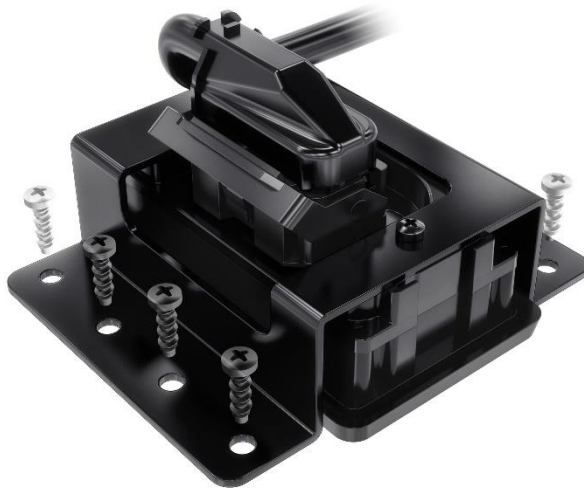




SMARTECU

technical brochure

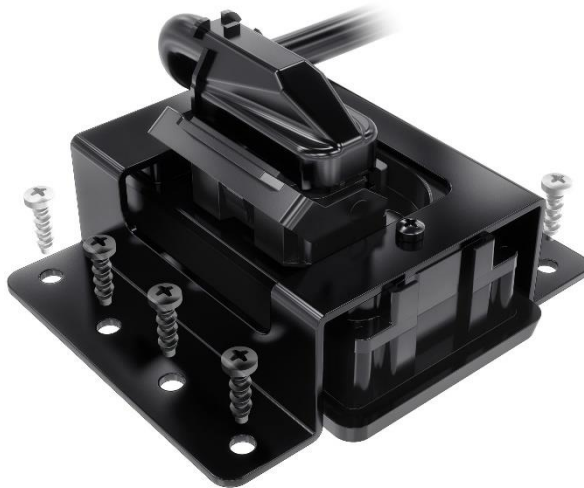


ITALIAN DESIGN
SOFTWARE CUSTOMIZATION
SAFETY CARE
OPERATOR ORIENTED

General Description

SMARTVECU is a very compact ECU. Studied to convert analog, digital, frequency INPUT in to CANBUS messages.

It is the right solution when si necessary to manage both analog and CANBUS system on old and new machinery.



TECHNICAL FEATURES

Operating voltage: 8 – 32 Vdc, protected against reverse polarity

Operating temperature: -30°C +80°C

Material: PC- ABS

Sealing: IP65

CPU: - 16 bit Spansion microcontroller

Memory: - FLASH: 256,5KB + 32KB
- RAM: 16KB

12 Digital INPUT (active high or low settable by SW)

2 Analog INPUT (resistive type)

2 Frequency INPUT

4 protected HIGH SIDE OUTPUT 2,5A (if used all output maximum 750mA for each)

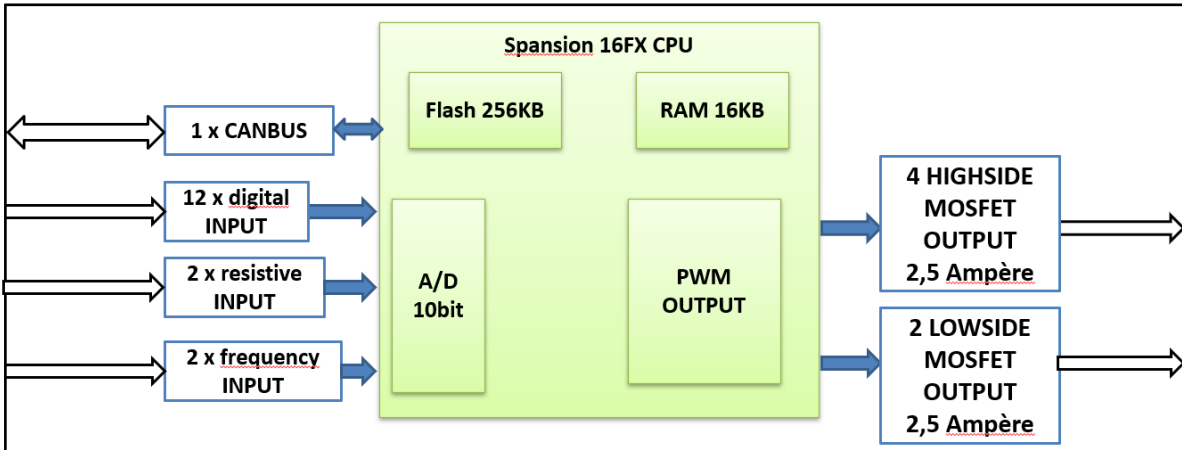
2 protected LOW SIDE OUTPUT 2,5A

1 CANBUS 2.0 part A and B up to 1Mbps (ISO 11898 standard)

Programmable in C languages

CAN bootloader for FW upgrade

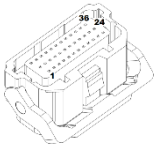
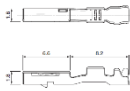
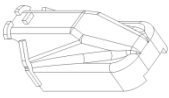
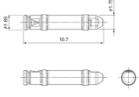
Block diagram



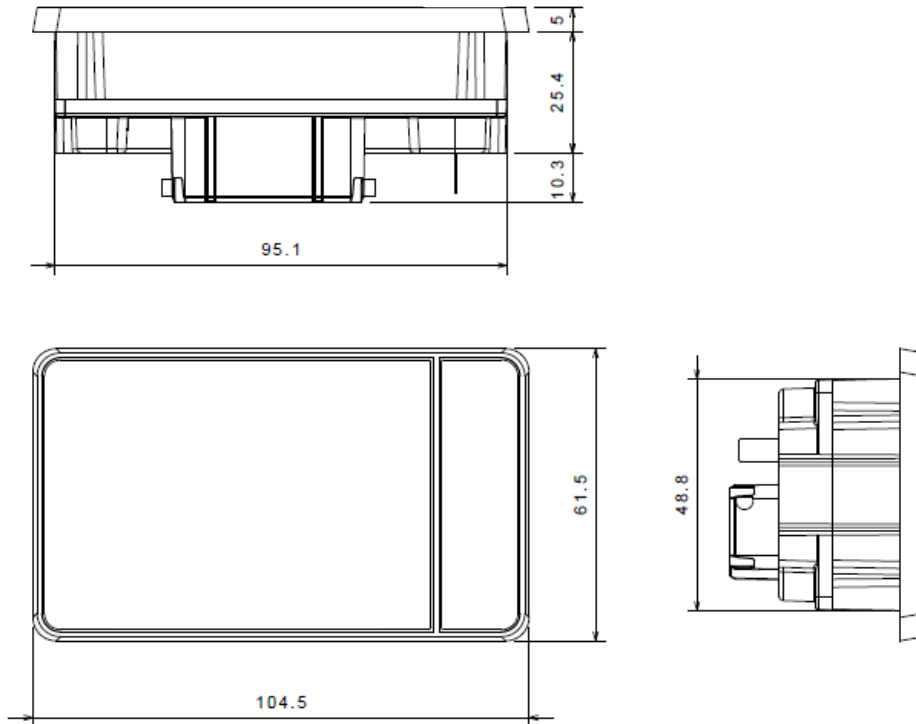
PINOUT CONNECTION

PIN	Function	PIN	Function	PIN	Function
1	+Vbatt	13	FREQ INPUT 1	25	DIGITAL IN 1 (default beam light)
2	+Vbatt	14	FREQ INPUT 2	26	DIGITAL IN 2 (default high beam light)
3	GND	15	UART RX TTL	27	DIGITAL IN 3 (default warning low battery)
4	GND	16	UART TX TTL	28	DIGITAL IN 4 (default fuel reserve)
5	OUTPUT LOW SIDE 1	17	CAN0 TX termination	29	DIGITAL IN 5
6	OUTPUT LOW SIDE 2	18	CAN0 RX termination	30	DIGITAL IN 6
7	RESISTIVE INPUT 2	19	CAN0 L	31	DIGITAL IN 7
8	RESISTIVE INPUT 1	20	CAN0 H	32	DIGITAL IN 8
9	HIGH VOLTAGE INPUT (UNTIL 48V)	21	GND	33	DIGITAL IN 9
10	NOT CONNECTED	22	GND	34	DIGITAL IN 10
11	OUTPUT HIGH SIDE 3	23	OUTPUT HIGH SIDE 1	35	DIGITAL IN 11
12	OUTPUT HIGH SIDE 4	24	OUTPUT HIGH SIDE 2	36	DIGITAL IN 12

Connector for harness cable

	<p>Manufacturer: J.S.T. Model: 36ZRO-B-1A (connector) Key Code: A Color: Black AMA Code: F24971</p>
	<p>Manufacturer: J.S.T. Model: : SZRO-A021T-MO.64 (female terminal) Conductor (mmq): 0.3 to 0.5 Insulation O.D. (mm): 1.6 to 1.7 AMA Code: F24971.F</p>
	<p>Manufacturer: J.S.T. Model: ZROHC-36H-K (cover) Color: Black AMA Code: F24971.C</p>
	<p>Manufacturer: J.S.T. Model: WPHDP-H-1A-H (dummy plug) Color: Gray AMA Code: F24971.T</p>

Overall dimensions





Strumentazione analogica-digitale,
centraline elettroniche e spie

Analog-Digital instruments,
Electronic Control Board & Indicators

ITALIAN DESIGN
SOFTWARE CUSTOMIZATION
SAFETY CARE
OPERATOR ORIENTED

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PER LA QUALITÀ CERTIFICATO DA DNV
= UNI EN ISO 9001:2008 =