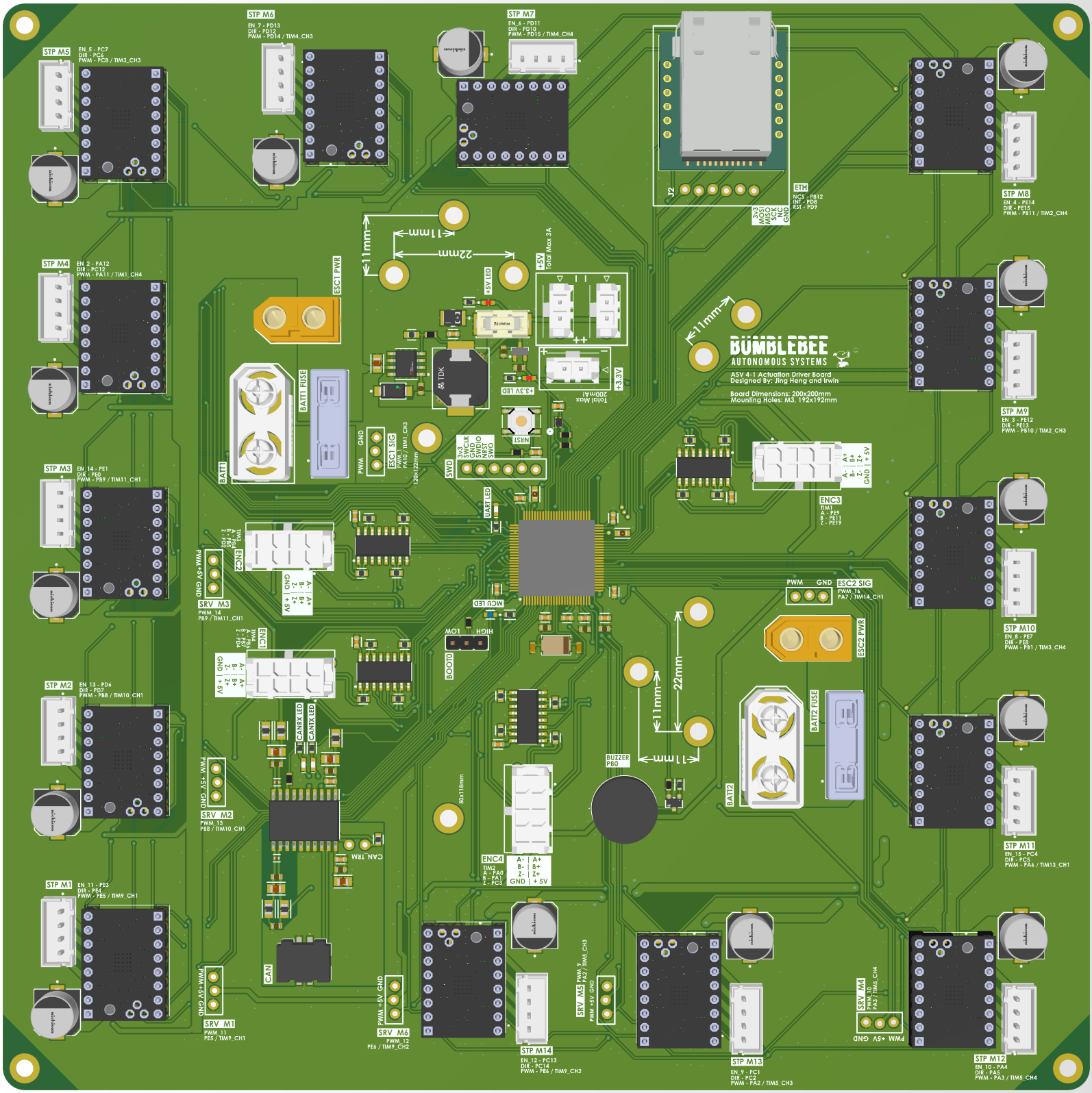
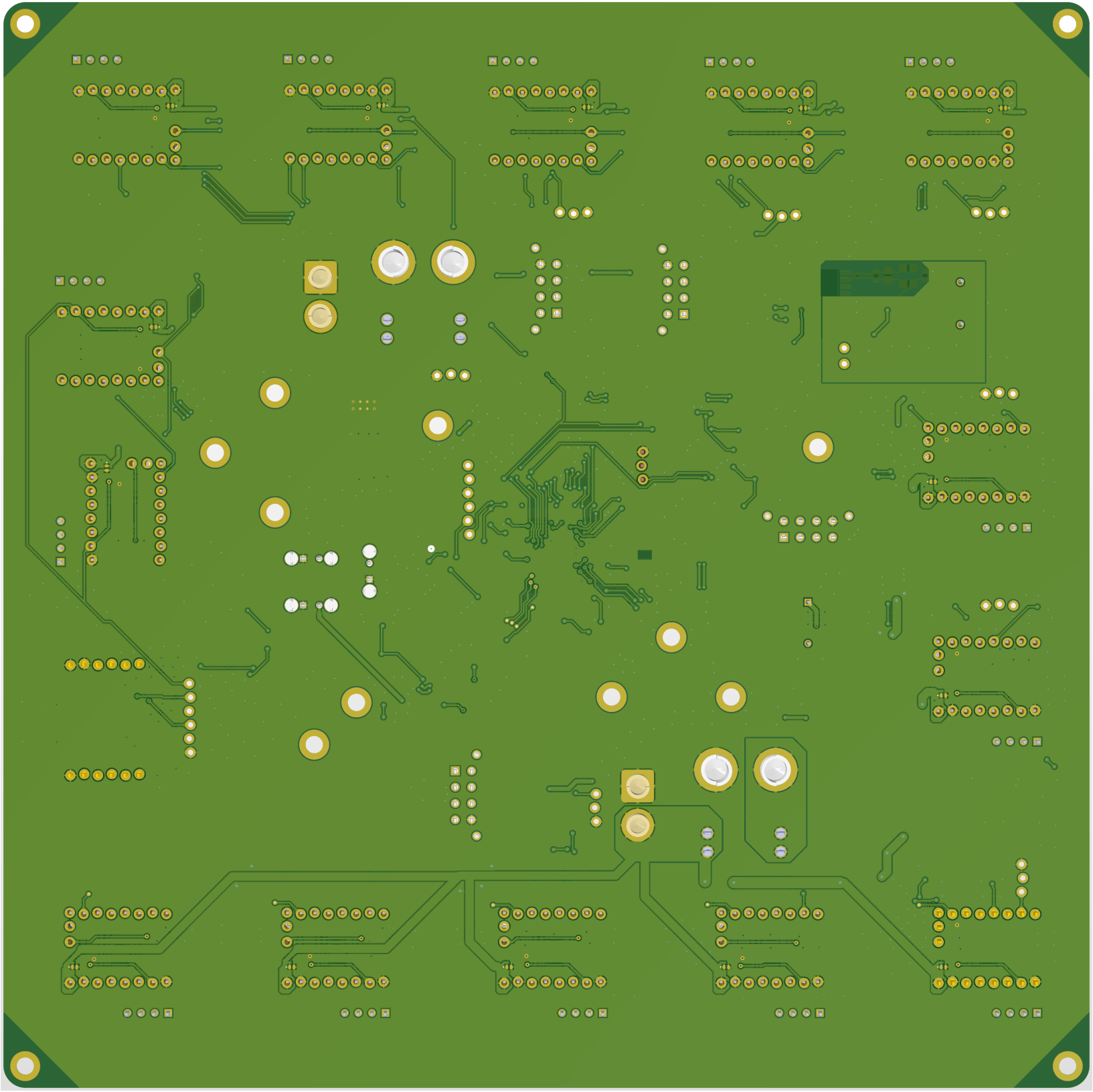
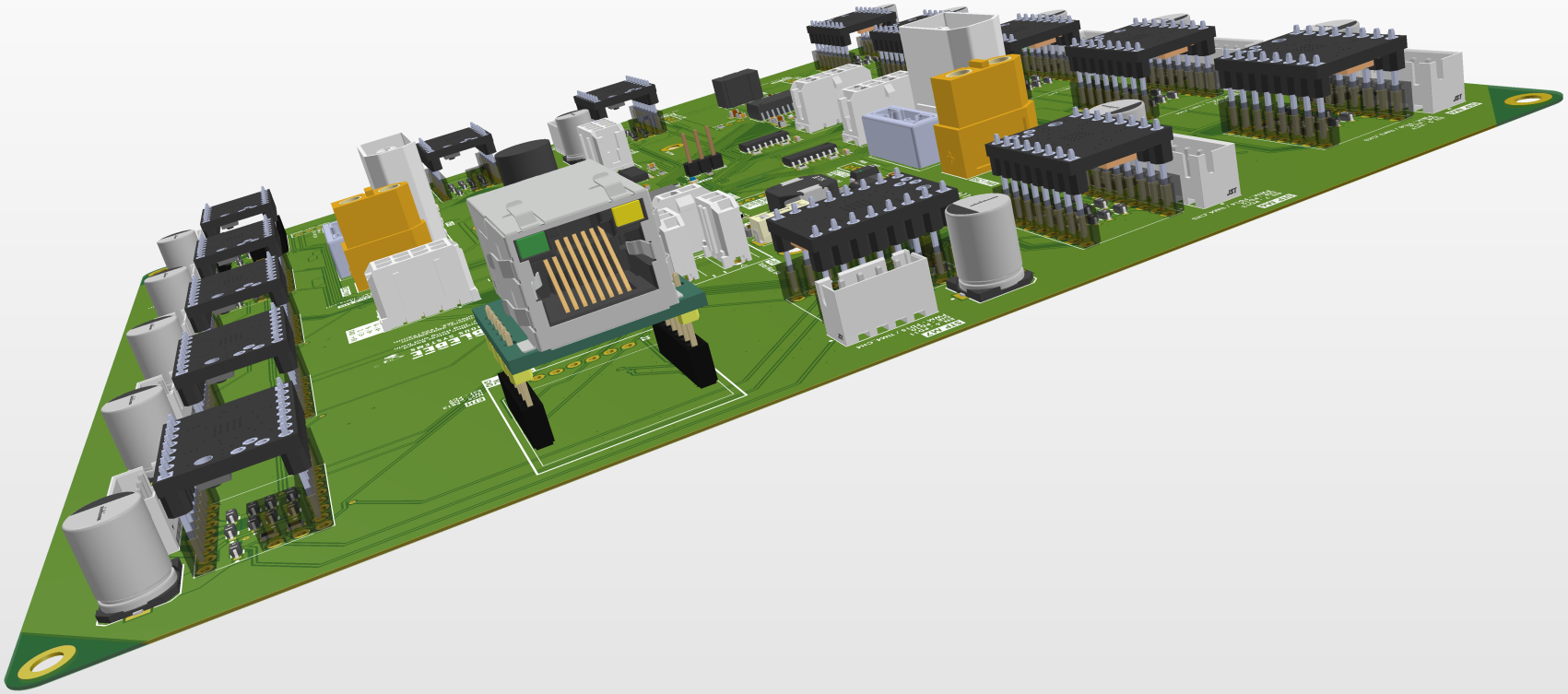

STP M5
EN 5 - PC7
DIR - PC6
PWM - PC8 / TIM3_CH3
STP M6
EN 7 - PD13
DIR - PD12
PWM - PD14 / TIM4_CH3
STP M7
EN 6 - PD11
DIR - PD10
PWM - PD15 / TIM4_CH4
STP M8
EN_4 - PE14
DIR - PE15
PWM - PB11 / TIM2_CH4
STP M4
EN 2 - PA12
DIR - PC12
PWM - PA11 / TIM1_CH4
STP M9
EN_3 - PE12
DIR - PE13
PWM - PB10 / TIM2_CH3
STP M3
EN_14 - PE1
DIR - PE0
PWM - PB9 / TIM11_CH1
STP M10
EN_8 - PE7
DIR - PE8
PWM - PB1 / TIM3_CH4
STP M2
EN_13 - PD6
DIR - PD7
PWM - PB8 / TIM10_CH1
STP M11
EN_15 - PC4
DIR - PC5
PWM - PA6 / TIM13_CH1
STP M1
EN_11 - PE3
DIR - PE4
PWM - PE5 / TIM9_CH1
STP M14
EN_12 - PC13
DIR - PC14
PWM - PE6 / TIM9_CH2
STP M13
EN_9 - PC1
DIR - PC2
PWM - PA2 / TIM5_CH3
STP M12
EN_10 - PA4
DIR - PA5
PWM - PA3 / TIM5_CH4
ETH
NCS - PB12
INT - PD8
RST - PD9
3V3
MOSI
MISO
SCK
NC
GND
J2
ESC1 PWR
BATT1 FUSE
BATT1
ESC1 SIG
PWM
GND
PA10 / TIM1_CH3
120x122mm
+5V LED
+5V
Total Max 3A
+3.3V LED
+3.3V
Total Max 200mA
NRST
SWD
3V3
SWCLK
GND
SWDIO
NRST
SWO
UART LED
MCU LED
BOOT0
HIGH
LOW
ENC2
TIM3
A - PB4
B - PB5
Z - PD2
A- | A+
B- | B+
GND | + 5V
PWM +5V GND
SRV_M3
PWM_14
PB9 / TIM11_CH1
ENC1
TIM4
A - PD12
B - PB7
Z - PD3
A- | A+
B- | B+
GND | + 5V
CANRX LED
CANTX LED
PWM +5V GND
SRV_M2
PWM_13
PB8 / TIM10_CH1
CAN TRM
CAN
PWM +5V GND
SRV_M1
PWM_11
PE5 / TIM9_CH1
PWM +5V GND
SRV_M6
PWM_12
PE6 / TIM9_CH2
50x118mm
ENC4
TIM2
A - PA0
B - PA1
Z - PC3
A- | A+
B- | B+
Z- | Z+
GND | + 5V
BUZZER
PB0
11mm
22mm
BÜMBLEBEE
AUTONOMOUS SYSTEMS
ASV 4-1 Actuation Driver Board
Designed By: Jing Heng and Irwin
Board Dimensions: 200x200mm
Mounting Holes: M3, 192x192mm
ENC3
TIM1
A - PE9
B - PE11
Z - PE19
A- | A+
B- | B+
Z- | Z+
GND | + 5V
PWM GND
ESC2 SIG
PWM_16
PA7 / TIM14_CH1
ESC2 PWR
BATT2 FUSE
BATT2
SRV_M5
PWM 9
PA2 / TIM5_CH3
PWM +5V GND
SRV_M4
PWM 10
PA3 / TIM5_CH4
PWM +5V GND



STP-MT1
EN : PC7
PWM : PA7 / TIM3_CH2
STP-MT3
EN : PC1
PWM : PA2 / TIM5_CH3
STP-MT2
EN : PC4 PA4
PWM : PA3 / TIM5_CH4
JST
GND 5V PWM