

# SCU

## Supervisory Control Unit

ES1274A

Intelligent vehicle auxiliary power 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 10 channels
Analog Input	Up to 8 channels
Frequency	Up to 2 frequency signal input
High-side Output	Up to 4 channels with 2 PWM outputs configurable
Low-side Output	Up to 10 channels with 2 PWM outputs configurable
5V Output	Up to 2 ports
KEYON	Up to 1 Wake-up signal

## INTERFACE

Signal Name	Number	Function	Interface Description
5V Output	2	5V Sensor Voltage	External Sensor 5V Power Supply
AI	7	Analog Input	2 * Analog Signal 0~32V 5 * Analog Signal 0~5V
AI	1	High Voltage Interlock Signal Output	1 * Analog Signal 0~32V
WAKEUP	1	Power-On Signal	1* KEYON
DI	10	Digital Input	5 * Active High 5 * Active Low
DI/SPEED	2	Frequency Input	Frequency Range 20Hz-2kHz 1 * Active High 1 * Active Low
HSO	3	High-Side Driver Output	1 * Rated 3A, Maximum 5A 2 * Rated 0.8A with PWM Output 1Hz-2kHz configurable
HSO	1	High Voltage Interlock Signal Output	Voltage Logic High
LSO	10	Low-Side Driver Output	2 * Rated 3A Maximum 5A 6 * Rated 0.25A with 2 * PWM Output configurable
CAN	3	CAN	ALL Supports CAN Flashing 1 * Supports Specific Frame Wake-Up
LIN_BUS	1	LIN BUS	Support Wakeup

## DIMENSION

