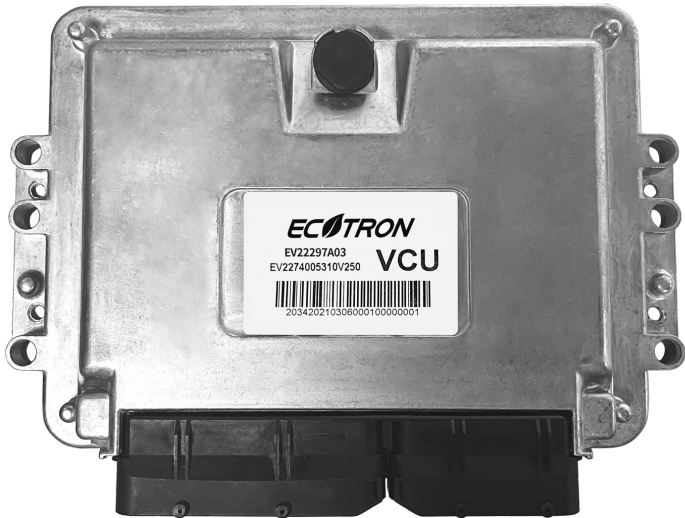# VCU
Vehicle Control Unit
EV22297A03

Intelligent vehicle controller for SAE L3-L4 levels electric vehicle systems

ECOTRON

Multiple Interfaces

CAN, LIN, FlexRay, DI, AI, PWM, HSO, LSO, 5V outputs, etc.

Model-Based Environment

MATLAB/Simulink Model-based development capable

Powerful MCU

Infineon ASIL-D rated TC297TP chip

Compatibilities

All-in-one vehicle control HW platform

TECHNICAL CHARACTERISTICS

CAN	Up to 6 CAN bus
LIN	UP to 1 LIN bus
FlexRay	Up to 2 FlexRay Bus port
KEYON	Up to 1 key signal
Digital Input	Up to 13 channels
Analog Input	Up to 22 channels
Frequency	Up to 4 frequency signal input
High-side Output	Up to 10 channels
Low-side Output	Up to 26 channels with 7 PWM outputs configurable
5V Output	Up to 9 ports
Wake Up Signal	Up to 1 Wake-up signal

INTERFACE

Signal Name	Number	Function	Interface Description
5V Output	9	5V Sensor Voltage	External Sensor 5V Power Supply
AI	21	Analog Input	7 * Analog Signal 0~32V, voltage type 8 * Analog Signal 0~5V, voltage type 6 * Analog Signal 0~5V, resistor type
AI	1	High Voltage Interlock Signal Input	Analog Signal 0~32V, voltage type
WAKEUP	2	Power-On Signal	1* KEYON 1 * Wake Up Signal
DI	13	Digital Input	2 * Active High 11 * Active Low
SPEED	4	Frequency Input	PWM Input 1Hz-2kHz configurable
HSO	9	High-Side Driver Output	4 * Rated 1.5A, Maximum 2A 5 * Rated 0.4A, Maximum 0.5A
HSO	1	High Voltage Interlock Signal Output	Rated 0.4A, Maximum 0.5A
LSO	26	Low-Side Driver Output	6 * Rated 1.5A Maximum 2A 6 * Rated 0.8A, Maximum 1A 4 * Rated 0.4A, Maximum 0.5A 10 * Rated 0.16A, Maximum 0.2A with 7 * PWM Output 1Hz-2kHz configurable
CAN	6	CAN	ALL Supports CAN Flashing 2 * Support Specific Frame Wake-Up 4 * Support CAN-FD
LIN_BUS	1	LIN BUS	Support Wakeup
FlexRay	4	FlexRay Communication	Include 120Ohm Terminal Resistor

DIMENSION