GEM® VCU (Vehicle Control Unit)

for control of complete electric drive system (powertrain) on light electric vehicles

- full compatibility with GEM in-wheel drive

- modular design for different applications

- different graphical displays support

- easy battery package integration

- electronic differential support

- parametrization of FW

- fast customization to customer needs

Technical data

	Description	Value
GENERAL	**Housing**	Plastic/Aluminium box
	Dimensions	150x130x45mm
	Weight	300g
	Connector type	48pin Molex
	Power supply input	7-37 V DC
	IP Protection	IP 67
	Temperature operation range	- 35 ~ 70 °C
	Self Diagnostics	yes
	Standard tests	Environmental, EMC, vibration, temperature, ESD...
	Updates	CAN / USB
EXTERNAL	**CAN**	2
	USB OTG	1
	UART	2
	SPI	1
	ADC	8, 12 bit
	DAC	2, 12 bit
	I2C	1
	GPIO including PWM	8
	Power output 3V3, 3W	1
	Power output 5V, 5W	1
	Power output 12V, 30W	2
INTERNAL	**Microcontroller**	32 bit, ARM Cortex
	EEPROM	8 Mbytes
	Wifi / Bluetooth	optional
	120R CAN terminators	switchable
	Accelerometer	1
	RTC	1

The Future of eMotion