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## Appendix A

# Intermediate Representation

This appendix details the intermediate JSON representation of each TML variant. The IR for TML-TSA is presented first, after which follows modifications used for the other language variants. For details on the JSON format, see <https://www.json.org>.

### TML-TSA

*Table A.1: Root object*

Property	Type	Description
<code>actions</code>	Array of strings	All actions used in the program.
<code>clocks</code>	Array of strings	All clocks used in the program.
<code>locations</code>	Array of <i>Location</i> objects	Automaton locations.
<code>edges</code>	Array of <i>Edge</i> objects	Automaton edges.

*Table A.2: Location object*

Property	Type	Description
<code>id</code>	String	Location identifier.
<code>initial</code>	Boolean	True for the initial location, false for all others.
<code>invariant</code>	Null or string	Location invariant (optional).