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# RaRa Academy: Circuit Simulation With LTSpice

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# Some History

Initial release back in 1973

Punch Cards

Used for integrated circuit simulation

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# Some Other Tools

Elsie - <http://tonnesoftware.com/elsie.html>

MicroCAP - [https://archive.org/details/mc12cd\\_202110](https://archive.org/details/mc12cd_202110)

CircuitLab - <https://www.circuitlab.com>

KiCAD - <https://www.kicad.org>

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# LTSpice

Free to use – no implementation limitations in the free version

Graphical User Interface – no more punch cards

Created by Linear Technologies – hence the LT

LT was bought by Analog Devices

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DC Operating Point Analysis	.op
DC Sweep Analysis	.dc
DC Transfer Function Analysis	.tf
AC Analysis	.ac
Transient Analysis	.tran
Noise Analysis	.noise
Parametric Analysis	.step
Temperature Analysis	.temp
Monte Carlo Analysis	.mc

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# Links

Download LTSpice:

<https://www.analog.com/en/design-center/design-tools-and-calculators/ltspice-simulator.html>

Keyboard shortcuts:

[https://www.analog.com/media/en/news-marketing-collateral/solutions-bulletins-brochures/ltspice\\_shortcutflyer.pdf](https://www.analog.com/media/en/news-marketing-collateral/solutions-bulletins-brochures/ltspice_shortcutflyer.pdf)

Keyboard shortcuts for macOS version:

<https://www.analog.com/media/en/news-marketing-collateral/solutions-bulletins-brochures/ltspiceshortcutsformacosx.pdf>

SpiceMan:

<https://spiceman.net>

Groups.IO:

<https://groups.io/g/LTspice>

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