

# Liberty Release Notes

## Version 2020.09

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These release notes present the latest information about Liberty version 2020.09. New modeling syntax and enhancements are described in the following sections:

- [Electromigration Enhancements](#)
- [Characterization Input States in Timing and Pin-Level Receiver Capacitance Models](#)

For detailed information about these enhancements, see the Liberty User Guide Volume 1.

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## Electromigration Enhancements

The tool now supports lifetime profile in the `electromigration` group. The electromigration group is enhanced to store chip lifetime profiles with the new `lifetime_profile` attribute. This attribute specifies a label that describes the lifetime of a chip.

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## Characterization Input States in Timing and Pin-Level Receiver Capacitance Models

The pin-level `receiver_capacitance` group now supports modeling the rising and falling input states at which the receiver capacitance timing arcs were characterized. To specify these input states, use the new `char_when_rise` and `char_when_fall` attributes. The timing group is also enhanced to support modeling the input states at which the timing arc was characterized. To specify these input states, use the new `char_when_rise` and `char_when_fall` attributes, and the `char_when` attribute in the timing group.

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