

Selene

New Rapid Prototyping Platform

Works in cold environments up to -20°C

SELENE (VS3100 Series) is a Rapid Prototyping platform designed to increase the efficiency of automotive ECU development. Automotive ECU requires variety of functions in terms of high reliability and safety. As a result, it takes a lot of time to develop ECU's.

SELENE has been designed to make ECU's development more efficient. Since it can work with a 48V battery, it can also be used for heavy duty vehicle ECU development. Furthermore, it can be used for motorcycle and robot development applications as well.

Specifications

Type	Specification
Temperature range	-20 ~ 60 °C (power supply DC40V or less) -20 ~ 40 °C (power supply DC40V or more)
Humidity range	0 ~ 90 % (no condensation)
Power input range	DC 7 ~ 55V
Body size	164(W) × 197(L) mm Height (H) : depends on configuration
Maximum module connections	Up to 2 modules can be connected (Maximum 3 modules including CPU module)

Selene CPU module (top) I/O module (bottom)



Features:

- Able to be used in cold environment (- 20 °C)
- Small and lightweight design
- Able to work with 48VDC batteries
- 2 expansion modules can be connected together (Max 3 module configuration including CPU module)
- Supports MATLAB/Simulink



Product Configuration

SELENE consists of a CPU module and expansion modules which have various interface types. Up to two expansion modules can be connected (up to a max of 3 modules including CPU module) allowing the configuration to meet the user's requirements.

Module Specifications

CPU Module (VS3100-001)

Type	Specification
CAN FD	CAN 2.0B/CAN FD×4ch (Termination Resistance 120Ω/None) Baud rate: ~4Mbps
LIN	1 channel
SERIAL	RS-232C, RS422 or RS485 ×1ch
Body size	164(W)×37(H)×197(L)mm
Weight	Approx. 1.1 kg

* VS3100-001 will be equipped with Wi-Fi function



Module Specifications

Extended I/O Module (VS3100-002)

Type	Specification
Analog input	8ch single-ended voltage input A/D sampling rate: 100kHz (*1) 16-bit ± 10V range
Analog output	8ch Single-ended voltage output D/A update rate: 250kHz (*2) 16-bit ± 10V range
Digital/PWM inputs	8ch of 5V or VB Input freq: ~1MHz (5V)/~100kHz (VB)
Digital /PWM output	8ch of 5V or VB Output freq: ~1MHz (5V)/~100kHz (VB) Drive current: ~5mA (5V)/~100mA (VB)
Body size	164(W)×32(H)×197(L)mm
Weight	Approx. 0.7 kg

*1 The conversion rate is 5kHz due to using multiplexer selection circuit.

*2 Fc=20kHz primary filter is implemented in the analog output circuit



Up to 2 Expansion modules can be connected
(3 modules including CPU module)

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