Embedded Software Development

Our offering

CS Canada offering includes the development of complete critical and non-critical embedded software packages. Development is performed using Agile methodology as an efficient mean to produce quality software in a rapid and cost-efficient manner.

Software package includes the following V-cycle stages of development

- Planning process documentation and development tooling set-up
- High-level software specification from client system specification
- Software architecture and low-level design
- Source code
- Software executable generation and debugging.

CS Canada maintains a complete software development environment within its premises, and corresponding verification activities are performed by independent V&V integrated product teams.

Methods

- Requirement management: DOORS, Reqtify, LDRA
- Specifications: UML, LUSTRE/Scade
- Design: SCADE, Matlab Simulink
- Methodologies: V-cycle, Agile

Programming languages

- ADA (83, 95, 2005), C, C++, Java, C#, assembler

Standards

- DO-178B/C
- ISO26262

1 (866) 748-8258
info@cscanada.ca
www.cscanada.ca

Montreal, Qc, Canada
East Hartford, CT, USA

Tools

- Design tools: SCADE, Matlab Simulink, LabVIEW
- Configuration management: Subversion, ClearCase, Mantis, Git, JIRA, Tuleap
- LDRA suite: TBrun, Testbed and MISRA-C Checker
- Code generation: SCADE KCG, Simulink RT-EC
- Assembler for most microprocessors: MPC 555, MPC5554, MPC5566, ARM, DSP
- Windriver Diab and GCC Compilers
- Greenhills MULTI IDE
- Greenhills INTEGRITY RTOS
- Buses: ARINC 429, ARINC 629, MIL-STD-1553, CANBUS, Ethernet
- Test benches: OPAL-RT, National Instrument PXI

Benefits

CS Canada provides a wide range of expertise in the development, verification, validation and certification of mission and safety critical software of embedded systems. This complete offering insures a large cohesion between each of the critical aspects from development to certification and allows CS Canada to manage complete programs.

Why CS Canada?

We have been involved successfully for +15 years with the most demanding and the highest level of critical systems in the aerospace industry with jet engine controls within DO-178C Level A certification with the largest OEMs in North America and many other critical systems for aeronautics, space, automotive, train, and industrial markets.

This expertise is now available to your service!

1 (866) 748-8258
info@cscanada.ca
www.cscanada.ca

Montreal, Qc, Canada
East Hartford, CT, USA