

		Instructions using Marlin 2.0				
Basic						
	In Configuration.h					
		Update #define BAUDRATE 250000				
		Update #define MOTHERBOARD BOARD_BIGTREE_SKR_V1_4_TURBO				
		Update #define DEFAULT_AXIS_STEPS_PER_UNIT { 79.77, 79.77, 400, 391.80 } for esteps. Last measured value. X and Y are 80 by default				
		Update #define DEFAULT_MAX_FEEDRATE { 500, 500, 5, 40 } (default value for E was 25)				
		Update #define DEFAULT_MAX_ACCELERATION { 500, 500, 100, 8000 } (default value for E was 5000)				
		Update to last known PID #define DEFAULT_Kp 26.81 #define DEFAULT_Ki 2.18 #define DEFAULT_Kd 82.25				
		Update #define TEMP_SENSOR_0 5				
		Update #define INVERT_E0_DIR false (for some reason plugged cables are inverted or something)				
		Update #define PREHEAT_1_TEMP_HOTEND 210 (original 185)				
		Update #define PREHEAT_1_TEMP_BED 60 (original 45)				
		Update #define PREHEAT_2_TEMP_BED 80 (original 0)				
		Uncomment #define NOZZLE_PARK_FEATURE				
	In Configuration_adv.h					
		Uncomment #define ADVANCED_PAUSE_FEATURE (to enable filament change in the menu)				
		Update #define PAUSE_PARK_NOZZLE_TIMEOUT 60 (original 45)				
		Uncomment #define PARK_HEAD_ON_PAUSE (to pause print and park nozzle when doing filament change from menu)				
		Update #define FILAMENT_CHANGE_UNLOAD_LENGTH 50 (shorter distance for direct drive)				
		Update #define FILAMENT_CHANGE_FAST_LOAD_LENGTH 50				
		Uncomment #define FILAMENT_LOAD_UNLOAD_GCODES (to add load/unload to menu)				
		Update #define E0_AUTO_FAN_PIN P2_04 (to use SKR 1.4 pin instead of default pin)				
		Uncomment #define LCD_SET_PROGRESS_MANUALLY (so that progress can be set from gcode)				
		Uncomment #define SHOW_REMAINING_TIME (so that progress can be set from gcode)				
		Uncomment #define USE_M73_REMAINING_TIME (so that progress can be set from gcode)				
Bed PID						
	In Configuration.h					
		Uncomment #define PIDTEMPBED				
		Update to this new default values #define DEFAULT_bedKp 295.08 #define DEFAULT_bedKi 51.18 #define DEFAULT_bedKd 425.32				
MKS TFT						
	In Configuration.h					
		Make sure #define SERIAL_PORT -1 (USB serial is enabled)				
		Uncomment and make sure #define SERIAL_PORT_2 0 (TFT connected to AUX-1. TFT needs to use same BAUDRATE defined above)				TFT Disabled for now so runout filament sensor works fine

BLTouch					
	In Configuration.h				
		Update #define Z_MIN_PROBE_ENDSTOP_INVERTING false . (default false value is ok. Conditionals+LCD.h will overwrite too)			
		Uncomment #define BLTOUCH			
		Update #define NOZZLE_TO_PROBE_OFFSET { +58.9, -15, -3.06 }			
		Comment out #define MIN_SOFTWARE_ENDSTOP_Z			
		Uncomment #define AUTO_BED_LEVELING_BILINEAR			
		Uncomment #define Z_SAFE_HOMING			
		Update #define X_BED_SIZE 220 (default was 235)			
		Update #define Y_BED_SIZE 209 (default was 235)			
		Update #define X_MIN_POS -1.4 (default was 0)			
		Update #define Y_MIN_POS -27 (default was 0)			
	In Configuration_adv.h				
		Uncomment #define BABYSTEP_ZPROBE_OFFSET			
		Update #define BABYSTEP_MULTIPLICATOR_Z 5 (5 is new value. could be higher if desired)			
	In pins\lpc1768\pins_BTT_SKR_V1_4.h				
		Update #define Z_STOP_PIN P0_10 (Z_STALL_SENSITIVITY not defined so change in ELSE branch)			
TMC2209 UART					
	In Configuration.h				
		Uncomment and Update #define X_DRIVER_TYPE TMC2209 #define Y_DRIVER_TYPE TMC2209 #define Z_DRIVER_TYPE TMC2209 #define E0_DRIVER_TYPE TMC2209			
	In Configuration_adv.h				
		Uncomment #define MONITOR_DRIVER_STATUS (to monitor driver from gcode)			
		Uncomment #define HYBRID_THRESHOLD (default threshold seem ok for speed I'm using .. 70 max and 180 for travel)			
		Uncomment #define TMC_DEBUG (to debug driver from gcode)			
		Update #define X_HYBRID_THRESHOLD 83 (original value 100)			
		Update #define Y_HYBRID_THRESHOLD 83 (original value 100)			
		Update #define E0_CURRENT 846 (new value for Hemera)			
		Uncomment #define SENSORLESS_HOMING			
		Uncomment #define IMPROVE_HOMING_RELIABILITY (testing to see if homing works better). No difference so disabling again			
		Update #define X_HOME_BUMP_MM 0 (original value 5)			
		Update #define Y_HOME_BUMP_MM 0 (original value 5)			
		Update #define X_STALL_SENSITIVITY 60 (original 8)			
		Update #define Y_STALL_SENSITIVITY 60 (original 8)			
Filament sensor					
	In Configuration.h				

		Uncomment #define FILAMENT_RUNOUT_SENSOR (by default will use P1_28. Connect to X+ max endstop)				
Linear Advance						
	In Configuration.h					
		Uncomment #define S_CURVE_ACCELERATION				
		Update #define JUNCTION_DEVIATION_MM 0.1 (original 0.02)				
	In Configuration_adv.h					
		Uncomment #define LIN_ADVANCE				
		Update #define LIN_ADVANCE_K 0.07				
		Uncomment #define SQUARE_WAVE_STEPPING				
		Comment out #define STEALTHCHOP_E				
		Uncomment and Update #define MINIMUM_STEPPER_PULSE 2				
		Before flashing new firmware: Retrieve current settings and keep them in Atom				
		M503				
		M122				
		Copy new firmware with command				
		cp .pio/build/LPC1769				
		scp firmware.bin octopi2:/media/usb0				