Orca Slicer Hack: Added fake line to get thumbnails to display on pad
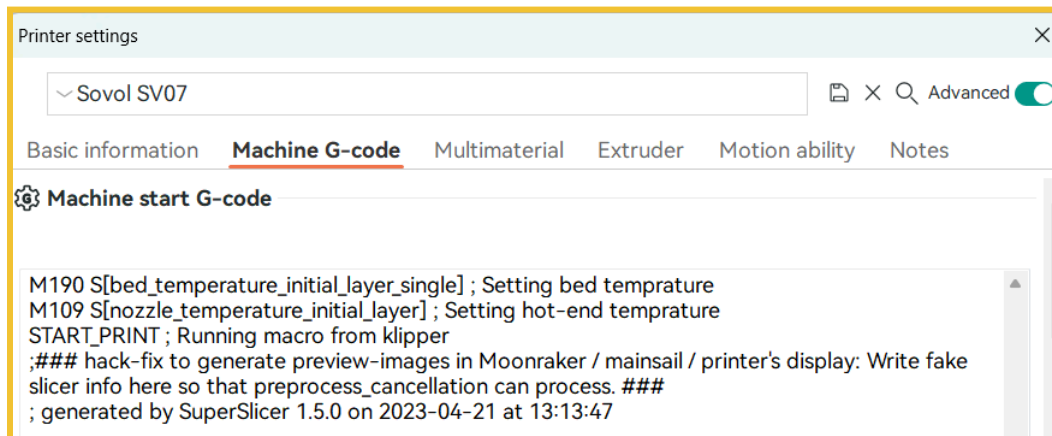
Printer settings ✕

Sovol SV07 🖫 ✕ 🔍 Advanced 🟢

Basic information   **Machine G-code**   Multimaterial   Extruder   Motion ability   Notes

⚙ **Machine start G-code**

M190 S[bed_temperature_initial_layer_single] ; Setting bed temprature
M109 S[nozzle_temperature_initial_layer] ; Setting hot-end temprature
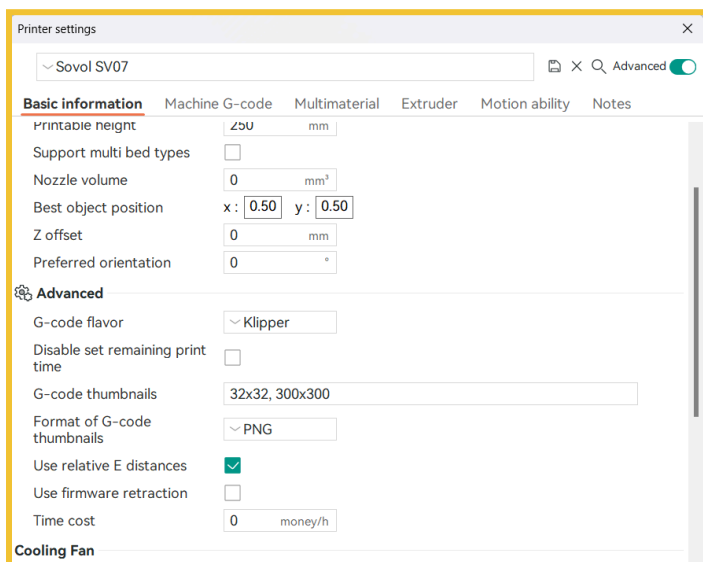START_PRINT ; Running macro from klipper
;### hack-fix to generate preview-images in Moonraker / mainsail / printer's display: Write fake slicer info here so that preprocess_cancellation can process. ###
; generated by SuperSlicer 1.5.0 on 2023-04-21 at 13:13:47

;### hack-fix to generate preview-images in Moonraker / mainsail / printer's display: Write fake slicer info here so that preprocess_cancellation can process. ###
; generated by SuperSlicer 1.5.0 on 2023-04-21 at 13:13:47

FIxed PAUSE G-code in Orca

⚙ **Pause G-code**

PAUSE
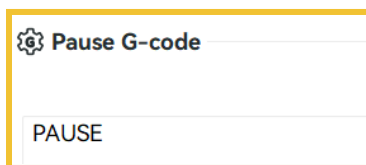
Use "Relative E distance
Check the box

Printer settings ✕

Sovol SV07 🖫 ✕ 🔍 Advanced 🟢

Basic information   Machine G-code   Multimaterial   Extruder   Motion ability   Notes

Printable height	250	mm
Support multi bed types	☐	
Nozzle volume	0	mm³
Best object position	x : 0.50 y : 0.50	
Z offset	0	mm
Preferred orientation	0	°

⚙ **Advanced**

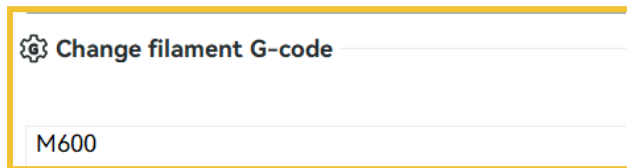|		
G-code flavor	Klipper	
Disable set remaining print time	☐	
G-code thumbnails	32x32, 300x300	
Format of G-code thumbnails	PNG	
Use relative E distances	☑	
Use firmware retraction	☐	
Time cost	0	money/h

Cooling Fan

Issue with small ooze from extruder (It rotates forward) on RESUME

Set to default(0) on the param.E line:

```
[gcode_macro RESUME]
description: Resume the actual running print
rename_existing: RESUME_BASE
gcode:
    RESPOND TYPE=echo MSG="RESUME Print!"
    ##### set defaults #####
    {% if printer["filament_switch_sensor my_sensor"].filament_detected == True %
        RESPOND TYPE=echo MSG="RESUME Print!"
        {% set e = params.E|default(0) %} #edit to your retract length WAS (1)
```

Fixed Change Filament G-Code in Orca slicer SV-07 profile

Add M600 to the slicer machine g-code

⚙ **Change filament G-code**

```
M600
```

AND add M600 macro code from the root folder "config examples/sample-macros.cfg" file located on the machine

```
############################################################
#GCODE_MACRO
############################################################

[gcode_macro M600]
gcode:
    {% set X = params.X|default(50)|float %}
    {% set Y = params.Y|default(0)|float %}
    {% set Z = params.Z|default(10)|float %}
    SAVE_GCODE_STATE NAME=M600_state
    PAUSE
    G91
    G1 E-.8 F2700
    G1 Z{Z}
    G90
    G1 X{X} Y{Y} F3000
    G91
    G1 E-50 F1000
    RESTORE_GCODE_STATE NAME=M600_state
```

Issue with heaters turning off immediately on cancel or end print

END_PRINT: Commented out M104 and M140

```
[gcode_macro END_PRINT]
gcode:
    G91 ;Relative positionning
    G1 E-2 F500 ;Retract a bit
    G1 E-2 Z0.2 F200 ;Retract and raise Z
    G1 X5 Y5 F3000 ;Wipe out
    G1 Z1 ;Raise Z more
    M106 S0 ;Turn off steppers
    #M104 S0 ;Turn-off hotend
    #M140 S0 ;Turn-off bed
    G90 ;Absolute positionning
    G1 X10 Y199 ;Present print was 210

    #M84 X Y E ;Disable all steppers but Z commented this out
    RESPOND TYPE=echo MSG="Finish Print!"
```

CANCEL_PRINT: Commented out M106, M104, M140

```
[gcode_macro CANCEL_PRINT]
description: Cancel the actual running print
rename_existing: CANCEL_PRINT_BASE
gcode:
    SAVE_VARIABLE VARIABLE=was_interrupted VALUE=False
    RUN_SHELL_COMMAND CMD=clear_plr
    clear_last_file
    G31
    TURN_OFF_HEATERS
    CANCEL_PRINT_BASE
    RESPOND TYPE=echo MSG="Cancel Print Success!"
    G91 ;Relative positionning
    G1 E-2 F500 ;Retract a bit
    G1 E-2 Z0.2 F200 ;Retract and raise Z
    G1 Z10 ;Raise Z more
    #M106 S0 ;Turn-off fan
    #M104 S0 ;Turn-off hotend
    #M140 S0 ;Turn-off bed
    G90
    G1 X10 Y210 F6000
    M84 X Y E ;Disable all steppers but Z
```

Added Idle Timeout Code:

```
[idle_timeout]
gcode:
    RESPOND TYPE=echo MSG="No operations in 10min!"
#   A list of G-Code commands to execute on an idle timeout. See
#   docs/Command_Templates.md for G-Code format. The default is to run
#   "TURN_OFF_HEATERS" and "M84"
timeout: 600
```

Fixed T0 and T1 error messages

Check the "Manual Filament Change" box

Printer settings

✓ Sovol SV07

Basic information | Machine G-code | **Multimaterial** | Extruder | Motio

Single extruder multimaterial setup

Single Extruder Multi Material ☑

Manual Filament Change ☑

Changed prime line path to run across the front of the bed

```
G92 E0      ; reset extruder
G1 Z1.0 F3000    ; move z up little to prevent scratching of surface
G1 X0.1 Y1 Z0.3 F5000.0  ; move to start-line position
G1 X100 Y1 Z0.3 F500.0 E15   ; draw 1st line
G1 X100 Y1.3 Z0.3 F5000.0  ; move to side a little
G1 X0.1 Y1.3 Z0.3 F500.0 E30  ; draw 2nd line
G92 E0      ; reset extruder
G1 Z1.0 F3000    ; move z up little to prevent scratching of surface
```

Solved "Must Home First" on Print End

Commented out the last M84 line

```
[gcode_macro END_PRINT]
gcode:
    G91 ;Relative positionning
    G1 E-2 F500 ;Retract a bit
    G1 E-2 Z0.2 F200 ;Retract and raise Z
    G1 X5 Y5 F3000 ;Wipe out
    G1 Z1 ;Raise Z more
    M106 S0
    M104 S0 ;Turn-off hotend # was 0
    M140 S0 ;Turn-off bed # was 0
    G90 ;Absolute positionning
    G1 X10 Y199 ;Present print was 210

    #M84 X Y E ;Disable all steppers but Z commented this out
    RESPOND TYPE=echo MSG="Finish Print!"
```

AND left the Orca END_PRINT g-code very simple to let the printer.cfg do the work

⚙ Machine end G-code

```
END_PRINT
```
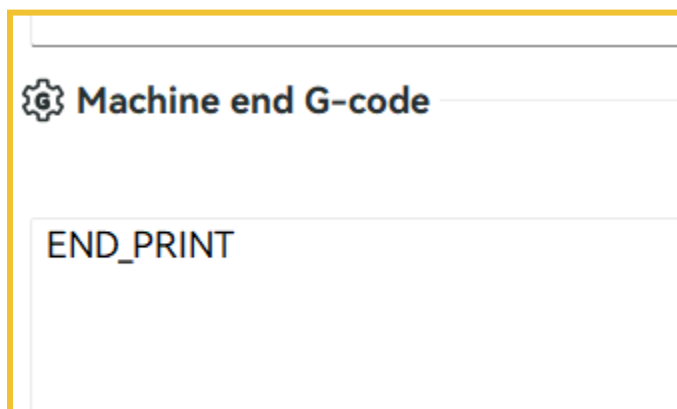
Customize the Preset Temp Settings on KlipperScreen

Using the instructions from this page:
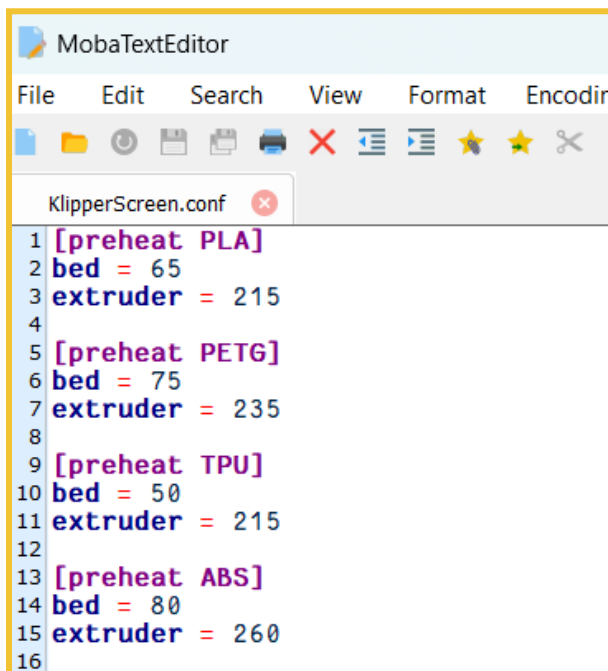### https://github.com/TheFeralEngineer/Sovol-SV07-assets
To add these assets, log into the SV07 via WinSCP **(I use MobaxTerm and SSH)**
Username: mks, Password: makerbase

1. Navigate to /home/mks/KlipperScreen/panels and right click on the temperature.py file.. Paste the lines. This will scale down the icons and change the order from Bed temp/Extruder temp to Extruder temp/Bed temp, to match the order above
2. Navigate to /home/mks/KlipperScreen/styles and paste the PETG.png and TPU.png files into your chosen theme (or all of the themes)
3. Navigate to /home/mks/KlipperScreen and add these two presets into KlipperScreen.conf

I used Mobaxterm and customized the settings and the order of the Temp Presets: