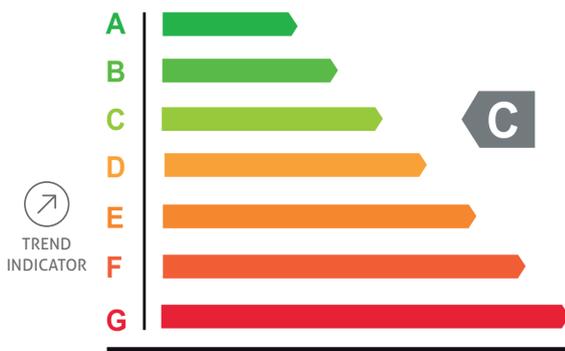


Automotive SQUARE



Squoring Technologies delivers an innovative decision-making dashboard dedicated to managing critical embedded software projects in the automotive industry.

ISO 26262 / ISO 25010 / Automotive SPICE / MISRA / HIS



Quality and functional safety represent major stakes for the development of the automotive industry.

The emergence of standards such as ISO 26262 and Automotive SPICE clearly reflects the willingness of all players in the sector to take up this challenge.

To control and mitigate risks, development teams need real-time access to the most relevant indicators to optimize their software project management.



Squore enables us to demonstrate compliance of our software deliverables with customer quality requirements.

Claude Pinaud, Software Manager, Powertrain Division, Continental.

Squore Automotive provides a fast and high return on investment by efficiently:

- Improving reliability by early defect detection.
- Improving confidence between car manufacturer and supplier.
- Automating verification methods required by ISO 26262 standard.
- Reducing maintenance costs by monitoring technical debt.
- Demonstrating deliverable compliance with quality requirements.
- Spreading base practices recommended by Automotive SPICE.



Visit
www.squore-automotive.com

 **SQUORING**
Technologies

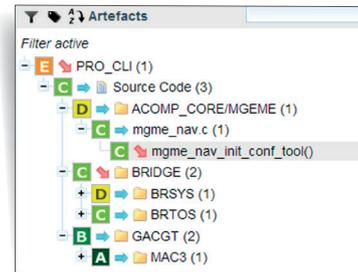
Innovative features dedicated to the success of your critical embedded software projects.

HIS Metrics Compliance			
COMF Function Compliance	51.7%		G
VG Function Compliance	89.9%		F
LEVEL Function Compliance	89.9%		F
MISRA-C Subset Compliance			
GOTO MISRA Rules Checked	110		I
RETURN Non Compliant Rules	26		I
COMPLI Standard Compliance	76.4%		E
VOCF Non Conformity Count	5,447		C
STMT Non Conformity Density	30/KLOC		C
PARAM Function Compliance	94.8%		E
CALLIN Function Compliance	97.6%		C
CALLS Function Compliance	98.3%		C
CYCLE Function Compliance	100.0%		A

The Squire dashboard provides comprehensive overviews to help demonstrate compliance to HIS and MISRA standards

- **Integrated effective source code analyzers** for Ada/C/C++/C#/Java .
- **Plugins to import data from 3rd party tools** already in use: Klocwork, QA-C, Coverity, Test RealTime, Polyspace, Tessy, Logiscope . . .
- **"Out-of-the-box" standardized control points** from applicable standards: HIS complexity metrics, MISRA coding rules, code duplication, stability index.
- **Check-lists and review forms** for software products and key processes.
- **Predefined quality evaluation models:** ISO SQuaRE 25010, ISO/IEC 9126.

- **Comprehensive overview of development progress** through key performance indicators and trend analysis: immediate detection of regressions, deviations from plans.
- **Unrivaled in-depth analysis** where at-risk components are immediately identified, down to the most elementary function or method.



The Squire drill-down combined with powerful filtering provides intuitive navigation in large-sized applications to spot critical or deteriorated items since previous versions

Testing Strategy Advises	
Fulfill Requirement-Based Testing	
Develop Unit Testing	
Perform Interface Testing	
Perform Boundary Values Testing	
Perform Stress Testing	
Improve Structure-Based Testing	
Perform Code Static Analysis	
Perform Code Walkthrough	

For each function, Squire recommends testing techniques to be applied according to the level of risk computed from collected measures

- **Risk-based testing strategy** from decision criteria adapted to each phase: Unit Test, Integration, Regression.
- **Enhanced team collaboration** achieved by centralizing all non-compliance data, automating alert notification, and sharing "to-do" lists.

Already available

Languages > Ada / C / C++ / C# / Java / Python . . .

Plugins for data importation > Klocwork, QA-C, R-TRT, Polyspace, PC lint, Logiscope, Tessy, Coverity...

Intégrations > Eclipse, Jenkins, CruiseControl, ClearCase, Synergy, Git, Svn, MKS . . .

Plateformes > Windows, Linux.