

Getting Started with APLAC



Circuit simulation and design tool



Getting Started with APLAC

- After downloading and installing APLAC Student Version, you can directly start using it – no licenses are required!
- You have access to a wide selection of examples under the following categories:

Analysis_methods – how to

- Do DC, AC, transient, harmonic balance analysis
- Do S-parameter, noise, sensitivity and stability analysis
- Perform optimization and statistical analysis
- Create library components and submodels

Devices – design examples on

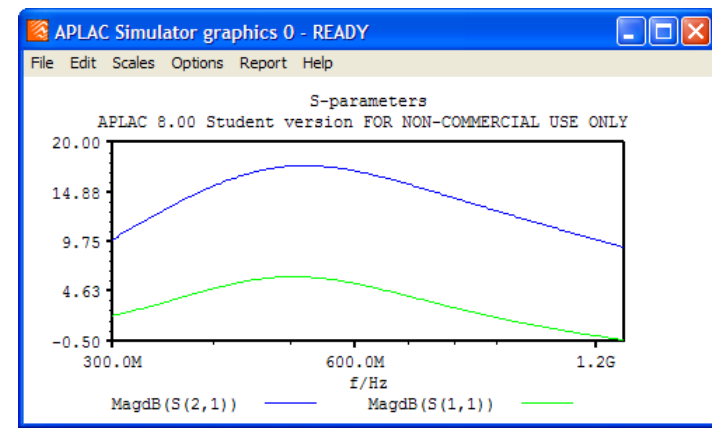
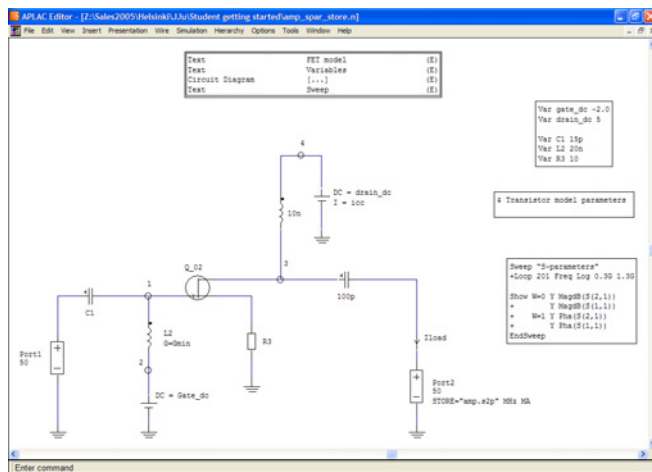
- Amplifiers, mixers, multipliers and oscillators
- Filters, switches and matching networks
- MEMS
- PLLs
- Characterization of BJTs or FETs

System – system simulation examples on

- 16-QAM, 32-TCM, 64-QAM, AM, FM, FSK, IQ, PSK, PWM and QPSK modulation schemes
- BER, constellation, eye-pattern, SNR, spectrum, waveforms, frequency response and synchronization
- Specific design examples on AGC, GSM and image-rejection mixers
- Circuit-system cosimulation
- Bluetooth, WLANa and WLANb radio systems
- Digital devices
- Vector signals
- Formula-based receiver chain systems

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- For example, if you are interested in S-parameter analysis, open ***Analysis_methods\S-parameters\amp_spar_store.n***
- In the example, S-parameters of a MESFET-amplifier are evaluated and stored over 300MHz – 1.3GHz



- You can open manuals from ***Help>PDF Books***. Consult manual R1 for APLAC syntax and analyses, R2 for analog components and R3 for distributed RF-components. In order to study APLAC systematically, take a look of R4.
- **Note!** APLAC Student Version has memory limitation, and therefore not all examples are runnable. If you see a message "Memory restricted in this version" or "Out of memory, too large allocation by Graphics", it indicates too large circuit or simulation task for APLAC Student Version. Reduce analysis points in the latter case. For Evaluation Version, please fill in the Evaluation Request Form at www.aplac.com.