

9) Scientific and special programs.

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| Useful links: | - | Scientific Applications on Linux - many links to both OSS and proprietary applications. |
| Math system in MathCad style | Mathcad | Gap. |
| Math system in Matlab style | Matlab | 1) Matlab . [FTP] 2) Octave . (+ Gnuplot) 3) Scilab . 4) R. 5) Yorick . 6) rlab. 7) Yacas . 8) Euler . |
| Math system in Mathematica style | Mathematica | 1) Mathematica . [Prop] 2) Maxima. 3) MuPad. 4) NumExp. 5) Mathomatic . |
| Math system in Maple style | Maple | 1) Maple . [Prop] 2) Maxima . 3) MuPad . |
| Equation / math editor | Mathtype, MS Equation Editor, OpenOffice Math | 1) OpenOffice Math . 2) MathMLed . 3) Kformula (Koffice) . 4) LyX . 5) Texmacs . |
| Programs for three-dimensional modeling | SolidWorks, ... | ProEngineer Linux . [Prop] |
| Programs for three-dimensional modeling | CATIA | CATIA. It was designed under Unix, and from version 4 (2000) it was ported under Windows (not too successfully). |
| Programs for three-dimensional modeling | SolidEdge | SolidEdge (part of more powerful package Unigraphics). |
| Engineering | ANSYS | ANSYS. |
| CAD/CAM/CAE | AutoCAD, Microstation, ArchiCAD | 1) Varkon . 2) Linuxcad . [Prop, ~100\$] 3) Varicad . [Prop] 4) Cycas . [Prop] |

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| | | 5) Tomcad . 6) Thancad . 7) Fandango (alpha-version). 8) Lignumcad . 9) Giram . 10) Jcad . 11) QSCad . 12) FreeEngineer . 13) Ocadis . 14) PythonCAD . 15) OpenCascade . |
| CAD/CAM/CAE, simplified | AutoCAD Lite | Qcad . |
| Desktop Publishing Systems | Adobe PageMaker, QuarkXPress | Adobe Framemaker . [Proprietary, cancelled] |
| Small desktop publishing systems | MS Publisher | 1) Scribus - Desktop Publishing for Linux . 2) KWord . |
| Diagram and chart designer | Microsoft Visio | 1) Kivio (Koffice) . 2) Dia . 3) KChart . 4) xfig . 5) Tgif + dotty . 6) Tulip . 7) Poseidon for UML . [Prop & free versions] 8) JGraph + JGraphPad . (Java) |
| Geographic image processing software | Erdas Imagine, ER Mapper , ENVI | ENVI. |
| GIS (Geographical information system) | ArcView | All projects: FreeGIS Project . 1) Grass . 2) Quantum GIS . 3) PostGIS . 4) FreeGIS . 5) MapQuest . 6) MapBlast . |
| Interactive Geographic Data Viewer | 1) Thuban . | 1) Thuban . |
| Vectorization of bitmaps | MapEdit, Easy Trace | 1) Autotrace . |
| Software CNC, controlling machine tools | OpenCNC [Prop] | EMC . |
| Advanced text processing system in TeX style | MikTeX, emTeX (DOS) | 1) TeX . 2) TeX / LaTeX 3) LyX (WYSIWYM). 4) Kile . |
| Convenient, functional and user-friendly TeX-files / dvi-files editor. | WinEdt | 1) Kile (KDE Integrated LaTeX Environment) . 2) Ktexmaker2 . |

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| Statistical Computing Language and Environment | S-PLUS | 3) Tk LaTeX Editor . R . |
| Statistical analysis | SPSS, Statistica, SalStat | Many links - here . 1) PSPP . 2) OpenStat2 . 3) " Probability and Statistics Utilities for Linux users " 4) SalStat . |
| Econometrics Software | Eviews, Gretl | 1) Gretl . |
| Emulation of the circuit | 1) Electronic Workbench 2) Altera MaxPlus+ | 1) Geda . 2) Oregano . 3) Xcircuit . 4) Gnome Assisted Electronics . 5) SPICE . 6) SPICE OPUS . 7) NG-SPICE . |
| Program to draw chemical structures | Chemdraw , Isisdraw | Xdrawchem . |
| Downloader and player for Olympus dictophone | Olympus DSS Player | ??? |
| Market analysis | MetaStock | ??? |
| Electronics scheme design | 1) PCAD 2) OrCad 3) Visio | 1) Eagle . 2) Geda . |
| The oscilloscope emulation | Winoscillo | Xoscope . |
| Measurement of the temperature and voltages on motherboard | MBMonitor, PCAlert, Speedfan | 1) KSensors . 2) KHealthCare (KDE). 3) Gkrellm + plugins + blackbox addons. |
| S.M.A.R.T-attributes and temperature of the hard disk | Come on CD with mainboard, Active SMART | 1) smartctl . 2) Hddtemp-0.3 . 3) IDEload-0.2 . 4) Smartsuite-2.1 . 5) Smartmontools . 6) Ide-smart . 7) Smartsuite . |
| Memory testing | SiSoft SANDRA | Memtest86 . |
| Program for watching temperatures, fanspeeds, etc | SiSoft SANDRA, SiSoft SAMANTHA | 1) Ksensors . 2) Lm_sensors . 3) xsensors . 4) wmsensormon and other applets for AfterStep / WindowMaker / FluxBox. |
| HDD testing / benchmarking | SiSoft SANDRA, SiSoft | 1) hdparm . 2) Bonnie++ . |

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| | SAMANTHA, IOzone | 3) IOzone. 4) Dbench. 5) Bonnie. 6) IO Bench. 7) Nhfsstone. 8) SPEC SFS. [Prop] |
| Video testing / benchmarking | Final Reality | 1) X11perf. 2) Viewperf. |
| Realtime Control | SHA Sybera Hardware Access | DIAPM RTAI - Realtime Application Interface. |
| Simulator of nets | ??? | 1) NS. |
| Neural network simulation | ??? | 1) Xnbc. 2) Stuttgart Neural Network Simulator (SNNS). |
| "Sensor for LCD" | ??? | 1) Sensors-lcd. |
| Electrocardiogrammas viewer | ??? | 1) ecg2png. |
| A software technology, that turns x86 computer into a full-function PLC-like process controller | SoftPLC | 1) MatPLC. |
| Catalog of the software for translators | - | Linux for translators. |
| Translation memory | 1) Trados Translators Workbench 2) Deja Vu 3) Star Transit 4) SDLX 5) OmegaT | 1) OmegaT. |
| Catalog of educational software | - | 1) SchoolForge. 2) Seul / EDU. |
| Designing and viewing DTDs | NearFar Designer [Prop] | ??? |
| Finity Element Analysis | - | 1) FELT (Finity Element Analysis) |