

Na githube som objavil zaujímavý python script pre KiCad 😊

Z knižnice symbolov dokáže exportovať parametre do formátu .csv a to aj s užívateľom definovanými. Pre kontrolu knižníc ako stvorené.

Pochopiteľne, neobjavil som ho náhodne. Dopomohol mi miestny člen [Andy99](#), ktorý ho vytvoril a zavesil na GitHub. Ďakujem!

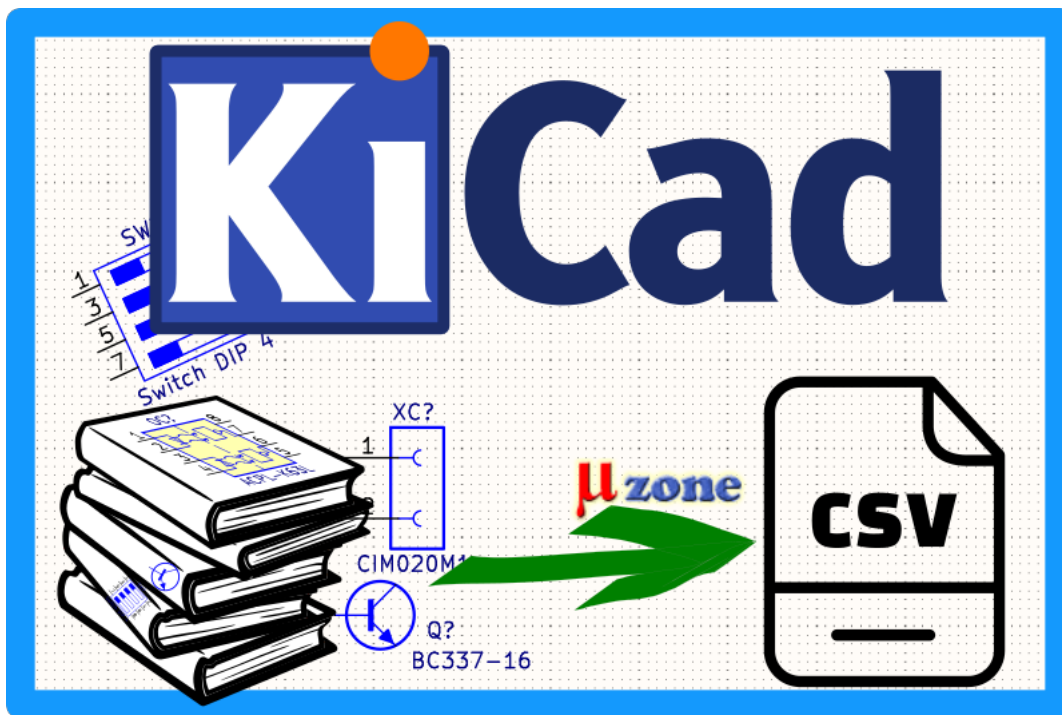
Ako teda pracuje?

Script prebehne zadanú knižnicu, alebo každú knižnicu symbolov v zadanom adresári a vyextrahuje z nich všetky polia parametrov symbolov a to aj užívateľom definované. Výstup následne uloží vo formáte csv.

Cieľom scriptu bolo dostať takýto zoznam do tabuľkového procesora, kde s použitím vhodných filtrov a zoradeniami, sa dá nájsť duplicita, chýbajúci parameter a podobne.

Tento účel script plne splňa.

Vďaka nemu vidím vo svojich knižniciach niektoré chyby a nedostatky.



Použitie

Andy99 síce popísal použitie na GitHub-e, no ja som ho použil trošku inak (Win 10).

Najskôr som nainštaloval [python3](#)

Následne som pomocou Win+R spustil command lajnu.

kde som už len zadal:

1. `kicad-export.py -i KICAD_SymbolLIB_Adresár -o Cesta_výstupnéhoCSV.csv`

A to je všetko.

Progres je asi takýto:

1.
C:\Users\EdizonTN\Documents\Workspace-KiCad\scripting\KiCad-to-csv-main>python kicad-export.py -i c:\Users\EdizonTN\Documents\Workspace-KiCad\LIB\SCH\ -o export.csv
2.
Start processing...
3.
Capacitor_Ceramic_THD2.50_50V_5perc_C0G-NP0_SRPassives.kicad_sym:220p, THD 2.50mm, 50V, +/-5% , COG/
NP0: "Checked" is missing
4.
Fuse_Eska.kicad_sym:T3,15A: "Sim.Enable" is missing
5.
Generic.kicad_sym:Mechanical Component: "Sim.Enable" is missing
6.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E107CL: "Sim.Enable" is missing
7.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E107G: "Sim.Enable" is missing
8.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E107L116.5M: "Sim.Enable" is missing
9.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E107L156.5M: "Sim.Enable" is missing
10.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E107L175M: "Sim.Enable" is missing
11.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E107L191.5: "Sim.Enable" is missing
12.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E107MT2: "Sim.Enable" is missing
13.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E72CL: "Sim.Enable" is missing
14.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E72G: "Sim.Enable" is missing
15.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E72L106.5: "Sim.Enable" is missing
16.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E72L117.75: "Sim.Enable" is missing
17.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E72L129: "Sim.Enable" is missing
18.
Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E72L140.25: "Sim.Enable" is missing

19. Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-E72MT2: "Sim.Enable" is missing
20. Mechanical_Part_Generic.kicad_sym:Italtronic-DIN Rail mount support-EV: "Sim.Enable" is missing
21. Mechanical_Part_Generic.kicad_sym:Mechanical Part Generic - non PCB: "Sim.Enable" is missing
22. Mechanical_Part_Generic.kicad_sym:Potentiometer knob 6 mm, Dia{colon}16.00, H{colon}16.00, Gray: "Sim.Enable" is missing
23. Mechanical_Part_Generic.kicad_sym:Potentiometer knob 6 mm, Dia{colon}16.00, H{colon}16.00, Red: "Sim.Enable" is missing
24. noPCB-TerminalBlockPluggable_Phoenix.kicad_sym:FK-MCP 1,5/10-STF-3,81: "Sim.Enable" is missing
25. noPCB-TerminalBlockPluggable_Phoenix.kicad_sym:FK-MCP 1,5/2-STF-3,81: "Sim.Enable" is missing
26. noPCB-TerminalBlockPluggable_Phoenix.kicad_sym:FK-MCP 1,5/3-STF-3,81: "Sim.Enable" is missing
27. noPCB-TerminalBlockPluggable_Phoenix.kicad_sym:FK-MCP 1,5/4-STF-3,81: "Sim.Enable" is missing
28. noPCB-TerminalBlockPluggable_Phoenix.kicad_sym:FK-MCP 1,5/8-STF-3,81: "Sim.Enable" is missing
29. noPCB-TerminalBlockPluggable_Phoenix.kicad_sym:MSTB 2.5/2-STF-5.08: "Sim.Enable" is missing
30. Power_Symbol.kicad_sym:+12/24V_Arrow: "Signal_Name" is missing
31. Power_Symbol.kicad_sym:+12/24V_Circle: "Signal_Name" is missing
32. Power_Symbol.kicad_sym:+12V_Arrow: "Signal_Name" is missing
33. Power_Symbol.kicad_sym:+12V_Circle: "Signal_Name" is missing
34. Power_Symbol.kicad_sym:+15V_Arrow: "Signal_Name" is missing
35. Power_Symbol.kicad_sym:+15V_Circle: "Signal_Name" is missing
36. Power_Symbol.kicad_sym:+24VEXT_Arrow: "Signal_Name" is missing
37. Power_Symbol.kicad_sym:+24VEXT_Circle: "Signal_Name" is missing
- 38.

Power_Symbol.kicad_sym:+24V_Arrow: "Signal_Name" is missing

39.

Power_Symbol.kicad_sym:+24V_Circle: "Signal_Name" is missing

40.

Power_Symbol.kicad_sym:+3V3_Arrow: "Signal_Name" is missing

41.

Power_Symbol.kicad_sym:+3V3_Circle: "Signal_Name" is missing

42.

Power_Symbol.kicad_sym:+3V_MCU_Arrow: "Signal_Name" is missing

43.

Power_Symbol.kicad_sym:+3V_MCU_Circle: "Signal_Name" is missing

44.

Power_Symbol.kicad_sym:+5V_Arrow: "Signal_Name" is missing

45.

Power_Symbol.kicad_sym:+5V_Circle: "Signal_Name" is missing

46.

Power_Symbol.kicad_sym:+Vext_Arrow: "Signal_Name" is missing

47.

Power_Symbol.kicad_sym:+Vext_Circle: "Signal_Name" is missing

48.

Power_Symbol.kicad_sym:GND_Bar: "Signal_Name" is missing

49.

Power_Symbol.kicad_sym:Ground_Shield: "Signal_Name" is missing

50.

Power_Symbol.kicad_sym:Pe_Earth: "Signal_Name" is missing

51.

Relay_Idec.kicad_sym:RJ15-C-D12: "Sim.Enable" is missing

52.

Relay_Idec.kicad_sym:RJ15-C-D24: "Sim.Enable" is missing

53.

Processing done

Výstup priebežne informuje, ktoré pole chýba pri akom prvku a v akej knižnici.

A časť výstupu v .csv vypadá takto:

1. `"Lib_PATH+FILENAME", "SYMBOLNAME", "Description", "Keywords", "Reference", "Value", "Footprint", "Datasheet", "Technology", "MFG", "MPN", "Device_Marking", "OC_LCSC", "OC_MOUSER", "OC_RS", "OC_DISTRELEC", "OC_TME", "OC_FARNELL", "OC_DIGIKEY", "OC_SOS", "Z-SYSCODE", "Assembly_Note", "Comment", "ki_fp_filters"`
2. `"c:\Users\EdizonTN\Documents\Workspace-KiCad\LIB\SCH\Audio_Loudity.kicad_sym", "LD-BZEN-0803", "Electromagnetic element polarised, 2.73kHz, 90mA, 2.5-4.5V, 85dB", "BZ", "RE", "LD-BZEN-0803", "SMD_Audio_Loudity:SPK_850X850H30-4N_LD-BZEN-0803_LOUDITY", "https://www.tme.eu/Document/2868dc86e5832ce778a426be00b7263f/ld-bzen-0803.pdf", "SMD", "Loudity", "LD-BZEN-0803", "", "", "", "", "", "LD-BZEN-0803", "", "", "", "", ""`
3. `"c:\Users\EdizonTN\Documents\Workspace-KiCad\LIB\SCH\Audio_Multicomp.kicad_sym", "ABT-410-RC", "Electromagnetic element polarised, 2048Hz, 15mA, 1-3.0V, 80dB", "BZ", "RE", "ABT-410-RC", "THD_Audio_Multicomp:SPKADV_650W60D1200H850-2N_ABT410_MULTICOMP", "https://www.farnell.com/datasheets/2861429.pdf", "THD", "Multicomp", "ABT-410-RC", "", "", "", "", "", "1022402", "", "", "", "", "", "SPKADV_650W60D1200H850-2?_ABT410_MULTICOMP*"`
4. `"c:\Users\EdizonTN\Documents\Workspace-KiCad\LIB\SCH\Audio_Murata.kicad_sym", "PKLCS1212E4001-R1", "SMD Piezo element non polarised, 65 dB (4kHz)", "BZ", "RE", "PKLCS1212E4001-R1", "SMD_Audio_Murata:SPK_1200X1200H300-2N_PLKCS_MURATA", "https://www.farnell.com/datasheets/2157985.pdf", "SMD", "Murata", "PKLCS1212E4001-R1", "", "", "", "", "", "1192551", "", "", "1813", "", "", "SPK_1200X1200H300-2?_PLKCS_MURATA*"`
5. `"c:\Users\EdizonTN\Documents\Workspace-KiCad\LIB\SCH\Audio_TDK.kicad_sym", "PS1240P02BT", "SMD Piezo element non polarised, 70 dB (4kHz), 3V", "BZ", "RE", "PS1240P02BT", "THD_Audio_TDK:SPKADV_500W65D1220H655-2N_PS12_TDK", "https://product.tdk.com/system/files/dam/doc/product/sw_piezo/sw_piezo/piezo-buzzer/catalog/piezo_electronic_buzzer_ps_en.pdf", "THD", "TDK", "PS1240P02BT", "", "C76871", "", "", "", "3267212", "", "", "", "", "", "SPKADV_500W65D1220H655-2?_PS12_TDK*"`
6. `"c:\Users\EdizonTN\Documents\Workspace-KiCad\LIB\SCH\Capacitor_Ceramic_SMD_0603_50V_X7R_Samsung.kicad_sym", "100n, SMD 0603, 50V, 10perc, X7R", "Capacitor ceramic", "", "C", "100n/50V", "SMD_Capacitor_NonPolarised_Generic:CAPC1608X80N_0603", "https://media.digikey.com/pdf/Data%20Sheets/Samsung%20PDFs/CL10B104KB8NNNC_Spec.pdf", "SMD", "Samsung", "CL10B104KB8NNNC", "", "C1591", "", "", "", "1276-1000-1-ND", "", "3062", "", "", "CAPC1608X80?_0603*"`

Script pracuje s KiCad knižnicami verzie 7.

Odkazy

GitHub stránka scriptu: <https://github.com/Mikrozone-Server/KiCad-to-csv> - sem pridávajte prípadné hlásenia o chybách alebo Vaše námety na vylepšenie

p.s.: Dovolím si upozorniť, že na GitHub-e servera mikrozone, môžete nájsť aj farebnú schému pre KiCad podľa vzoru Altium Designera. Presne tu: <https://github.com/Mikrozone-Server/KiCad-AD-Colors>