

Universal Off-Highway Control – TTC 36X

General Description

TTC 36X is an intelligent I/O module that is controlled using CANopen®. It is compliant to CANopen standard certified by CiA. It is part of a complete and compatible product family for the off-highway industry. The TTC 36X is protected by a compact, automotive-style housing and is highly suited for rough operating conditions. It allows local current control on its PWM outputs.

Specifications

| Parameter | | Unit |
|--|---|-------------------|
| ECU Dimensions | 147.6 x 180.3 x 39.8 | mm |
| Dimensions for minimum connector release clearance | 197.7 x 202.8 x 39.8 | mm |
| Weight | about 650 | g |
| Operating Temperature | -40 to +85 | °C |
| Operating Altitude | 0 to 4000 | m |
| Supply Voltage | 8 to 32 | V |
| Peak Voltage | 45 | V _{max} |
| Idle Current | 0.15 at 9V | A _{max} |
| Standby Current | 0.5 | mA _{max} |
| Current | 25 | A _{max} |
| Fulfills the following standards | | |
| CE-Mark | Conformity with 2004/108/EC | |
| EMC | ISO13766, up to 100 V/m, 20 MHz to 1GHz | |
| ESD | IEC61000-4-2 | |
| Load Dump | ISO 7637-2, 173 V, 2 Ohm | |
| Ingression Protection | EN 60529 IP 65, IP67 DIN 40050 IP 6K9K | |
| Communication Profile | CANopen CiA DS 401 | |
| Temperature | EN 60068-2-1, -14Nb, -2, -78, -30 | |
| Vibration, Shock, Bump | IEC 60068-2-29, -64, -27, -32 | |

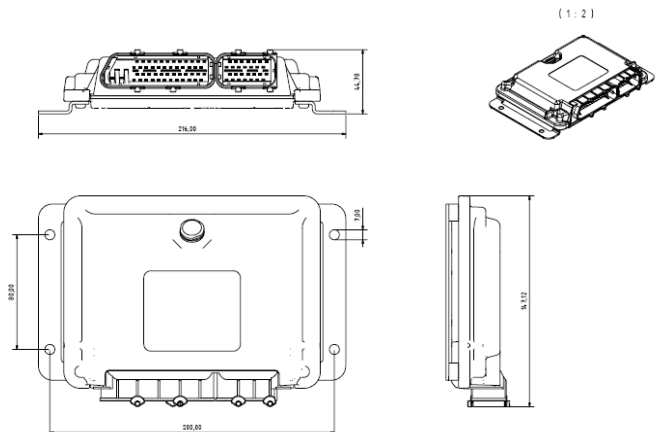
Features

All I/Os and interfaces mentioned below are protected against short circuit to GND and BAT+.

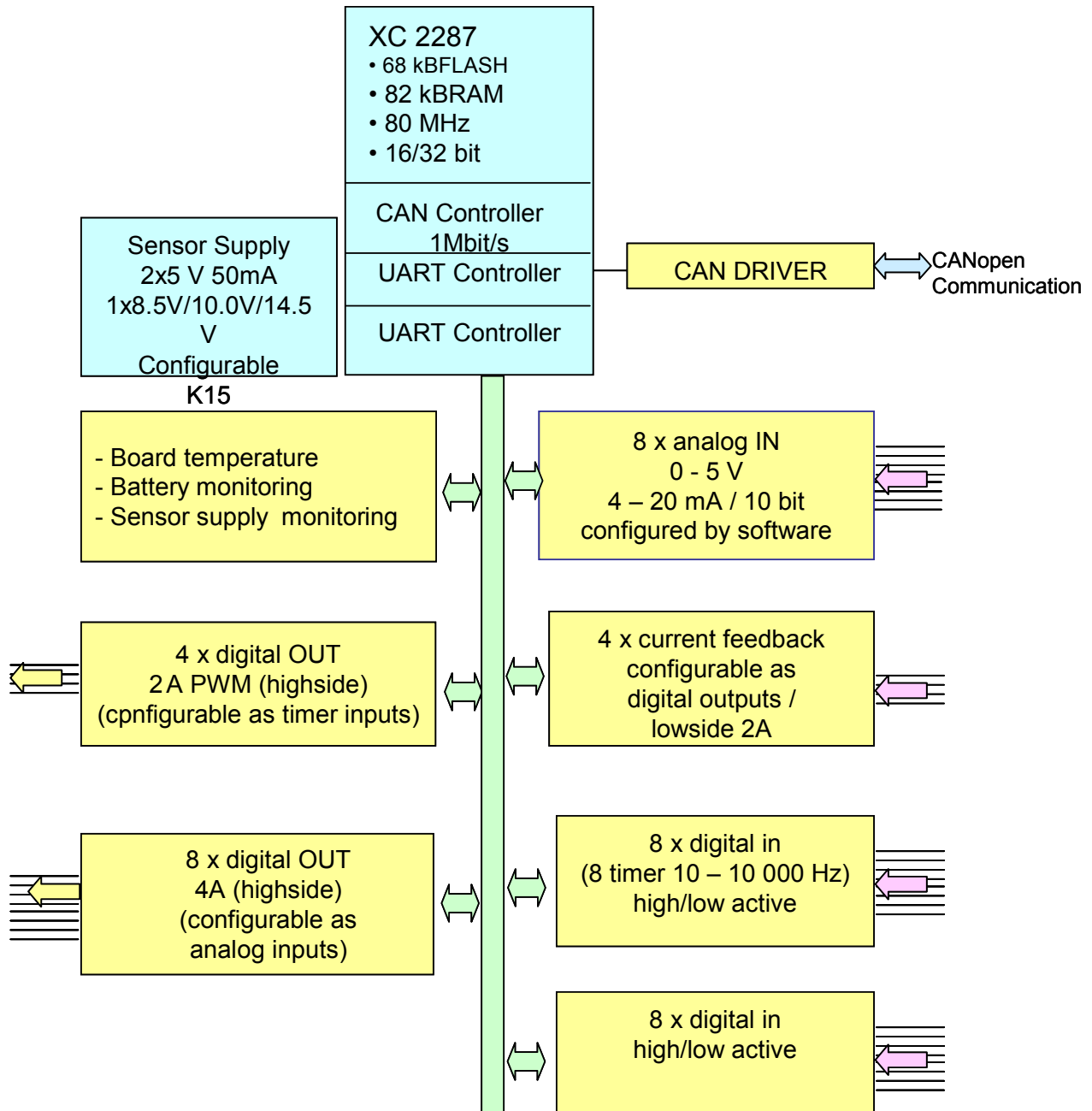
- 16/32-bit Infineon XC2287 microcontroller, 80 MHz, 768 kB int. Flash, 82 kB int. RAM
- 1 x CAN, 125 kbit/s up to 1 Mbit/s
- 8 x analog IN 0 to 5V or 4 to 20mA / 10 bit, configured by software
- 4 x current feedback, configurable as digital outputs/ lowside 2 A
- 8 x digital IN (8 timer 10Hz to 10kHz)
- 8 x digital IN
- 4 x digital OUT 2A high-side, PWM, configurable as timer inputs
- 8 x digital OUT 4A high-side, configurable as analog inputs
- Internal: monitoring of board temperature, sensor supply and battery
- 1 x sensor supply 8.5V/10.0V/14.5V configurable
- 2 x sensor supply 5V

Outline Dimensions

- Aluminum pressure die-cast housing
- Water-proof 80-pin connector
- Pressure adjusting with water barrier



Block Diagram



For further information, including price and availability, please contact products@ttcontrol.com