

Model Maintainability Report

Date: 29-Jan-2026

Project: MathworksCICD

MATLAB version: 25.2.0.2998904 (R2025b)

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1. Demo3_model1

1.1. Artifact Summary

| Artifact Group | Artifact Type | Number of Artifacts |
|-------------------------|---------------|---------------------|
| Design | Block diagram | 1 |
| | Model file | 1 |
| Functional Requirements | | |
| Test Results | | |
| Tests | | |

1.2. Component Structure

Complexity: 1

Halstead Difficulty: 3.60

Maximum layer depth of 1

Maximum layer breadth of 1

1.3. Component Interface

0 component input ports

1 component output ports

- component input signals

- component output signals

1.4. Design Cyclomatic Complexity Breakdown

1.4.1. Simulink - Complexity

Simulink design cyclomatic complexity of 1

1.4.2. Simulink - Distribution

| Decisions | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | >89 |
|------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Number of Model Layers | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.4.3. Stateflow - Complexity

Stateflow design cyclomatic complexity of 0

1. Demo3_model1

1.4.4. Stateflow - Distribution

| Decisions | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | >89 |
|----------------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Charts, States, and Truth Tables | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.4.5. MATLAB - Complexity

MATLAB code design cyclomatic complexity of 0

1.4.6. MATLAB - Distribution

| Decisions | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | >89 |
|-----------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Functions and Methods | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.5. Halstead Difficulty Breakdown

1.5.1. Simulink - Difficulty

Halstead difficulty of 3.60

1.5.2. Simulink - Distribution

| Difficulty | [0,5) | [5,10) | [10,15) | [15,20) | [20,25) | [25,30) | [30,35) | [35,40) | [40,45) | ≥45 |
|------------------------|-------|--------|---------|---------|---------|---------|---------|---------|---------|-----|
| Number of Model Layers | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.5.3. Stateflow - Difficulty

Halstead difficulty of 0

1.5.4. Stateflow - Distribution

| Difficulty | [0,5) | [5,10) | [10,15) | [15,20) | [20,25) | [25,30) | [30,35) | [35,40) | [40,45) | ≥45 |
|----------------------------------|-------|--------|---------|---------|---------|---------|---------|---------|---------|-----|
| Charts, States, and Truth Tables | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.5.5. MATLAB - Difficulty

MATLAB Halstead difficulty of 0

1. Demo3_model1

1.5.6. MATLAB - Distribution

| Difficulty | [0,5) | [5,10) | [10,15) | [15,20) | [20,25) | [25,30) | [30,35) | [35,40) | [40,45) | ≥45 |
|-----------------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|-----|
| Functions and Methods | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.6. Simulink Architecture

1.6.1. Blocks - Count

5 Simulink blocks, excluding Inport, Outport, and Goto blocks

1.6.2. Blocks - Distribution

| Blocks | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | >89 |
|------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Number of Model Layers | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.6.3. Signal Lines - Count

7 Simulink signals

1.6.4. Signal Lines - Distribution

| Signal Lines | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | >89 |
|------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Number of Model Layers | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.6.5. Gotos - Count

0 Simulink Goto blocks

1.6.6. Gotos - Distribution

| Goto Blocks | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | >89 |
|------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Number of Model Layers | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.7. Stateflow Architecture

1.7.1. Transitions - Count

0 Stateflow Transitions

1. Demo3_model1

1.7.2. Transitions - Distribution

| Transitions | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | >89 |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Charts | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.7.3. States - Count

0 Stateflow States

1.7.4. States - Distribution

| States | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | >89 |
|--------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Charts | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1.8. MATLAB Architecture

1.8.1. Lines of Code - Count

0 effective lines of code

1.8.2. Lines of Code - Distribution

| Lines of Code | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80-89 | >89 |
|------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| Functions and Method S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |