Pole/Zero: Customizing the Barr Group Embedded C Coding Standard

Pole/Zero analyzes, designs, builds, and supports interference mitigation and spectral purification solutions for industrial and defense manufacturers and integrators of RF/microwave electronics. Since 1989, Pole/Zero has developed and fielded products to expand the linear dynamic range of communications products from 1.5 MHz to 12 GHz.

The Challenge

Pole/Zero's software engineers develop and support a variety of embedded firmware configurations. These firmware solutions provide real-time and off-line control and monitoring of the myriad types of RF filter products in Pole/Zero's catalog. To provide a more consistent approach to firmware development that would facilitate better portability, readability, maintainability and higher reliability, Pole/Zero decided to incorporate a coding standard into their development process. The engineers wanted an objective basis for their coding standard and also to avoid the expense of developing a coding standard from scratch. The engineers reviewed several coding standards as part of their research.

The Solution

Barr Group's Embedded C Coding Standard was selected by Pole/Zero's engineers as the basis for their new coding standard, because of its focus on rules that are specifically designed to reduce bugs. Yet, Pole/Zero wanted to customize the Barr Group standard to fit their unique needs. So, Pole/Zero licensed the DOC file from Barr Group, made changes to the Barr Group document for their own internal use, and the firmware engineering team is now successfully utilizing their own modified version of the Barr Group Embedded C Coding Standard.

"Barr Group's Embedded C Coding Standard provided the foundation needed by Pole/Zero as we developed our own embedded firmware coding standard document. By licensing the DOC file from Barr Group, we were able to get up-and-running with our own well-designed coding standard very quickly."

- Kevin Ehlert,
  Digital Design Engineer,
  Pole/Zero