



AdaCore PRESS RELEASE

Collins Aerospace Selects AdaCore's QGen Code Generator to Streamline Model-Based Development

AdaCore, a trusted provider of software development and verification tools, announces that Collins Aerospace has selected AdaCore's QGen code generator for Simulink/Stateflow models, and the new TQL-1 Enterprise Qualification Package, to advance the development of their FAA-certifiable Perigon™ computer, which is designed to support the future flight control and vehicle management needs of commercial and military rotary/fixed wing platforms. By using the TQL-1 release of QGen, Perigon™ software developers are able to save thousands of hours of testing, verification, and certification efforts, while providing additional safety guarantees to their customers. With the adoption of the QGen Enterprise Qualification Package, Collins is now able to streamline its model-based engineering practices.

“AdaCore is excited to partner with Collins Aerospace to bring to market the first TQL-1 code generator for Simulink.”

QGen is the first qualifiable code generator for a safe subset of the Simulink®/Stateflow® modeling languages. QGen automatically generates C or Ada source code directly from the model while precisely preserving its functionality, eliminating the need for manual verification of the resulting source code. For systems requiring the highest assurance, such as commercial aerospace, medical device, and autonomous driving applications, the QGen code generator is being qualified by AdaCore and its partner Verocel at DO-178C Tool Qualification Level 1

(TQL-1), which is the highest level of qualification recognized by the FAA. QGen with TQL-1 allows developers to use the generated code without any manual review, streamlining the critical-system development and verification process. In addition, QGen includes an interactive model-level debugger, displaying the model together with the generated source code to provide a uniquely productive bridge between control engineering and software engineering.

QGen is now available with an Enterprise Qualification Package. This package comes with flexible licensing so that projects of any size, company-wide, can take advantage of the use of a TQL-1 qualified autocode generator. The package is based on a unique subscription approach, which provides an enhanced qualification kit every year. The same warranties are provided to all projects, including expert support for certification audits. Large organizations that perform many of their development and verification activities through model simulation can now dramatically reduce verification activities on the generated code, reducing costs while streamlining the overall certification process.

“AdaCore is excited to partner with Collins Aerospace to bring to market the first TQL-1 code generator for Simulink,” said JC Bernedo, AdaCore QGen team lead. “AdaCore has worked closely with Collins throughout the development of QGen to ensure it meets the development needs of their most critical aerospace software.”

Learn how QGen can help your enterprise significantly reduce its software development, testing, and verification costs. Contact sales@adacore.com.

