# Advanced robotics for modern, efficient farming

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## Robotech Controller 501

Powerful Embedded Vehicle Computer

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### **Conpleks Robotech Controllers**

- The Robotech Controller is the core of any autonomous vehicle equipped with Conpleks' Robotech technology.
- The Robotech controller has four main logical interfaces:
  - Navigation sensors
  - Navigation actuators
  - Function sensors
  - Function actuators
- The interfaces towards the navigation parts are generic, whereas the interfaces towards the functional parts are application specific.





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## Conplexs Robotech Controller 501

- The Conpleks Robotech Controller 501 is a high-performance, ruggedized embedded vehicle computer platform e.g. for temperature-hardened outdoor robotics.
- The controller is equipped with a number of external interfaces making it possible to connect the controller to all the sensors and actuators used in your specific robotics or advanced automation application.
- All interfaces are supported by the Robotech Controller software package that includes ROS-based middleware and a Linux/Ubuntu operating system.





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## Conplexs Robotech Controller 501

- On-board 3rd generation Intel Core I5 processor
- Flash-based hard-drive
- Linux/Ubuntu operating system
- Compact design, IP67 compliant, fully sealed mechanics
- Optional Can-bus interface for sensor connectivity
- GE and FE Ethernet and USB 2.0 ports
- GPS prepared
- WiFi and Bluetooth supported
- Serial ports
- Optional 3G connectivity
- Automotive 12 VDC supply (6-36 V range)
- 0 50 °C operational temperature range





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## **Conpleks Robotech Controller 501**

Rugged hardware and high-quality connectors

- All I/O connectors are mounted on one single side of the controller
- The processor on the main board is thermo-coupled directly to the aluminum box
- The overlay allows OEM branding









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### Conpleks Robotech Controller 501 Main Processor Board

- The Conpleks Robotech Controller 501 is equipped with a powerful Aaeon GENE-QM77 board that supports the 3rd Generation Intel® i7-,i5,-i3 2Core and 4Core CPU technology with long-term availability.
- Based on the Mobile 3rd generation Intel® chipset, the motherboard offers an ideal performance-per-watt ratio and the very latest interface technology
- Legacy interfaces are also supported, 6 x SATA (incl. 2 x SATA III) interfaces alongside the 4x USB 3.0 & 10x USB 2.0 interfaces.





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#### **About Conpleks Innovation**

Conpleks Innovation is based in Struer, Denmark, and operates worldwide. Our customer base consists of both small domestic companies and large international corporations.

Depending on the nature of the task, we can involve an entire network of competent hardware, software and mechanical design professionals. This way, we can assign appropriate resources, find the best solutions and create a successful product.

### **Contact us**

You are always welcome to contact us and discuss how we can help you to develop your idea – partly or fully – depending on your needs.



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