Applet elettronica ottime

http://educypedia.karadimov.info/electronics/javadigital.htm

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| |  |  |  |  | | --- | --- | --- | --- | | **Java applets and animations:** | |  |  | | [**Active semiconductors**](http://educypedia.karadimov.info/electronics/javaanalogsemi.htm) | [**Electricity**](http://educypedia.karadimov.info/electronics/javaelectricity.htm) | [**Modulation-digital**](http://educypedia.karadimov.info/electronics/javamodulationdig.htm) | [**Passive semiconductors**](http://educypedia.karadimov.info/electronics/javaanalogsemipassif.htm) | | [**Audio**](http://educypedia.karadimov.info/electronics/javaaudio.htm) | [**Fourier**](http://educypedia.karadimov.info/electronics/javafourier.htm) | [**Motor (AC)**](http://educypedia.karadimov.info/electronics/javamotor.htm) | [**RF**](http://educypedia.karadimov.info/electronics/javarf.htm) | | [**Audio waves**](http://educypedia.karadimov.info/electronics/javaaudiowaves.htm) | [**Generator**](http://educypedia.karadimov.info/electronics/generator.htm) | [**Motor (DC)**](http://educypedia.karadimov.info/electronics/javamotordc.htm) | [**RF - Antennas**](http://educypedia.karadimov.info/electronics/javarfantennas.htm) | | [**Basic circuit theory**](http://educypedia.karadimov.info/electronics/javabasic.htm) | [**Java applets and animations**](http://educypedia.karadimov.info/electronics/javacollectors.htm) | [**Opamp animations**](http://educypedia.karadimov.info/electronics/javaopamps.htm) | [**RC-RL circuits (DC)**](http://educypedia.karadimov.info/electronics/javaanalog.htm) | | [**Components**](http://educypedia.karadimov.info/electronics/javaComponents.htm) | [**Magnetics**](http://educypedia.karadimov.info/electronics/javamagnetics.htm) | [**Optics**](http://educypedia.karadimov.info/electronics/javaapplications.htm) | [**RLC circuits (AC)**](http://educypedia.karadimov.info/electronics/javarlc.htm) | | [**Control**](http://educypedia.karadimov.info/electronics/javapower.htm) | [**Measurement**](http://educypedia.karadimov.info/electronics/javameasurement.htm) | [**Optics: Display Devices**](http://educypedia.karadimov.info/electronics/displaydevices.htm) | [**Transmission lines**](http://educypedia.karadimov.info/electronics/javatransmissinlines.htm) | | **Digital** | [**Modulation-analog**](http://educypedia.karadimov.info/electronics/javamodulation.htm) | [**Optics: Fiber technology**](http://educypedia.karadimov.info/electronics/fibertechnology.htm) | [**Waves (EMW)**](http://educypedia.karadimov.info/electronics/javawaves.htm) | |
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| |  | | --- | | **Digital animations and java applets** **[http://educypedia.karadimov.info/images/Top.gif](http://educypedia.karadimov.info/electronics/javadigital.htm#computer)** | | [**Applets**](http://tams-www.informatik.uni-hamburg.de/applets/applets.html) CMOS technology, Karnaugh Veitch diagram, ordered binary decision diagrams | | [**Digital demonstrations**](http://www.eeng.dcu.ie/~digital1/afdez/) converters, flip flops, Boolean algebra, registers, ..., a tip | | [**From logic gate to combinatorial arithmetic operators**](http://tima-cmp.imag.fr/~guyot/Cours/Oparithm/english/Op_Ar2.htm) Adder in CMOS, Multipliers, Dividers | | [**Hades**](http://tams-www.informatik.uni-hamburg.de/applets/hades/webdemos/00-intro/00-welcome/chapter.html) interactive applet collection of the Hades simulation framework | | [**Interactive digital java applets and Simulation**](http://tams-www.informatik.uni-hamburg.de/applets/hades/webdemos/toc.html) adders, counters, relays, pics, converters, flip flops, Boolean algebra, basic SR flipflop, SR flipflop, clocked SR flipflop, D-latch, D-flipflop, JK-flipflop, 7476 JK-flipflop, LSSD latch, 74273 D-register, 74166 shift-register, C-gate, micropipeline, traffic light, registers, ..., a tip | | [**Simulations DigSim**](http://patrick.furon.free.fr/_elecnumerique/_digsim_utiliser/indexDigSim.html) en Français, a tip | | Horizontaal | | **Analog to Digital - Digital to Analog Converters: animations and java applets** **[http://educypedia.karadimov.info/images/Top.gif](http://educypedia.karadimov.info/electronics/javadigital.htm#computer)** | | [**Analog to Digital converter**](http://educypedia.karadimov.info/library/analo-num-synth-2.swf) swf file | | [**Analog to Digital converter**](http://educypedia.karadimov.info/library/analo-num-synth.swf) Analog to Digital converter, swf file | | [**Base-2 Binary**](http://educypedia.karadimov.info/library/aa-biny.gif) | | [**Convertisseur N/A**](http://educypedia.karadimov.info/library/cna.swf) | | [**Convertisseur N/A**](http://educypedia.karadimov.info/library/cna.swf) | | [**Convertisseur A/N**](http://educypedia.karadimov.info/library/CANflash.swf) CAN Flash | | [**Convertisseur A/N à approximations**](http://subaru.univ-lemans.fr/enseignements/physique/02/electro/candicho.html) la tension analogique à convertir est appliquée par l'intermédiaire d'un verrou, Educypedia, en Français | | [**Convertisseur A/N simple rampe**](http://subaru.univ-lemans.fr/enseignements/physique/02/electro/canrampe.html) la tension à mesurer est comparée avec une rampe (linéaire en fonction du temps), en Français | | [**Convertisseur N/A R-2R**](http://subaru.univ-lemans.fr/enseignements/physique/02/electro/cnar2r.html) en Français | | [**D/A converter**](http://server.elektro.dtu.dk/personal/ldn/javalab/Circuit11.html) D/A converter | | [**Digital to analog converter**](http://educypedia.karadimov.info/library/26072009_303797.swf) Digital to analog converter | | [**PCM**](http://www.netbook.cs.purdue.edu/animations/convert%20analog%20to%20digital.html) Converting Analog Signals to Digital Signals | | [**Pulse amplitude modulation**](http://cnyack.homestead.com/files/modulation/modpam.htm) PAM, this type of modulation is used as the first step in converting an analog signal to a discrete signal or in cases where it may be difficult to change the frequency or phase of the carrier, **[Educypedia](http://educypedia.karadimov.info/index.html)** | | [**Sigma-Delta Analog-to-Digital Converters**](http://designtools.analog.com/dt/sdtutorial/sdtutorial.html) An interactive illustration showing the behavior of an idealized sigma-delta A/D converter | | [**Sigma Delta Conversion**](http://www.atela.uhp-nancy.fr/tisserand/delta/index.html) Demonstrates how Sigma-Delta-Converters work | | Horizontaal | | **Digital animations and java applets: topics** **[http://educypedia.karadimov.info/images/Top.gif](http://educypedia.karadimov.info/electronics/javadigital.htm#computer)** | | [**2-Bit binary decoder**](http://circuitscan.homestead.com/files/digelec/combination1.htm) | | [**4-Bit Ripple Counter**](http://www.falstad.com/circuit/e-counter.html) | | [**555 circuit**](http://educypedia.karadimov.info/library/Astable2.swf) | | [**555 circuit**](http://educypedia.karadimov.info/library/28072009_404514.swf)  555 timer, A-stable multivibrator | | [**555 circuit**](http://educypedia.karadimov.info/library/aa-555-01.gif) animated, how does it work, applications with the 555 | | [**555 circuit**](http://educypedia.karadimov.info/library/555-Timer_Animation.GIF) | | [**555 circuit**](http://educypedia.karadimov.info/library/del00017.gif) astable 555 circuit, running lights, 4017 | | [**555 Missing Pulse Detector**](http://www.falstad.com/circuit/e-555missing.html) This circuit uses a 555 timer chip to detect a missing pulse. The input is a square wave | | [**555 Monostable Multivibrator**](http://www.falstad.com/circuit/e-555monostable.html) | | [**555 Pulse Width Modulator**](http://www.falstad.com/circuit/e-555pulsemod.html) | | [**555 Sawtooth Oscillator**](http://www.falstad.com/circuit/e-555saw.html) | | [**555 Schmitt Trigger (inverting)**](http://www.falstad.com/circuit/e-555schmitt.html) | | [**555 Square Wave Generator**](http://www.falstad.com/circuit/e-555square.html) 555 Square Wave Generator | | [**5x5x5 ledkubus**](http://www.youtube.com/watch?v=ISOvzn_9PDY) | | [**5x5x5 LED kubus**](http://www.youtube.com/watch?v=BQDpwmJg-T8) | | [**5x5x5 LED kubus**](http://www.youtube.com/watch?v=mZFXXtBj1aw&) | | [**7-Segment LED Decoder**](http://www.falstad.com/circuit/e-7segdecoder.html) | | [**8-Bit Ripple Counter**](http://www.falstad.com/circuit/e-counter8.html) | | [**ASCII text decoder/encoder**](http://nickciske.com/tools/binary.php) this application only encodes and decodes ASCII text | | [**Additionneur binaire**](http://subaru.univ-lemans.fr/enseignements/physique/02/electro/addition.html) en Français | | [**Analog Switch & Transmission Gate**](http://jas.eng.buffalo.edu/education/mos/tgate/index.html) | | [**Arithmetc operators**](http://tima-cmp.imag.fr/~guyot/Cours/Oparithm/english/Op_Ar2.htm) adders, multipliers, ... | | [**Bascules J-K**](http://subaru.univ-lemans.fr/enseignements/physique/02/electro/basculjk.html) en Français | | [**Bascules R-S et D**](http://subaru.univ-lemans.fr/enseignements/physique/02/electro/bascule.html) en Français | | [**BCD to 7 segment decoder**](http://educypedia.karadimov.info/library/dig7307.swf) BCD to 7 segment decoder | | [**BCD to 7 segment decoder**](http://circuitscan.homestead.com/files/digelec/bcdto7seg.htm) | | [**BCD to 7 segment decoder**](http://educypedia.karadimov.info/library/decodeur_bcd_7seg.swf) | | [**BCD up counter**](http://circuitscan.homestead.com/files/digelec/bcdupcoun.htm) | | [**Boolean Set Algebra**](http://www-ihs.theoinf.tu-ilmenau.de/~sane/projekte/BaaBma/Boole.html) | | [**Bubble, bi-directional bubble and quick sort**](http://java.sun.com/applets/applets/SortDemo/example1.html) | | [**Binary Huffman Coding demonstration**](http://www.ee.uwa.edu.au/~roberto/teach/itc314/java/Huffman/huff.html) Binary Huffman Coding demonstration | | [**Carry-select adder (8 bit)**](http://tams-www.informatik.uni-hamburg.de/applets/hades/webdemos/20-arithmetic/20-carryselect/adder_carryselect.html) | | [**Channel capacity**](http://candle.ctit.utwente.nl/Docs/wp5/tel-sys/exercises/transmission/index.html) channel capacity calculation, Nyquist's channel capacity, Shannon's channel capacity, [**Hamming code**](http://candle.ctit.utwente.nl/Docs/wp5/tel-sys/exercises/datalinkp2p/hamming74demo.html) part of[**Networking exercises**](http://candle.ctit.utwente.nl/Docs/wp5/tel-sys/exercises/) Introduction to Telematics Systems | | [**Circuit builder**](http://www.jhu.edu/~virtlab/logic/logic.htm) online logic circuit test | | [**CMOS Inverter**](http://jas.eng.buffalo.edu/education/mos/inverter/index2.html) | | [**Codage des signaux binaires**](http://educypedia.karadimov.info/library/codage.swf) swf file, en Français | | [**Column decoder simulation**](http://jas.eng.buffalo.edu/education/system/coldecoder/index.html) | | [**Combinational logic circuits and Flipflops**](http://www.csupomona.edu/~apfelzer/demos/toc.html#combinational) | | [**Combinational logic circuits and tables**](http://www.sweethaven.com/sweethaven/ModElec/digital/CombLogic/SymsTabs01.asp?iNum=1) | | [**Combinational logic virtual lab**](http://www.sweethaven.com/sweethaven/ModElec/digital/CombLogic/CombLab01.asp) set the input levels and probe the logic IC to determine the output levels. There are 16 circuits and endless possibilities | | [**Compact disc**](http://micro.magnet.fsu.edu/electromag/java/cd/) this tutorial explores how a laser beam is focused onto the surface of a spinning compact disc, and how variations between pits and lands on the disc surface affect how light is either scattered by the disc surface or reflected back into a detector, Educypedia | | [**CRC calculation**](http://www.zorc.breitbandkatze.de/crc.html) CRC calculation, CRC calculator, CRC parameters, CRC order, CRC polynom | | [**CRC code**](http://www.easics.com/webtools/crctool) Generator of synthesizable CRC functions, g(x)=1+x^5+x^12+x^16 | | [**Dansende led kubus**](http://www.youtube.com/watch?v=LeL_gW9_6Gk) | | [**Digital circuit simulator**](http://www.cise.ufl.edu/~fishwick/dig/dlesp.htm) java applet | | [**Digital circuit simulator**](http://www.softronix.com/) free software download | | [**Digitale transmissie simulator**](http://candle.ctit.utwente.nl/Docs/wp5/tel-sys/exercises/transmission/index.html) in Dutch | | [**Diode AND-OR gate**](http://server.elektro.dtu.dk/personal/ldn/javalab/Circuit17.html) digital logic with diodes | | [**DRAM Addressing**](http://educypedia.karadimov.info/library/aa-ramad.gif) | | [**DRAM**](http://www-g.eng.cam.ac.uk/mentor/IIA/VLSI/DRAM/DRAM.html) The animation shows how a single DRAM Storage Cell works | | [**DRAM Cell**](http://jas.eng.buffalo.edu/education/system/memcells/dramcell/index.html) | | [**Decimal Counter**](http://www.falstad.com/circuit/e-deccounter.html) | | [**Dynamic RAM**](http://www.falstad.com/circuit/e-dram.html) | | [**Fast Division**](http://tima-cmp.imag.fr/~guyot/Cours/Oparithm/english/DiviRa.htm) To avoid the delay of the carry propagation, the following applet uses a stack of borrow-save "BS" adders/subtractors | | [**Flip-Flop simulator**](http://www-ihs.theoinf.tu-ilmenau.de/~sane/projekte/flipflop/embed_flipflop.html) interactive Flip-Flop simulation | | [**FlipFlops**](http://maui.theoinf.tu-ilmenau.de/~sane/projekte/flipflop/flipflop.html) | | [**FlipFlops**](http://tams-www.informatik.uni-hamburg.de/applets/hades/webdemos/16-flipflops/10-srff/srff.html) basic SR flipflop, SR flipflop, clocked SR flipflop, D-latch, D-flipflop, JK-flipflop, 7476 JK-flipflop, LSSD latch, 74273 D-register, 74166 shift-register, c-gate, micropipeline, traffic light, **[Educypedia](http://educypedia.karadimov.info/index.html)** | | [**Full-adder**](http://isweb.redwoods.cc.ca.us/INSTRUCT/CalderwoodD/diglogic/full.htm) The full-adder circuit adds three one-bit binary numbers (C A B) and outputs two one-bit binary numbers, a sum (S) and a carry (C1). The full-adder is usually a component in a cascade of adders, ... | | [**Gray code**](http://www.bushytails.net/~randyg/encoder/encoderwheel.html) Optical encoder wheel generator | | [**Gray Code Counter**](http://www.falstad.com/circuit/e-graycode.html) | | [**Gray code generator**](http://www.xess.com/misc/graycode.php) Gray Code Counter Generator | | [**Half adder**](http://isweb.redwoods.cc.ca.us/INSTRUCT/CalderwoodD/diglogic/half-add.htm) The half adder is an example of a simple, functional digital circuit built from two logic gates. The half adder adds to one-bit binary numbers (AB). The output is the sum of the two bits (S) and the carry (C), ... | | [**Hamming code tool**](http://www.ee.unb.ca/cgi-bin/tervo/hamming.pl?X=+Generate+&L=7&D=3&T=0000000) Hamming code tool | | [**Interactive shift-register demos**](http://www.sweethaven.com/sweethaven/ModElec/digital/SSTopic06/default.asp) | | [**Karnaugh maps**](http://www-ihs.theoinf.tu-ilmenau.de/~sane/projekte/karnaugh/embed_karnaugh.html) Karnaugh maps simulation | | [**Karnaugh maps and PLA implementation**](http://tams-www.informatik.uni-hamburg.de/applets/kvd/index.html) demonstrates KV diagrams and logic minimization | | [**Logic calculator**](http://www.ee.umd.edu/~yavuz/logiccalc.html) computes the truth value of a logic expression comprising up to four variables | | [**Logic gates**](http://isweb.redwoods.cc.ca.us/INSTRUCT/CalderwoodD/diglogic/index.htm) common logic gates found in simple digital circuits | | [**Logic gates**](http://educypedia.karadimov.info/library/as-ptn-logic.gif) | | [**Logicly**](http://joshblog.net/projects/logic-gate-simulator/Logicly.html) Logicly simulates the boolean algebra performed by logic gates, which are a vital part of digital circuitry and computer achitecture | | [**Memory cache simulation**](http://www.dcs.ed.ac.uk/home/hase/simjava/simjava-1.2/examples/app_cache/jarindex.html) demonstrates cache associativity | | [**MOS memory**](http://jas.eng.buffalo.edu/education/system/memory/index.html) simulation of MOS memory operation | | [**NotGate**](http://www.ngsir.netfirms.com/englishhtm/NotGate.htm) | | [**Omega switching network**](http://www.dcs.ed.ac.uk/home/hase/simjava/simjava-1.2/examples/app_omega/jarindex.html) simulation of an omega network | | [**Probe**](http://www.scit.wlv.ac.uk/~cm1970/probe/webpage/probeapp.html) Internet Logic Circuit Simulation via a Java applet | | [**Propeller LED klok**](http://www.youtube.com/watch?v=11U7z0oL6F0) | | [**Propeller LED klok**](http://www.youtube.com/watch?v=Xm8-7VHRktM) | | [**Quine McCluskey**](http://www-ihs.theoinf.tu-ilmenau.de/~sane/projekte/qmc/embed_qmc.html) Quine McCluskey Minimization | | [**Ring Oscillator**](http://tams-www.informatik.uni-hamburg.de/applets/hades/webdemos/12-gatedelay/20-ringoscillator/ringoscillator.html) Ring Oscillator simulator, formed by connecting an odd number of inverters in a loop | | [**Robot**](http://www.youtube.com/watch?v=fsqlb5DZ-GQ) | | [**Robot**](http://www.youtube.com/watch?v=fsqlb5DZ-GQ) | | [**ROM memory**](http://educypedia.karadimov.info/library/animation_ROM_memory_fast.gif) ROM memory simulation | | [**Row decoder simulation**](http://jas.eng.buffalo.edu/education/system/rowdecoder/index.html) The Row Decoder of proivded in this applet is one of the decoders in the memory architecture. It's function is to provide the word line address when a word address is given by the address generator | | [**RS 232**](http://educypedia.karadimov.info/library/rs232.swf) | | [**SR Flip Flop**](http://educypedia.karadimov.info/library/bascule_RS.swf) | | [**SR Flip Flop**](http://isweb.redwoods.cc.ca.us/INSTRUCT/CalderwoodD/diglogic/srflip.htm) An SR Flip Flop is an arrangements of logic gates that maintains a stable output even after the inputs are turned off | | [**Switch Logic Applets**](http://www.neuro.gatech.edu/groups/butera/Courses/2030/readings/switch-logic/applets/index.html) | | [**Synchronous Counter**](http://www.falstad.com/circuit/e-synccounter.html) | | [**Traffic Light**](http://www.falstad.com/circuit/e-traffic.html) | | [**Treinbesturing**](http://www.youtube.com/watch?v=7BQj18iUvOI) digitale treinbesturing | | [**Truth table constructor**](http://www.brian-borowski.com/Truth/index.html) a powerful tool that draws truth tables for statements in propositional logic. It works with up to six variables, supports six connectives, and produces either T/F or 0/1 output | | Horizontaal | |  |  |