Sloki Software Technologies LLP
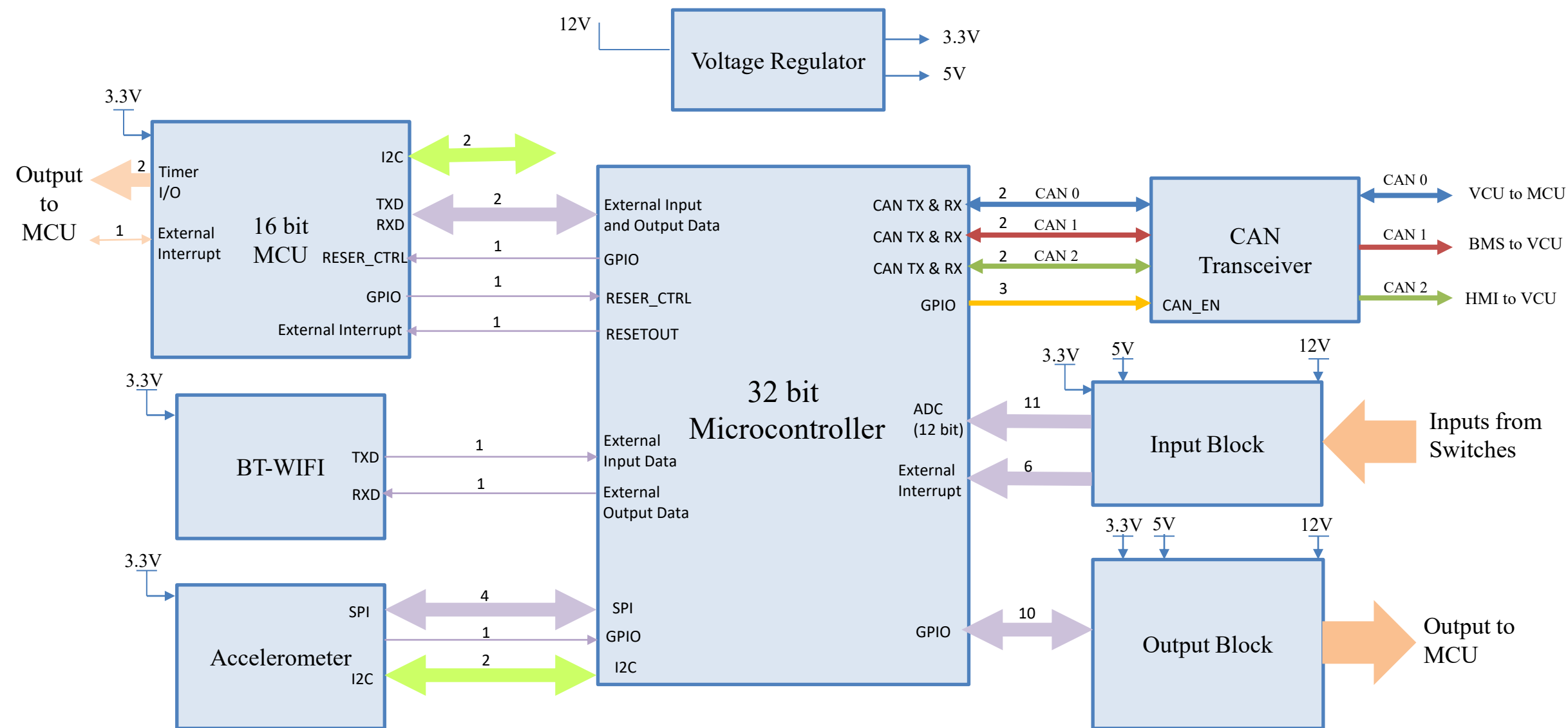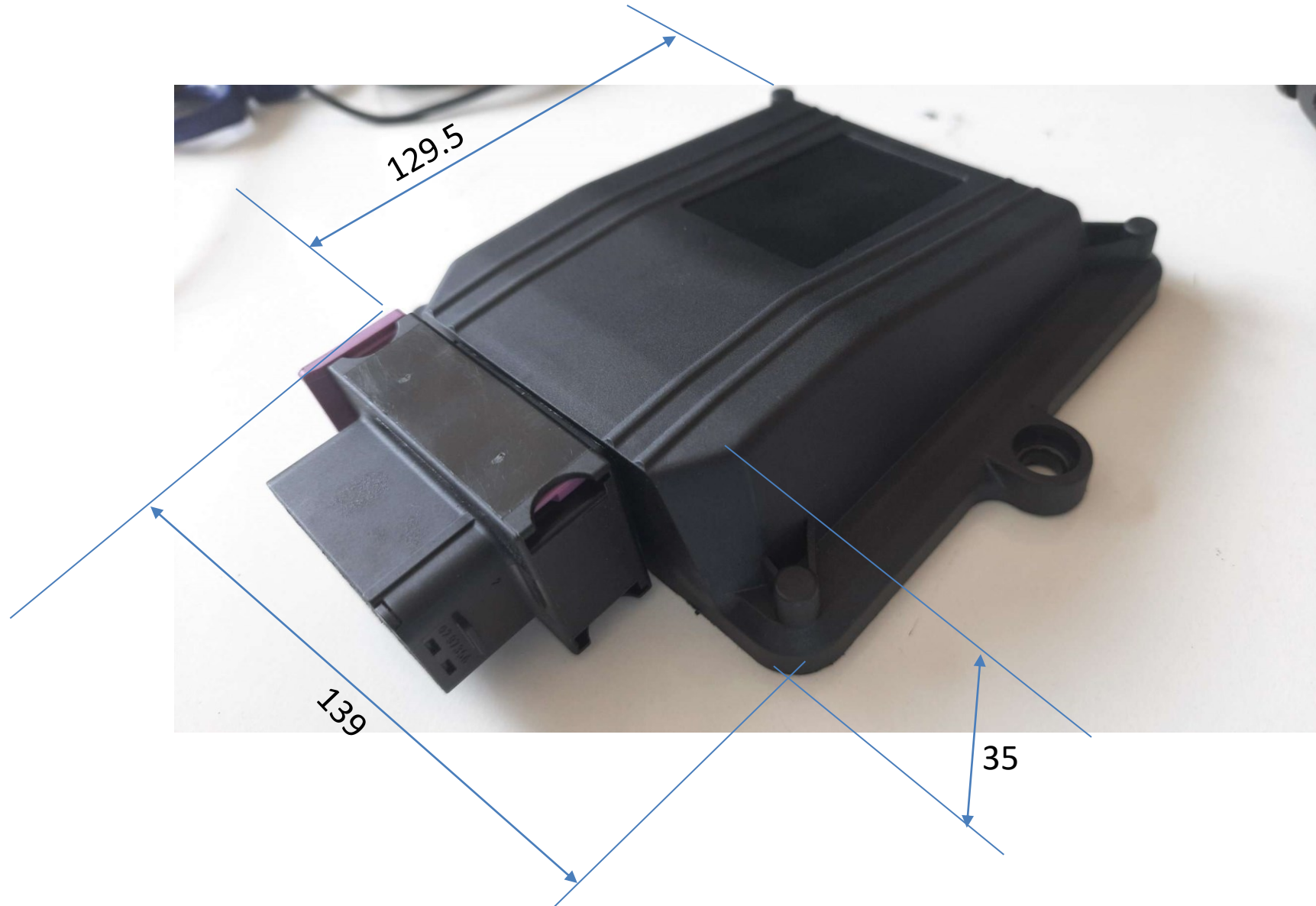
www.sloki.in

ISO 9001:2015 Certified

Sloki Vehicle Control Unit for Electric 2 Wheelers

VCU Block Diagram

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 tilted.

➢ CAN based communication.

Hardware Features/Specifications:

➢ Based on the signal form switches VCU should send information to MCU, HMI and BMS.

➢ Drive mode is selected using 2-way joystick.

Images of the VCU

VCU Controller Specifications

Parameter	Range	Parameter	Range
Family and series	32 bit controller	Watchdog Timer (ch)	2
Bit Size	32	Other Timers	Timer for OS x 1ch, Encoder timer x 1ch
Program Memory (KB)	512	PWM Output	24
RAM (KB)	64	10-bit A/D Converter (ch)	14
Data Flash (KB)	64	12-bit A/D Converter (ch)	11
Program Memory Type	Flash Memory	CAN (ch)	3
Pin Count	80	Clocked Serial Interface (ch)	4
Max. Freq (MHz)	120	SPI (ch)	4
Operating Voltage (V)	3.0 to 5.5	UART (ch)	3
On-chip Oscillator Freq. (MHz)	8 MHz, Low Speed: 240 kHz	I2C (ch)	2
External Interrupt Pins	13	LIN (ch)	5
I/O Ports	64	Operating Temperature (°C)	-40 to - 125
16-bit Timer (ch)	32		
32-bit Timer (ch)	16		

Sloki

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 HMI layout and deliver the prototype samples within 2 to 3 months of time.

Thank You

Sloki Software Technologies LLP

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