



ALM-IO

CAN-BUS I/O EXPANDER



- I/O expansion ECU in CAN-BUS network systems
- Reverse polarity supply protected
- Small form factor
- Up to 18 inputs
- Up to 4 outputs
- Cortex-M7 high performance CPU
- Protected Output against short-circuit
- Protected Input against over-voltage/current
- Rugged and waterproof case



TECHNICAL FEATURES

POWER SUPPLY 8-30 VDC

CURRENT CONSUMPTION 50mA in STD-BY @24V

INPUT

No. 18 INPUTS

- n. 5 UNIVERSAL INPUT: 4-20mA/0-40V/0-5V/DIGITAL_LS/DIGITAL_HS (SW Configurable)
- n. 5 ANALOGIC INPUT: 0-40V/0-5V/DIGITAL_HS (SW Configurable)
- n. 4 DIGITAL INPUT: DIGITAL_HS/COUNTER (SW Configurable)
- n. 4 ANALOGIC INPUT: 0-40V/0-5V/DIGITAL_HS (SW Configurable) SHARED WITH OUTPUT PINS

OUTPUT

No. 4 HIGH SIDE DIGITAL OUTPUTS
SINGLE OUTPUT CURRENT: 3A, TOTAL DEVICE CURRENT: 6 A

No. 1 SENSOR POWER SUPPLY
VOLTAGE = POWER SUPPLY VOLTAGE (OPTIONAL: STABILIZED +5VDC)
CURRENT: MAX 500 mA

CAN BUS

No. 1 PORT
2.0B COMPLIANT - (11, 29 BIT) - ISO 11898 - UP TO 1MBIT/S
PROTOCOLS: CAN OPEN (DS401 DEVICE PROFILE FOR GENERIC I/O MODULE, WITH DS306 EDS FILE)

CONNECTION SICMA 24 PIN – Refer to «MATING CONNECTORS» table

ENCLOSURE MATERIAL PC ABS V0

STATUS INDICATION Green and red LED

WORKING TEMPERATURE -40°C +85°C



Scan me



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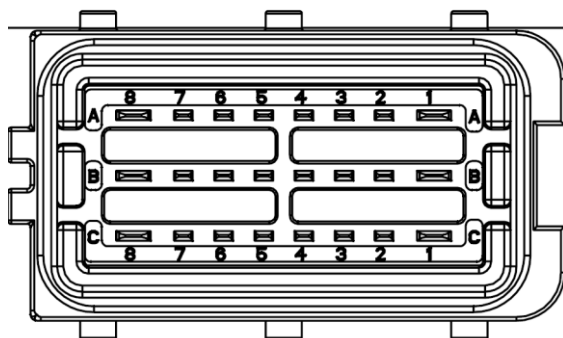
ELECTRONIC FEATURES

SLAVE USAGE	EDS FILE
MASTER USAGE OPTIONAL	C LANGUAGE PROGRAM BASED ON ALMEC SDK LIBRARY OPTIONAL: LOGIClab®
PROGRAMMING	FIRMWARE UPLOAD BY CAN BUS WITH ALOADER SOFTWARE TOOL
CPU	Family: 32-bit Arm® Cortex®-M7 With external hardware watchdog
MEMORY	MCU FLASH: 2 MB - RAM: 1 MB External EEPROM: 1024 KB OPTIONAL: QSPI 64 MB/128 MB

STANDARDS

APPROVALS	CE: 2014/30/EU UKCA: 2016 No. 1091 The Electromagnetic Compatibility Regulations 2016
ELECTROMAGNETIC COMPATIBILITY	EN 50498
ELECTROMAGNETIC EMISSIONS	EN 61000-6-4
ELECTROMAGNETIC IMMUNITY	EN 61000-6-2
ENVIRONMENTAL TESTING	IEC 60068-2-64 IEC 60068-2-27 IEC 60068-2-27 IEC 60068-2-3
PROTECTION	IEC 60529 (IP68)

CONNECTOR PINOUT



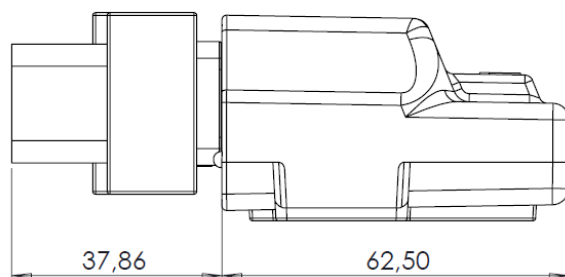
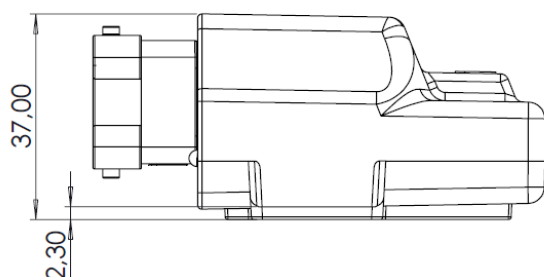
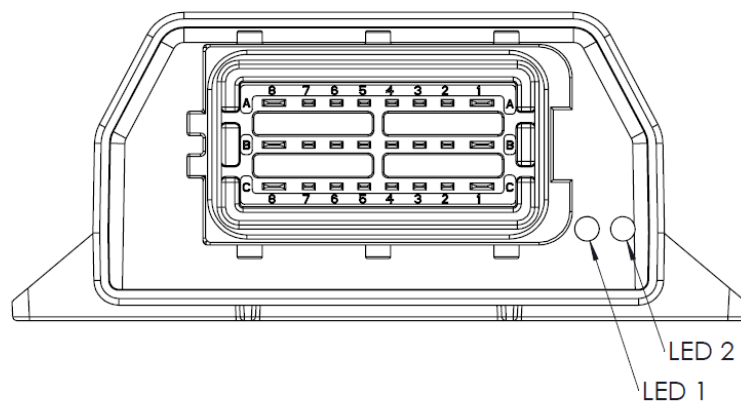
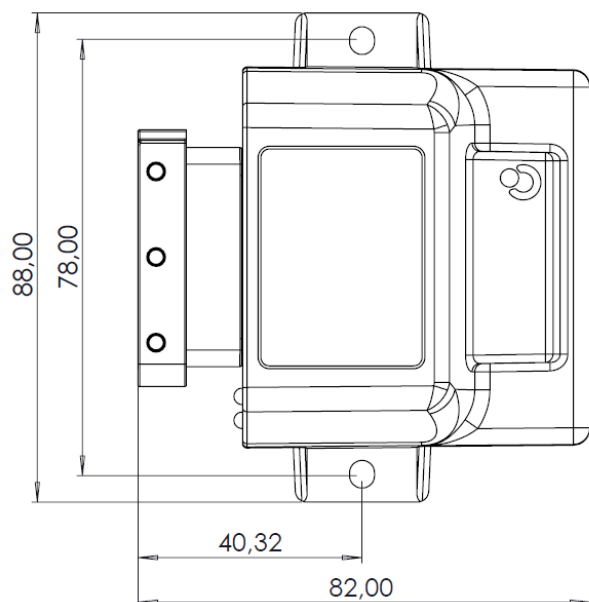
PIN	8	7	6	5	4	3	2	1
A	DIG IN 17 (FAST 3)	DIG IN 16 (FAST 2)	DIG IN 15 (FAST 1)	OUT4 / AN IN 14	OUT3 / AN IN 13	OUT2 / AN IN 12	OUT1 / AN IN 11	POSITIVE SUPPLY OUT
B	DIG IN 18 (FAST 4)	AN IN 9	AN IN 8	AN IN 7	AN IN 6	CAN H	CAN L	SENSOR POWER SUPPLY
C	POSITIVE POWER SUPPLY	AN IN 10	AN IN 5	AN IN 4	AN IN 3	AN IN 2	AN IN 1	GND



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CAN-BUS I/O EXPANDER

SIZE (mm)



MATING CONNECTORS – APTIV CODES

COMPONENT	CODE
MATING CONNECTOR BRAND: APTIV	211PC249S0033
TERMINALS BRAND: APTIV	211CC2S2160P
PRE-WIRED CABLES	AVAILAVBLE ON REQUEST





NOTE