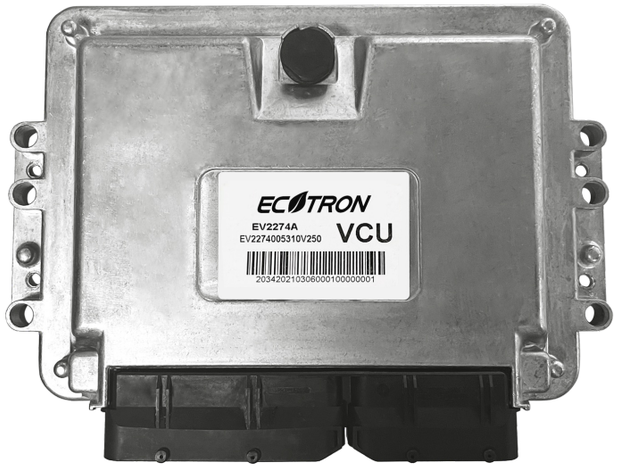
VCU

Vehicle Control Unit

EV2274A

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



Multiple Interfaces

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

Model-Based Environment

MATLAB/Simulink Model-based development capable

Powerful MCU

NXP ASIL-D rated SPC5744P chip

Compatibilities

All-in-one vehicle control HW platform

TECHNICAL CHARACTERISTICS

CAN	Up to 3 CAN bus
LIN	UP to 1 LIN bus
PWM Input	Up to 4 PWM inputs
Digital Input	Up to 14 channels
Analog Input	Up to 15 channels
High-side Output	Up to 10 channels
Low-side Output	Up to 18 channels with 4 PWM outputs configurable
5V Output	Up to 5 ports
Wake Up Signal	Up to 3 Wake-up signal

INTERFACE

Signal Name	Number	Function	Interface Description
5V Output	5	5V Sensor Voltage	External Sensor 5V Power Supply
AI	14	Analog Input	7 * Analog Signal 0~32V 7 * Analog Signal 0~5V
AI	1	High Voltage Interlock Signal Output	1 * Analog Signal 0~32V
WAKEUP	3	Power-On Signal	1* KEYON 1*AC Charging Wake Up 1*DC Charging Wake Up
DI	14	Digital Input	7 * Active High 7 * Active Low
DI/SPEED	4	Frequency Input	Frequency Range 20Hz-2kHz 2 * Active High 2 * Active Low
HSO	9	High-Side Driver Output	2 * Rated 3A, Maximum 5A 2 * Rated 0.5A, Maximum 1A 5 * Rated 1A, Maximum 3A with 2 * PWM configurable
HSO	1	High Voltage Interlock Signal Output	Rated 0.5A, Maximum 1A
LSO	19	Low-Side Driver Output	2 * Rated 3A Maximum 5A 5 * Rated 1A Maximum 3A 8 * Rated 0.5A, Maximum 1A
LS_PWM	4	Low-Side Driver Output	4 * Rated 0.5A, Maximum 1A All Frequency 20Hz-2kHz
CAN	3	CAN	ALL Supports CAN Flashing 1 * Supports Specific Frame Wake-Up
LIN_BUS	1	LIN BUS	Support Wakeup

DIMENSION