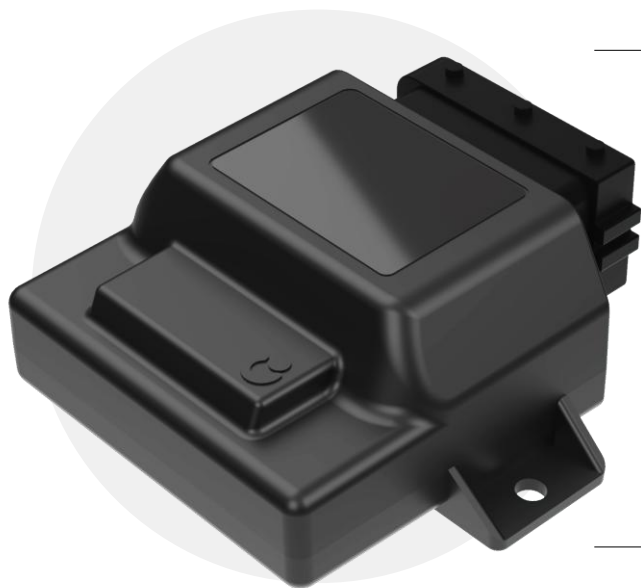




ALMEXT

CAN-BUS I/O ECU



- I/O expansion ECU for CAN-BUS based systems
- Small form factor
- 10 inputs and 8 outputs
- Cortex-M7 high performance CPU
- Designed for Master or Slave usage mode
- Internal watchdog for class II safety architecture EN13849 (up to PLd)
- Protected I/O against short-circuit and over-voltage/current
- Rugged and waterproof case



TECHNICAL FEATURES

POWER SUPPLY 8-30 VDC

CURRENT CONSUMPTION 50mA in STD-BY @ 24V

INPUT
No. 10 INPUTS

- n. 5 UNIVERSAL INPUTS(4-20 mA/0-40 V/0-5V/DIGITAL LS/DIGITAL HS). (SW Configurable)
- n. 4 ANALOGIC INPUTS (0-40 V)
- n. 1 IGNITION INPUT FOR BOARD ACTIVATION

OUTPUT
No. 8 OUTPUTS
MAX CURRENT: SINGLE OUTPUT: 3 A ; TOTAL DEVICE: 12 A
SOFTWARE CONFIGURABLE AS:

- HIGH-SIDE PWM OPEN-LOOP OUTPUTS WITH CURRENT SENS.
- HIGH-SIDE DIGITAL OUTPUTS

No. 1 SENSOR POWER SUPPLY
VOLTAGE = SUPPLY VOLTAGE (OPTIONAL STABILIZED +5VDC)
MAX SOURCE 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 - See «MATING CONNECTORS» table for pinout

ENCLOSURE MATERIAL PC ABS V0

STATUS INDICATION Green and Red LED

WORKING TEMPERATURE -40°C +85°C



Scan me



ALMEXT

CAN-BUS I/O EXPANDER

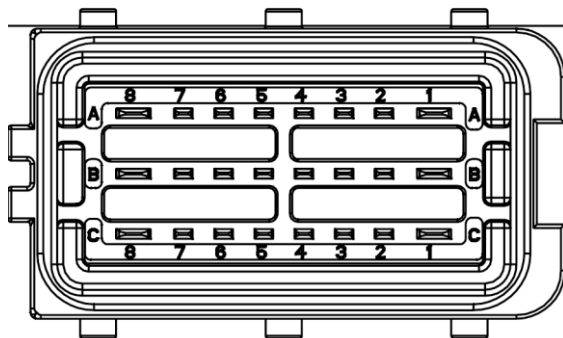
ELECTRONIC FEATURES

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: 128 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
PERFORMANCE AND SAFETY INTEGRITY LEVEL	Up to PL(d)cat.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



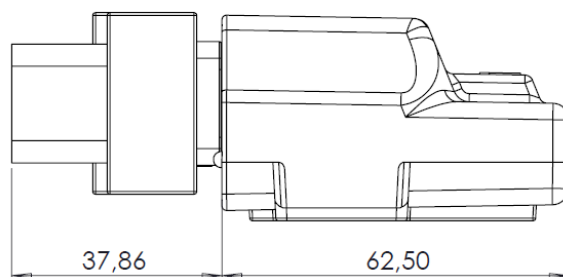
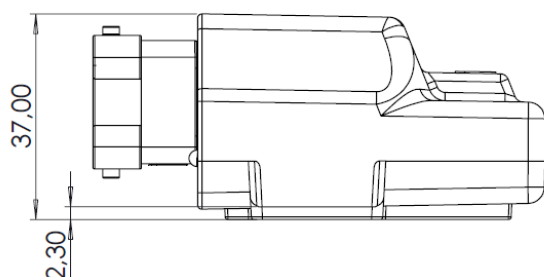
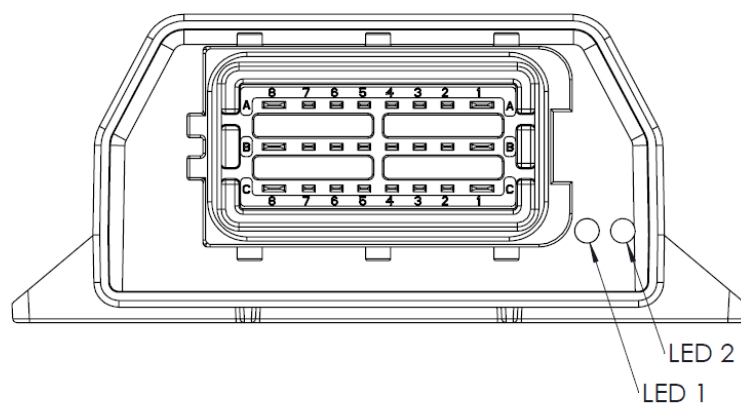
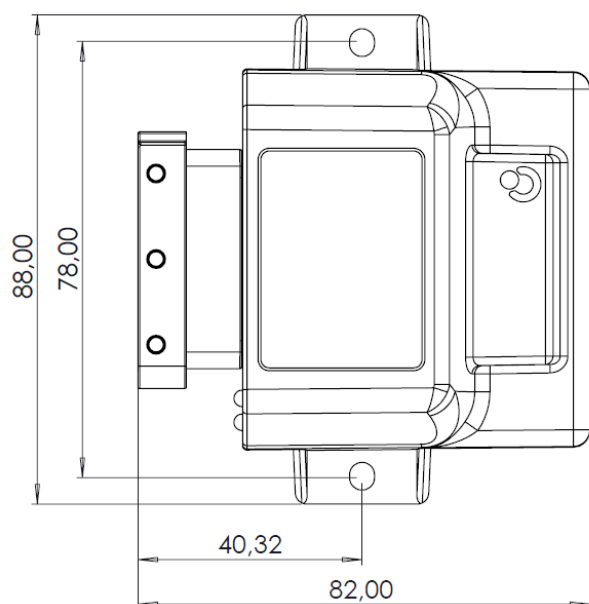
PIN	8	7	6	5	4	3	2	1
A	OUT8	OUT6	OUT5	OUT4	OUT3	OUT2	OUT1	POSITIVE SUPPLY OUT
B	OUT7	IN AN 9	IN AN 8	IN AN 7	IN AN 6	CAN H	CAN L	SENSOR POWER SUPPLY
C	POSITIVE POWER SUPPLY	IGNITION INPUT	IN AN 5	IN AN 4	IN AN 3	IN AN 2	IN AN 1	GND



ALMEXT

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