

| Back-end | | Remark |
|-----------------------|----------------------------------|---|
| Python code | Added Function | |
| bed_thermal_adjust.py | M140 | Set Bed Temperature |
| | M190 | Set Bed Temperature and Wait |
| config_switch.py | SAVE_CONFIG_MODE | Save session variables, marked in printer.cfg |
| | TOGGLE_CONFIG_MODE | Toggle saved session variable in printer.cfg |
| rounded_path.py | ROUNDED_G0 | Rounded paths for fast travel |
| save_babies.py | SAVE_BABYSTEPS | Work with [offsets_adjust_record.cfg] to allow the ability to save baby steps. |
| tool.py | ASSIGN_TOOL | Assign tool to tool number |
| toolchanger.py | INITIALIZE_TOOLCHANGER | Initialize the toolchanger |
| | RESET_TOOL_PARAMETER | [deprecated] It is not recommended to create and save a tool parameter via the console. |
| | SAVE_TOOL_PARAMETER | [deprecated] It is not recommended to create and save a tool parameter via the console. |
| | SELECT_TOOL | Select active tool |
| | SELECT_TOOL_ERROR | [deprecated] Abort tool change and mark the active toolchanger as failed. This command will cause Klipper shutdown. |
| | SET_TOOL_PARAMETER | [deprecated] It is not recommended to create and save a tool parameter via the console. |
| | SET_TOOL_TEMPERATURE | Set temperature for tool |
| | TEST_TOOL_DOCKING | Unselect active tool and select it again |
| | UNSELECT_TOOL | Unselect active tool without selecting a new one |
| tool_probe.py | | Provide functions for other back-end code blocks |
| tool_probe_endstop.py | DETECT_ACTIVE_TOOL_PROBE | Detect which tool is active by identifying a probe that is NOT triggered |
| | SET_ACTIVE_TOOL_PROBE | Set the tool probe that will act as the Z endstop |
| | START_TOOL_PROBE_CRASH_DETECTION | Start detecting tool crashes |
| | STOP_TOOL_PROBE_CRASH_DETECTION | Stop detecting tool crashes |
| tools_calibrate.py | TOOL_CALIBRATE_PROBE_OFFSET | Calibrate the tool probe offset to nozzle tip |
| | TOOL_CALIBRATE_QUERY_PROBE | Return the state of calibration probe |
| | TOOL_CALIBRATE_SAVE_TOOL_OFFSET | Save tool offset calibration to config folder |
| | TOOL_CALIBRATE_TOOL_OFFSET | Calibrate current tool offset relative to tool 0 |
| | TOOL_LOCATE_SENSOR | Locate the tool calibration sensor |

| File | G-code | Remark |
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| config_switch.cfg | [gcode_macro CONFIG_TOGGLE] | Save current configuration, and toggle between the configuration with-dock and without-dock. |
| homing.cfg | [force_move] | Enable the ability to force the printer to move without being homed. |
| | [homing_override] | Override the default homing routine. |
| | [gcode_macro _ADJUST_Z_HOME_FOR_TOOL_OFFSET] | Correct the physical Z endstop offset, relative to T0. |
| | [gcode_macro _APPLY_ACTIVE_TOOL_GCODE_OFFSETS] | Apply active tool gcode offsets. |
| nozzle_clean.cfg | [gcode_macro CLEAN_NOZZLE] | description: [TOOL=<index>] Leave empty to clean active tool. Set tool number for specific tool. Set "A" or "a" to clean all tools. |
| | [gcode_macro _SCRUB] | Back-end function for CLEAN_NOZZLE / _CLEAN_MID_PRINT |
| | [gcode_macro _CLEAN] | |
| | [gcode_macro _CLEAN_MID_PRINT] | Clean active tool, mid print. |
| offsets_adjust_record.cfg | [gcode_macro _CURRENT_OFFSET] | Contain the variables for the current set of global offsets. |
| | [gcode_macro _RECORD] | Update the variables in _CURRENT_OFFSET |
| | [gcode_macro SAVE_CONFIG] | [gcode_macro SAVE_CONFIG] rename_existing: _SAVE_CONFIG Add the function of to save the z_offset from baby-stepping for tool-changer. |
| | [gcode_macro SET_GCODE_OFFSET] | rename_existing: _SET_GCODE_OFFSET description: [X=<pos>][X_ADJUST=<adjust>] [Y=<pos>][Y_ADJUST=<adjust>] [Z=<pos>][Z_ADJUST=<adjust>] [MOVE=<0/1>] [MOVE_SPEED=<speed>] Add the recording ability to SET_GCODE_OFFSET. |
| overwrite.cfg | [gcode_macro M104] | description: [T<index>] [S<temperature>] Set tool temperature. T= Tool number, optional. If this parameter is not provided, the current tool is used. S= Target temperature |
| | [gcode_macro M109] | description: [T<index>] [S<temperature>] Set tool temperature and wait. T= Tool number, optional. If this parameter is not provided, the current tool is used. S= Target temperature |
| | [gcode_macro M106] | description: Override "M106" to allow multiple extruders. T= Tool number, optional. If this parameter is not provided, the current tool is used. S= Target temperature |
| | [gcode_macro M107] | description: Override "M107" to allow multiple extruders. T= Tool number, optional. If this parameter is not provided, the current tool is used. |
| | [gcode_macro BED_MESH_CALIBRATE] | description: { BASE_BED_MESH_CALIBRATE ADAPTIVE=1 } But, accounting for tool_z_offset. |
| | [gcode_macro QUAD_GANTRY_LEVEL] | Check calibration probe and initialise toolhead before QGL. |
| | [gcode_macro _CPI_CHECK] | |
| | [gcode_macro _QGL] | Back-end function for QUAD_GANTRY_LEVEL |
| print_time_default.cfg | [gcode_macro PRINT_START] | Print time macros |
| | [gcode_macro PRINT_END] | |
| | [gcode_macro PAUSE] | |
| | [gcode_macro RESUME] | |
| | [gcode_macro CANCEL_PRINT] | |
| | [gcode_macro _TOOLCHANGER_TURN_OFF_FANS] | Back-end function for PRINT_END |
| tool_calibrate.cfg | [gcode_macro CALIBRATE_OFFSETS] | description: [TOOL=<index>] Offsets calibration |
| | [gcode_macro CALIBRATE_ABSOLUTE_Z] | description: [TOOL=<index>] Absolute z offset calibration, in reference to the bed. This function is for calibration probes that can't be used for the calibration of the absolute z. |
| | _CALIBRATE_ABSOLUTE_Z_VARIABLE | Back-end functions for CALIBRATE_ABSOLUTE_Z. It has to be done this way to overcome some Klipper quirks with handling variables. |
| | _PROBE_START | |
| | _PROBE_TOOL | |
| | _PROBE_CENTRE | |
| | _RECORD_CURRENT_POSITION | |
| | _RECORD_PROBE_DEVIATION | |
| | _CALCULATE_Z_OFFSET | |
| | _SAVE_Z_OFFSET | |
| | _CALIBRATE_MOVE_OVER_PROBE | |
| | [gcode_macro _CHECK_PROBE] | Back-end functions for CALIBRATE_OFFSETS. |
| | [gcode_macro _CALIBRATE_OFFSETS] | |
| * Unlike macros in other files, these are all back-end functions, either for each others or for the relevant section in misschanger_settings.cfg toolchanger.cfg | [gcode_macro _fan_speed] | Back-end function for _BEFORE_SELECT_TOOL |
| | [gcode_macro _BEFORE_SELECT_TOOL] | description: [TOOL=<index>] routine to be completed before SELECT_TOOL. Including: - part fan control |
| | [gcode_macro _AFTER_SELECT_TOOL] | description: [TOOL=<index>] routine to be completed after SELECT_TOOL. including: - check for tool-change failures - turning on/off crash detection - restore position |
| | [gcode_macro _TOOL_BEFORE_CHANGE] | Back-end function for SELECT_TOOL. description: [TOOL=<index>] |
| | [gcode_macro _TOOL_AFTER_CHANGE] | |
| | [gcode_macro _TOOL_DROPOFF] | |
| | [gcode_macro _TOOL_PICKUP] | |
| | [gcode_macro _print_time] | Print time static variables |
| | [gcode_macro _TAP_PROBE_ACTIVATE] | Prevent probing if the nozzle is too hot |
| | [gcode_macro _INITIALIZE_FROM_DETECTED_TOOL] | Initial from detected tool |
| | [gcode_macro _TOOLCHANGER_CRASH] | Crash routine. |