

FCU

Fuel-cell Control Unit EF22297B02

Intelligent vehicle control unit designed to control fuel cell



Multiple Interfaces

CAN, LIN, DI, AI, PWM, HSO, LSO, H Bridge, 5V outputs, Peak & Hold, 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 4 CAN bus: 1*wake up, 3*CAN_FD
LIN	UP to 1 LIN bus
H-Bridge	Up to 2 H-Bridge output
KEYON	Up to 1 key signal
Digital Input	Up to 8 channels
Analog Input	Up to 22 channels
Frequency	Up to 6 frequency signal input
High-side Output	Up to 9 channels with 5 PWM outputs configurable
Low-side Output	Up to 22 channels with 10 PWM outputs configurable
5V Output	Up to 9 ports
Peak and Hold	Up to 4 peak and hold
Wake Up Signal	Up to 1 Hardware Wake-up signal

INTERFACE

Signal Name	Number	Function	Interface Description
5V Output	3	5V Sensor Voltage	External Sensor 5V Power Supply
AI	22	Analog Input	12 * Analog Signal 0~5V, voltage type 10 * Analog Signal 0~5V, resistor type
WAKEUP	2	Power-On Signal	1* KEYON 1 * Wake Up Signal
DI	8	Digital Input	4 * Active High 4 * Active Low
SPEED	6	Frequency Input	2 * Rated 5V with PWM Input 1Hz-2kHz configurable
PeakHold	4	Hydrogen Injector Driver	Peak 7A
HSO	9	High-Side Driver Output	4 * Rated 1.5A, Maximum 2A 5 * Rated 0.4A, Maximum 0.5A with PWM Output 1Hz-2kHz configurable
LSO	22	Low-Side Driver Output	6 * Rated 1.5A Maximum 2A 6 * Rated 0.8A, Maximum 1A 3 * Rated 0.8A, Maximum 1A with PWM Output 1Hz-2kHz configurable 7 * Rated 0.16A, Maximum 0.2A with PWM Output 1Hz-2kHz configurable
H-Bridge	4	H-Bridge Driver	4 * Rated 3A, Locked-Rotor Current 4.5A
CAN	4	CAN	ALL Supports CAN Flashing 3* CAN-FD 1 * Supports Specific Frame Wake-Up
LIN_BUS	2	LIN BUS	Support Wakeup

DIMENSION

