

MK4 Input Shaper 0.4 Nozzle

M17 ; enable steppers
M862.1 P[nozzle_diameter] ; nozzle diameter check
M862.3 P "MK4" ; printer model check
M862.5 P2 ; g-code level check
M862.6 P"Input shaper" ; FW feature check
M115 U5.1.0+13455

M555 X{(min(print_bed_max[0], first_layer_print_min[0] + 32) - 32)} Y{(max(0, first_layer_print_min[1]) - 4)} W{((min(print_bed_max[0], max(first_layer_print_min[0] + 32, first_layer_print_max[0]))) - ((min(print_bed_max[0], first_layer_print_min[0] + 32) - 32))} H{((first_layer_print_max[1]) - ((max(0, first_layer_print_min[1]) - 4))}

G90 ; use absolute coordinates
M83 ; extruder relative mode

M140 S[first_layer_bed_temperature] ; set bed temp
M104 T0 S{(((filament_notes[0]=~/.*HT_MBL10.*/) ? (first_layer_temperature[0] - 10) : (filament_type[0] == "PC" or filament_type[0] == "PA") ? (first_layer_temperature[0] - 25) : (filament_type[0] == "FLEX") ? 210 : (filament_type[0]=~/.*PET.*/) ? 175 : 170))} ; set extruder temp for bed leveling
M109 T0 R{(((filament_notes[0]=~/.*HT_MBL10.*/) ? (first_layer_temperature[0] - 10) : (filament_type[0] == "PC" or filament_type[0] == "PA") ? (first_layer_temperature[0] - 25) : (filament_type[0] == "FLEX") ? 210 : (filament_type[0]=~/.*PET.*/) ? 175 : 170))} ; wait for temp

M84 E ; turn off E motor

G28 ; home all without mesh bed level

G1 X{10 + 32} Y-4 Z5 F4800

M302 S160 ; lower cold extrusion limit to 160C

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{if filament_type[initial_tool]=="FLEX"}  
G1 E-4 F2400 ; retraction  
{else}  
G1 E-2 F2400 ; retraction  
{endif}
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M84 E ; turn off E motor

G29 P9 X10 Y-4 W32 H4

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{if first_layer_bed_temperature[initial_tool]<=60}M106 S100{endif}
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G0 Z40 F10000

M190 S[first_layer_bed_temperature] ; wait for bed temp

M107

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; MBL

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M84 E ; turn off E motor

G29 P1 ; invalidate mbl & probe print area

G29 P1 X250 Y0 W50 H20 C ; probe near purge place

G29 P3.2 ; interpolate mbl probes

G29 P3.13 ; extrapolate mbl outside probe area

G29 A ; activate mbl

; prepare for purge

M104 S{first_layer_temperature[0]}

M106 S128 ; turn on part cooling fan at 50% power (128 of 255) to push oozing filament to the right side

G0 X250 Y-4 Z15 F4800 ; move away and ready for the purge

M109 S{first_layer_temperature[0]}

M106 S255 ; turn on part cooling fan at 100% power (255 of 255) to push oozing from bed

G92 E0

M569 S0 E ; set spreadcycle mode for extruder

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; Extrude purge line

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G92 E0 ; reset extruder position

G1 E{(filament_type[0] == "FLEX" ? 4 : 2)} F2400 ; deretraction after the initial one before nozzle cleaning

G0 E7 X235 Z0.2 F500 ; purge

M107 ; Turn off the part cooling fan at the beginning of the purge

G0 X225 E4 F500 ; purge

G0 X215 E4 F650 ; purge

G0 X205 E4 F800 ; purge

G0 X{205 - 3} Z{0.05} F{8000} ; wipe, move close to the bed

G0 X{205 - 3 * 2} Z0.2 F{8000} ; wipe, move quickly away from the bed

G92 E0

M221 S100 ; set flow to 100%