

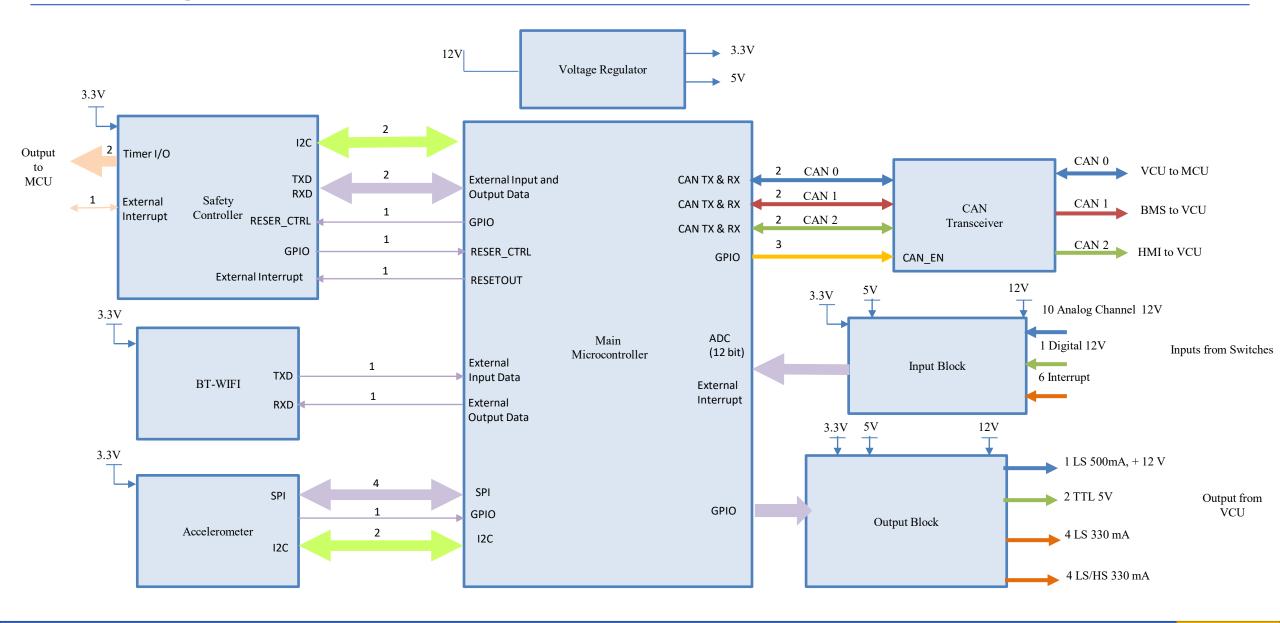
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ISO 9001:2015 Certified

Sloki Vehicle Control Unit for Electric 2 Wheelers

VCU Block Diagram





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ECU Dimensions & Actual PCB Pictures









Dimensions in mm



	Α	В	С	D	E	F	G	Н	J	K	L	M
1	5V	Digital Output_5V,100mA	5V	DIGITAL INPUT_12V ACTIVE_HIGH	CANL_1	CANH_1	CANL_0	CANH_0	CANL_2	CANH_2	LOW SIDE SWITCH_12V,1.2A	12V
2	5V	Digital Output_5V,100mA	GND	DIGITAL INPUT_12V ACTIVE_HIGH	Digital Input_Pull UP_12V	GND	GND	GND	GND	GND	GND	12V
3	Digital Output_12V,330mA	Digital Output_12V,330mA	Digital Output_12V,330mA	Digital Output_12V≤VCC≤42V,330mA	DIGITAL INPUT_12V ACTIVE_HIGH	Headlight_High	DIGITAL INPUT_12V ACTIVE_HIGH	GND				
4	Digital Output_12V,330mA	Digital Output_12V,330mA	Digital Output_12V,330mA	GND	DIGITAL INPUT_12V ACTIVE_HIGH	GND						



2 Wheeler Vehicle Control Unit for Electric Vehicle

Software Features/Specifications:

- ➤ Controlling motor by communicating with Motor Control Unit.
- ➤ Communicate with HMI via CAN for Displaying information.
- ➤ Communicate with BMS using CAN to monitor Battery voltages, SOC, power drawn, temperatures, etc.
- Broadcast information to Smartphone via Bluetooth Connectivity.
- ➤ Key-less go function if it is connected to authenticated smartphone via BLE.
- > Safe mode will be triggered automatically by the VCU if system temperature exceeds preliminary safe limits or vehicle is fallen down.
- > CAN based communication.



Images of the VCU





Parameter	Range
Family and series	32 bit controller
Bit Size	32
Program Memory (KB)	512
RAM (KB)	64
Data Flash (KB)	64
Program Memory Type	Flash Memory
Pin Count	80
Max. Freq (MHz)	120
Operating Voltage (V)	3.0 to 5.5
On-chip Oscillator Freq. (MHz)	8 MHz, Low Speed: 240 kHz
External Interrupt Pins	13
I/O Ports	64
16-bit Timer (ch)	32
32-bit Timer (ch)	16

Parameter	Range
Watchdog Timer (ch)	2
Other Timers	Timer for OS x 1ch, Encoder timer x 1ch
PWM Output	24
10-bit A/D Converter (ch)	14
12-bit A/D Converter (ch)	11
CAN (ch)	3
Clocked Serial Interface (ch)	4
SPI (ch)	4
UART (ch)	3
I2C (ch)	2
LIN (ch)	5
Operating Temperature (°C)	-40 to - 125





Quick Customization

New Layout and Software

Development within 1 to 3

Months



Cater to Start-ups with Low volume req. (~500/1000)



Complete
Design/Components
Automotive grade





Flexible and Adaptable Team

VCU Product Manufacturing Support



- 1. Sloki team can support the production through its established eco-system of contract manufacturer within India.
- 2. Genuine channel partner for component procurement.
- 3. Production handling capabilities: Volume of 2K up-to 200K per Year.
- 4. Low volume support during vehicle launch stage: 1000/2000 Qty.
- 5. Certification Support: Sloki can support customer for Product Certification at reasonable handling charges.
- 6. Custom Design: Sloki team can support designing the custom VCU requirements and deliver the prototype samples within 2 to 3 months of time.



Thank You

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