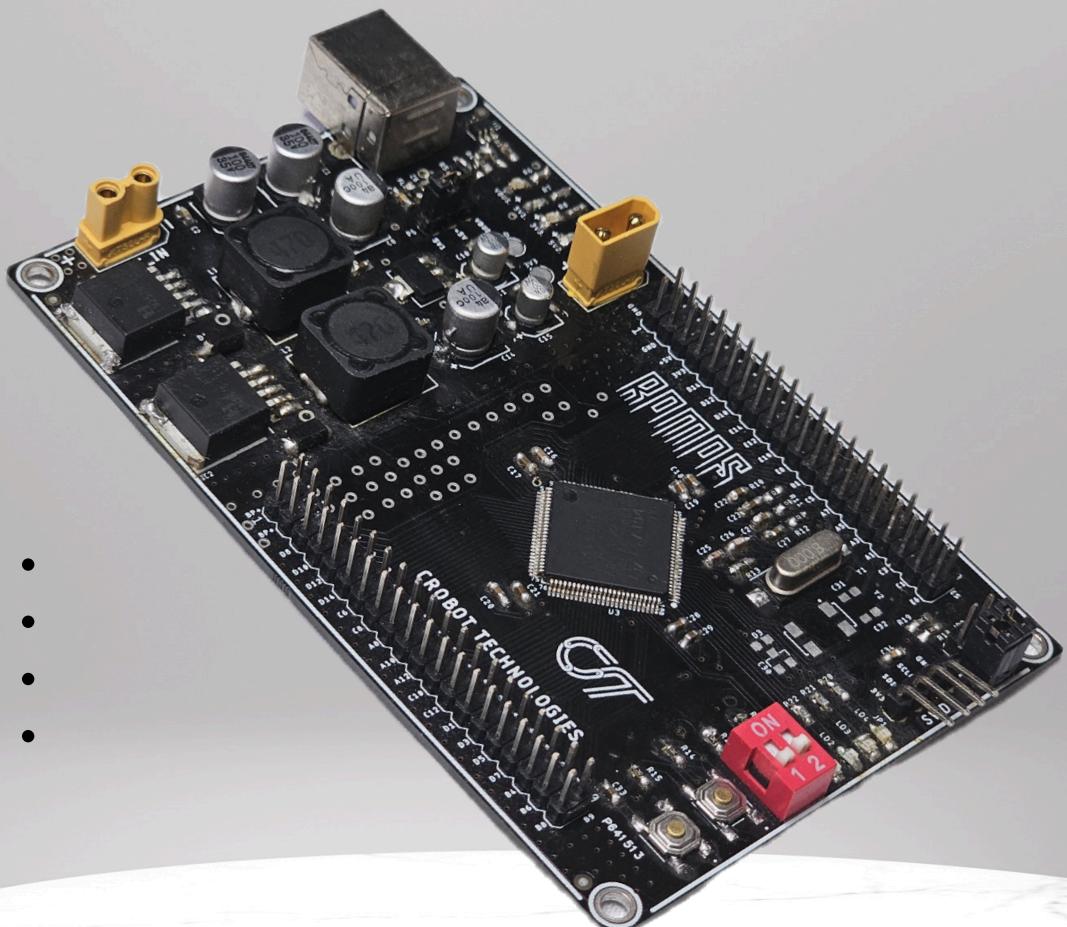


**EXPLORE THE WONDERS  
OF ROBOTICS**

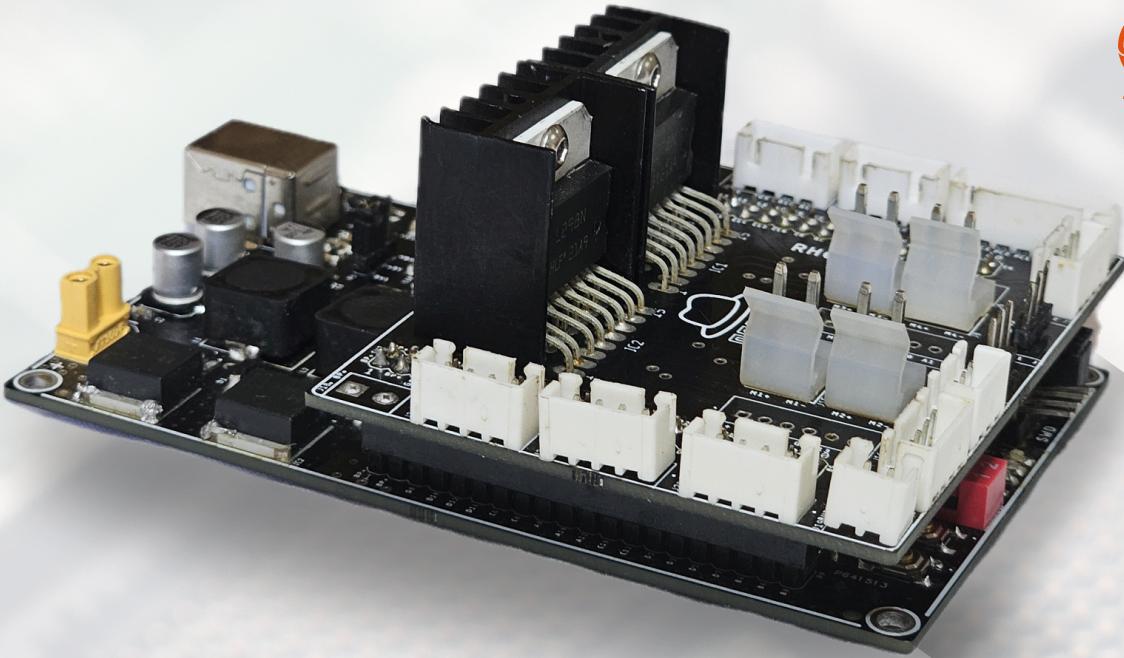
**WITH**

**ROMOS**



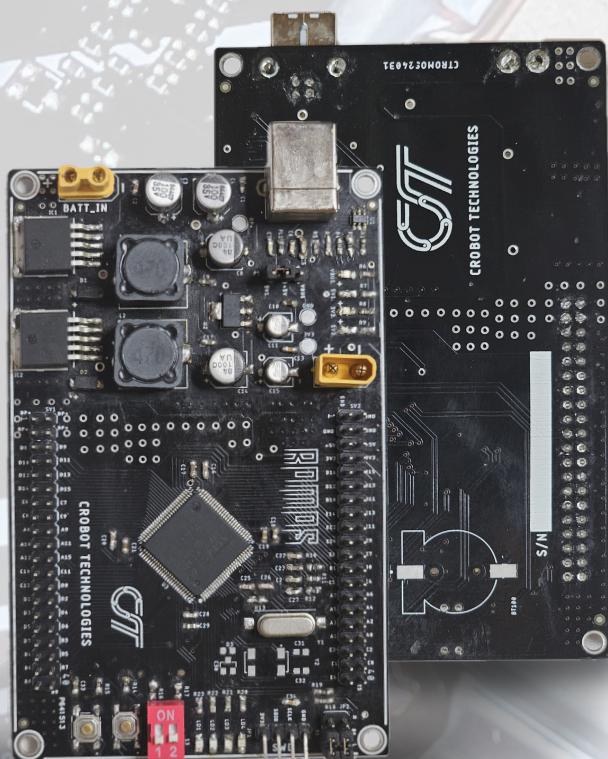
**ROMOS**

**CROBOT TECHNOLOGIES PRIVATE LIMITED**



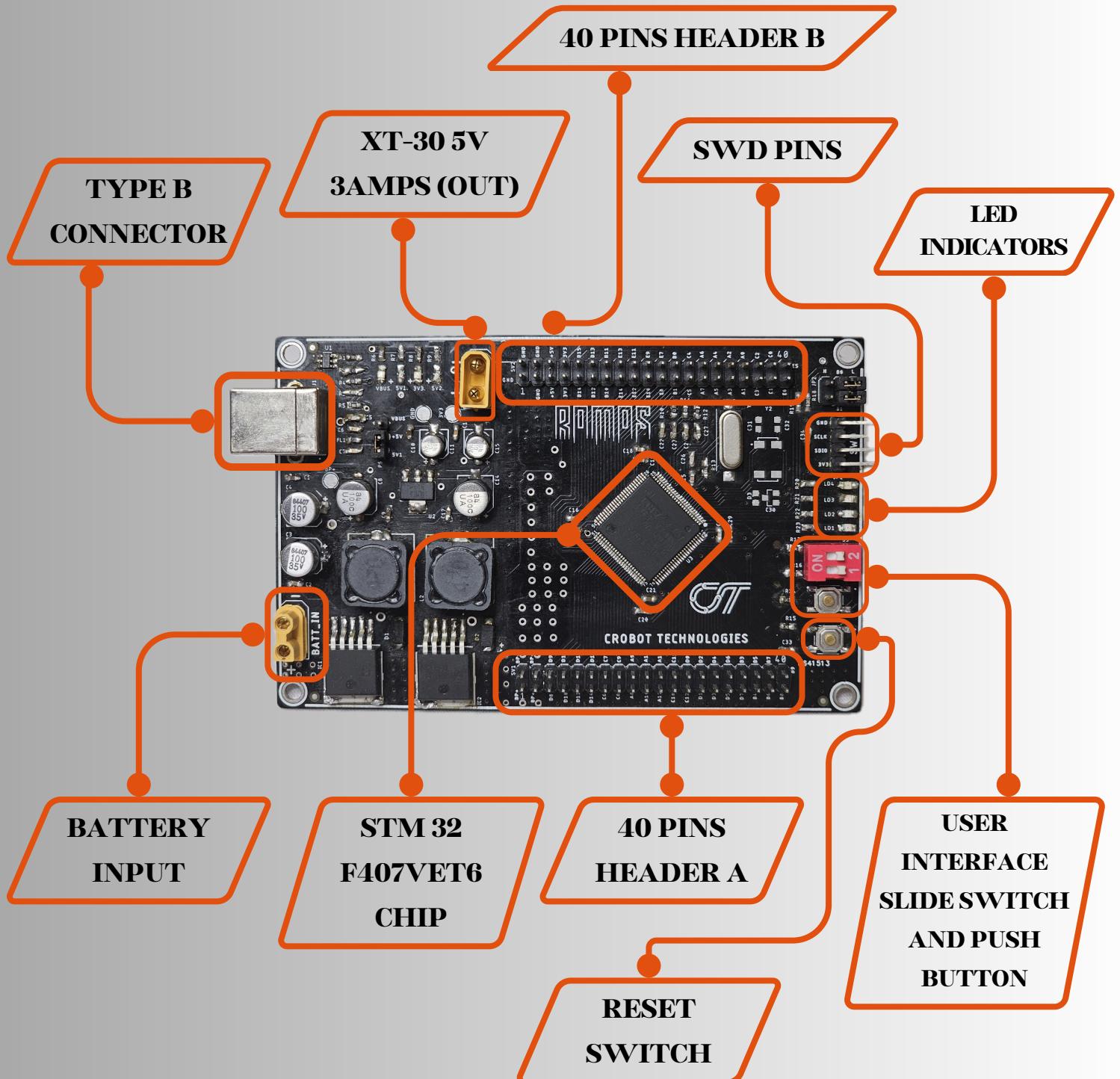
Robot on Metal Oxide Semiconductor (ROMOS), a developer module based on the STM32 microcontroller, empowers both robot enthusiasts and novices to dive into robot building with ease, minimizing wire clutter. Its industrial-grade design facilitates direct engagement in robotics projects. ROMOS is ingeniously crafted to accommodate the creation of personalized interface modules or HATs using the onboard power modules and GPIO expander. Moreover, CROBOT extends its offerings with a specialized motor driver HAT, leveraging the L298N technology. This driver HAT facilitates seamless connection of up to four individual DC motors, each capable of handling a maximum current rating of 2 A, catering to a diverse range of robotic applications.

# BOARD FEATURES

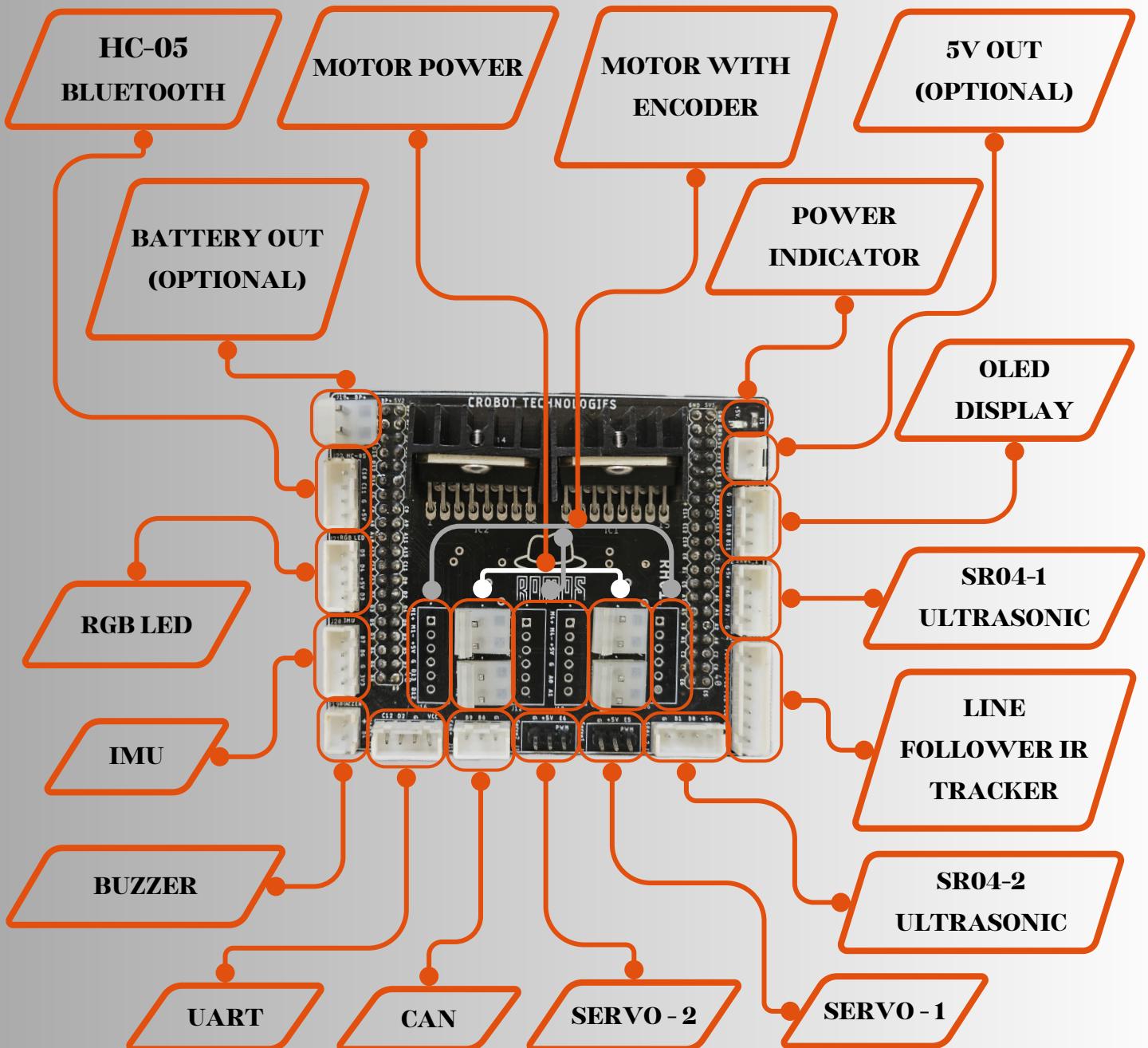


- 1. MICROCONTROLLER : STM32F407VET6**
- 2. CORE : HIGH-PERFORMANCE ARM CORTEX -M4 32-BIT RISC**
- 3. OPERATING FREQUENCY : 168 MHZ**
- 4. INPUT VOLTAGE : UPTO 40 V DC MAXIMUM**
- 5. 80 PIN GPIO EXPANDER FOR POWER TRANSFERS AND I/O'S**
- 6. ON BOARD USB TYPE B CONNECTOR WITH ESD PROTECTION**
- 7. SELECTION PIN FOR USB POWERING OR BATTERY POWERING**
- 8. ON BOARD LED INDICATORS FOR ALL POWER MODULES**
- 9. RTC INTERFACE PROVISION**
- 10. 5 V REGULATOR - 2 NOS RATED @ 3 A MAXIMUM EACH**
- 11. ON BOARD SWD PROGRAMMING OPTION**
- 12. 4 LED INTERFACE, 2 SLIDE SWITCHES AND 1 PUSH SWITCH AVAILABLE ONBOARD FOR TESTING**

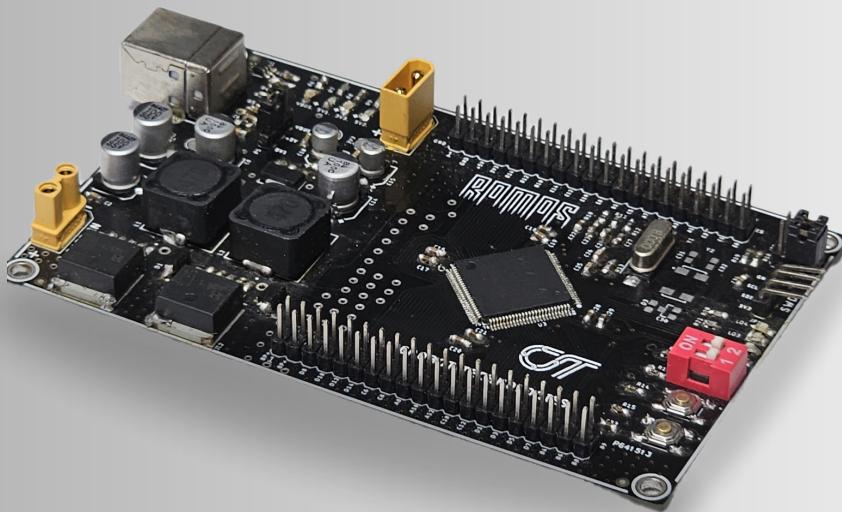
# OVERVIEW



# OVERVIEW



# PIN CONFIGURATION



**40 PINS HEADER A**

BP+	1	2	BP+
BP+	3	4	BP+
PD8	5	6	PD9
PD10	7	8	PD11
PD12	9	10	PD13
PD14	11	12	PD15
PC6	13	14	PC7
PC8	15	16	PC9
PA8	17	18	PA9
PA10	19	20	PA11
PA12	21	22	PA15
PC10	23	24	PC11
PC12	25	26	PD0
PD1	27	28	PD2
PD3	29	30	PD4
PD5	31	32	PD6
PD7	33	34	PB3
PB4	35	36	PB5
PB6	37	38	PB7
PB8	39	40	PB7

**40 PINS HEADER B**

GND	41	42	GND
GND	43	44	GND
+5V	45	46	+5V
3V3	47	48	3V3
PB14	49	50	PB15
PB12	51	52	PB13
PB10	53	54	PB11
PE14	55	56	PE13
PE12	57	58	PE11
PE10	59	60	PE9
PE8	61	62	PE7
PB1	63	64	PB0
PC5	65	66	PC4
PA7	67	68	PA6
PA5	69	70	PA4
PA3	71	72	PA2
PA1	73	74	PA0
PC3	75	76	PC2
PC1	77	78	PC0
PE6	79	80	PE5

NOTE : BP (BATTERY POWER), P FOR PORT EX: PA - PORT A