

Project management

- Choose directory (absolute or relative)
- Choose CSV file to read
- Choose project file
- Define a suffix for the created files
- Save configuration

FEA format conversion to CSV format (script)

- Transient Analysis.
- Parametric Analysis.
- Circuit (voltage and current)
- Contour

Syntax operation on file (script)

- CSV sanity check
- Headers filtering
- Data filtering (alphabet or digit , integer, or double)
- Formatting to CSV or Tkfab (CSV with header)
- Columns extraction (sorting)
- Data formatting (scientific not., decimal point pos.)
- Data transformation (log, normalization)
- Units conversion
- Folding according to a sequence , a known period
- Assembling several files in one

Mathematical operation on file (script)

- Linear interpolation
- Linear regression

Calculator

- Operations on double and complex
- Generated data (Ex.: $z = g(x,y)$, $y = f(x)...$)
- Operations on plots (CSV files input)
- Physical constants
- Numerous statistical functions
- Visualization before export (text format)

Plots (data visualization)

- Bar graphs
- 2D plots
- Scattering plots
- Contours (colors gradient)
- 3D plots

specifications

TkFab™ 0.1 : Pack CSV (features are written in green)

Spreadsheet

- Edition by line, column or value
- Erase, insert, replace value
- Formatting, units change

2D measurements

- Value at X,Y
- Peak to peak value
- risetime, falltime, slope
- Delta X, delta Y
- Derivative

Scatter data measurements

- Mean, max, min, standard deviation
- Dpu (defects per units)
- Cpk (Process capability index)

Plot transformations

- Logarithm
- Sequence (for instance modulo 2π)
- Normalization ($y_n = y / y_{max}$ for instance)
- Transformation into scattering plots
- Spline (2D)
- Zoom (2D)

Extra functions

- Automation programming (COM)
- Units converter
- Screenshot in one click
- Data export (CSV) in one click
- Curve selection in one click.
- Direct access to configuration parameters
- Visual messages : text or led-like
- Console

Hardware

- CPU : Pentium III (years ago ...) or more recent.
- RAM : According to data volume
- Optimum : 10 000 points

Software

- QuickField for functions using ActiveField
- Windows : Xp or more recent
- Linux (2016)