

## Review Form and Checklist

### **Software Architecture Review:**

Project Name: \_\_\_\_\_  
Architect Name: \_\_\_\_\_  
Project Engineer: \_\_\_\_\_  
Customer : \_\_\_\_\_  
Stakeholders: \_\_\_\_\_  
Reviewers: \_\_\_\_\_  
\_\_\_\_\_

Review Date: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Estimated Code Size: \_\_\_\_\_ K ELOC

### **Software Quality Attributes:**

- |   |                                       |   |
|---|---------------------------------------|---|
| <input type="checkbox"/> Functional Suitability | <input type="checkbox"/> Performance  | <input type="checkbox"/> Maintainability  |
| <input type="checkbox"/> Reliability            | <input type="checkbox"/> Portability  | <input type="checkbox"/> Usability        |
| <input type="checkbox"/> Modifiability          | <input type="checkbox"/> Modularity   | <input type="checkbox"/> Extensibility    |
| <input type="checkbox"/> Security               | <input type="checkbox"/> Safety       | <input type="checkbox"/> Integrity        |
| <input type="checkbox"/> Scalability            | <input type="checkbox"/> Availability | <input type="checkbox"/> Interoperability |
- ☐ RASU (Reliability, Availability, Serviceability, Usability and Installability)  
☐ FURPS (Functionality, Usability, Reliability, Performance and Supportability)  
☐ RASR (Reliability, Availability, Scalability and Recoverability) [databases]  
☐ ACID (Atomicity, Consistency, Isolation (or Integrity) and Durability [databases]  
☐ RAMS (Reliability, Availability, Maintainability and Safety) [safety critical systems]  
☐ Agility (Debug Ability, Extensibility, Portability, Scalability, Securability, Testability & Understandability)  
☐ Dependability (Availability, Reliability, Safety, Integrity and Maintainability)  
☐ Other \_\_\_\_\_

## Review Form and Checklist

### **Key Software Architecture Decisions:**

#### **Hardware/Driver/OS**

[ ] RTOS/BSPs/Hypervisor:

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[ ] Bus Communication Card/Drivers:

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[ ] Database API Drivers:

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[ ] Graphics Card/Drivers:

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[ ] Operating Systems:

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[ ] Hardware Platforms:

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[ ] Other:

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### **Key Software Architecture Decisions (continued):**

#### **Software Technology**

[ ] IPC Mechanisms:

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[ ] Bus Communication Protocols:

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[ ] Persistence Technology:

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[ ] Graphics Technology:

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[ ] Programming Languages:

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[ ] Mixed Language Bindings:

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[ ] Software Design Methodology:

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[ ] Other:

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**Key Software Architecture Decisions (continued):**

**Software Tools**

- ☐ IPC Development Tools: \_\_\_\_\_
- ☐ Bus Communication Dev Tools: \_\_\_\_\_
- ☐ Database/Persistence Frameworks: \_\_\_\_\_
- ☐ Graphics Dev Tools: \_\_\_\_\_
- ☐ Integrated Dev Environment: \_\_\_\_\_
- ☐ Software Design Tools: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_

**Key Software Architecture Decisions (continued):**

**Software Reuse Strategy**

- ☐ Software Processes: \_\_\_\_\_
- ☐ Historical Productivity Data: \_\_\_\_\_
- ☐ Software Design Patterns: \_\_\_\_\_
- ☐ External Software Components: \_\_\_\_\_
- ☐ Internal Software Components: \_\_\_\_\_
- ☐ Software Product Line: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_

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**Architectural Design:**

**Use Cases**

[ ] Use Case Diagrams: \_\_\_\_\_

**Software Components and Interfaces**

[ ] Class Diagrams: \_\_\_\_\_

[ ] Component-Connector Diagrams: \_\_\_\_\_

[ ] Sequence Diagrams: \_\_\_\_\_

[ ] Interface Definition Descriptions: \_\_\_\_\_

**Software Component Deployment**

[ ] Deployment Diagrams: \_\_\_\_\_