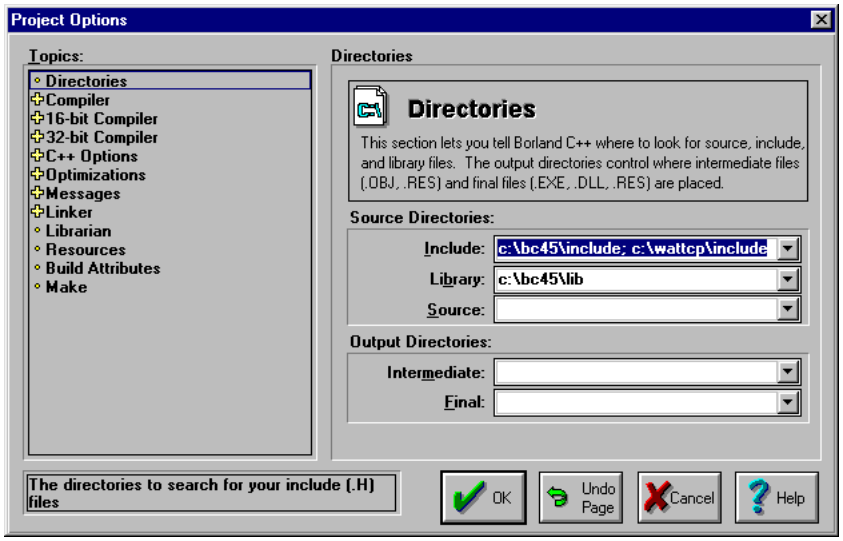
Getting Started with the Borland IDE

Double click on the source file (.c or .cpp) in the project window. This will open a new text window to begin your coding.

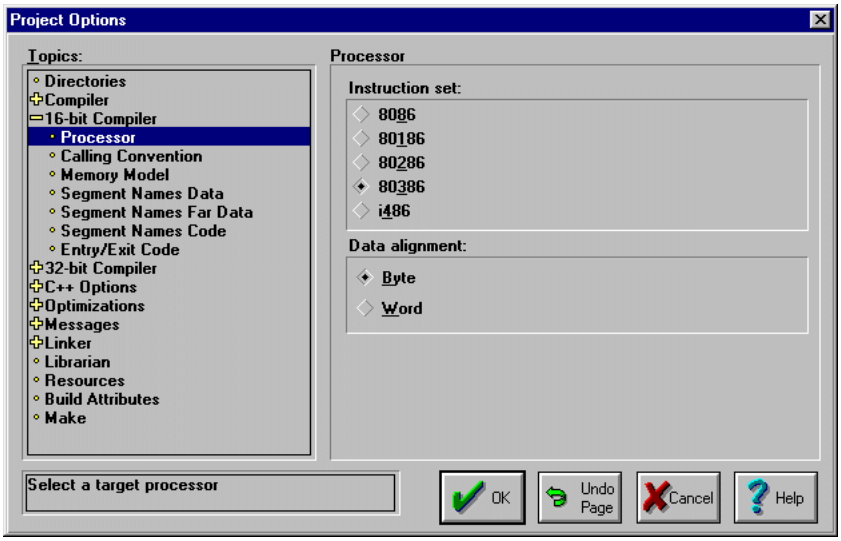
Before you compile your project you will want to specify or verify a few more options. Select Options, Project from the menu bar.



Add (or modify) the necessary directories to the Source Directory list for include or library files. Additional entries are separated by semicolons (;).

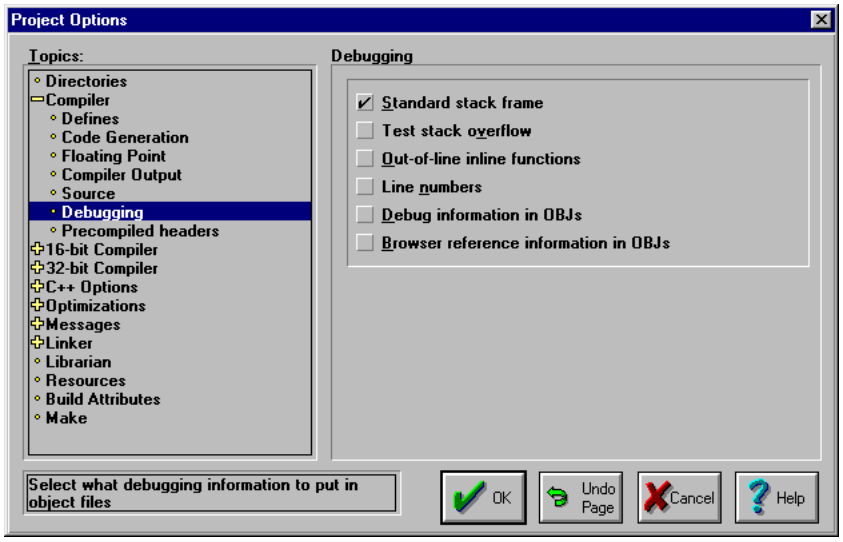


Next, click the + next to 16-bit Compiler and then Processor. Select the Appropriate target processor. The V-25 supports the 8086 instruction set.

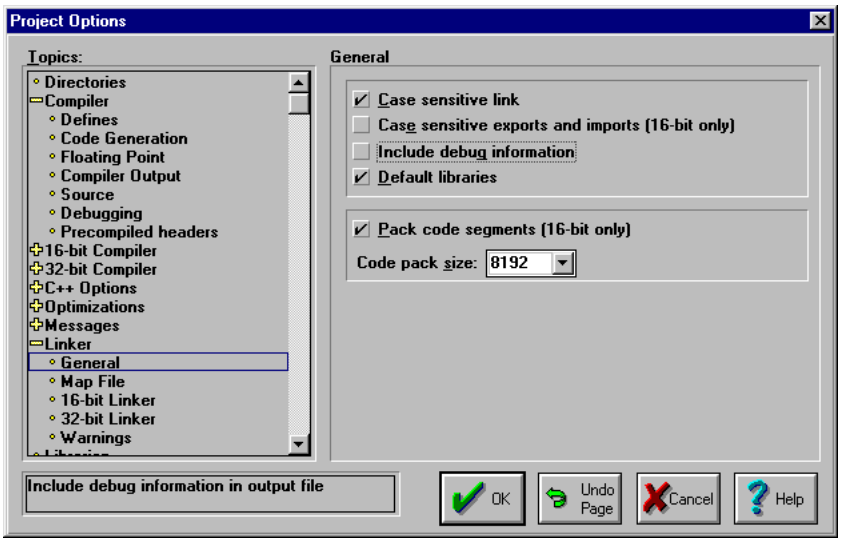


Depending on the stage of your development, you may want to exclude debug information from the object and executable files. This will reduce the size of the compiled project. To do this, there are two menus that must be modified.

First, click on the + next to Compiler to expand the compiler options. Then click on Debugging to show the debug options. Uncheck 'Debug information in OBJs' and 'Browser reference information in OBJs'.



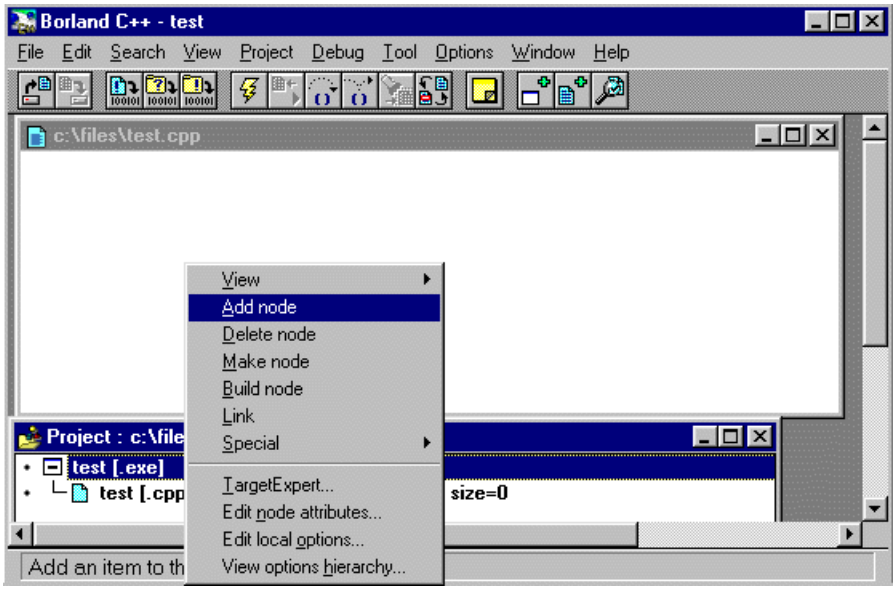
Next, click the + next to Linker and then General. Uncheck 'Include debug information'



Click the OK button when you are finished making changes to the project information.

It is frequently necessary to add nodes to a project. Nodes can be C/C++ source files, assembly language files, object files or libraries.

To add a node, right click on the name of the executable in the project window and select Add Node.



Use the browser to find the file(s) you wish to add. Multiple files (in the same directory) may be added by holding the CTRL key while selecting the files. Press OK when done making your selection. The new nodes will be shown in the Project Window. It may be necessary to change the 'List Files of Type' selection to indicate .ASM, .OBJ, .LIB files. Nodes of different types or from other directories can be added by repeating the above steps.