DRIVING
MACHINES
TO A SMARTER
TOMORROW





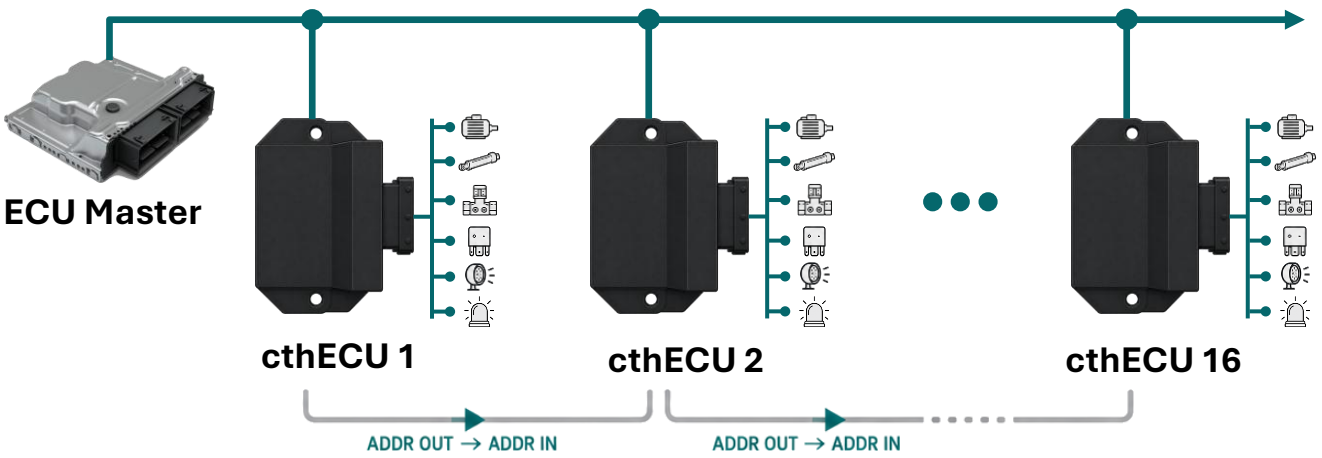
Distributed Control for Mobile Machines

cthECU

Can To H-Bridge

cthECU is an output expansion ECU designed for distributed control of electric actuators on agricultural machinery, off-highway vehicles and special-purpose equipment.
Each module can drive up to 6 bidirectional DC actuators in full H-bridge configuration, or up to 12 outputs in half-bridge configuration.
CAN communication allows the master ECU to configure, operate and monitor outputs from a single point. Up to 16 eCTH modules can be daisy-chained on one CAN network.

Each module is automatically assigned an ID based on its position in the chain, with no individual programming or hardware selectors required. This simplifies installation, maintenance and system expansion.
cthECU supports distributed control of motorized valves, linear actuators, brushed DC motors, ON/OFF hydraulic solenoid valves, relays, warning lights, gates, flaps and other DC auxiliary loads.



Automatic position-based addressing

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cthECU | Distributed Control for Mobile Machines

Agriculture • Off-Highway • Special Vehicles

Key Benefits

- **Easy installation**

Automatic addressing eliminates manual configuration and reduces the risk of errors.

- **Scalability and reusability**

One module can be reused across different machine sizes and models, simplifying spare parts management.

- **Simplified wiring**

Power and CAN are replicated on the connector for daisy-chain wiring.

- **Synchronized actuation**

Commands can be prepared on multiple modules and executed simultaneously.

Power supply	9–32 VDC
Current	10 A (typ.), 18 A (max.)
Dimensions	123 × 92 × 35 mm
IP rating	IP67
Connector	Delphi HCCPHPE24BKA90F, 24 pins
Operating temperature	−40 °C to +85 °C
Standards	ISO 14982 ISO 13766
Communication interfaces	1 × CAN
Enclosure	Custom potted PC-PBT
Outputs	6 × full H-bridge, 1.5 A or 12 × half-bridge, 1.5 A
Protection	Overcurrent, overvoltage, reverse polarity, overtemperature
Weight	230 g

Applications

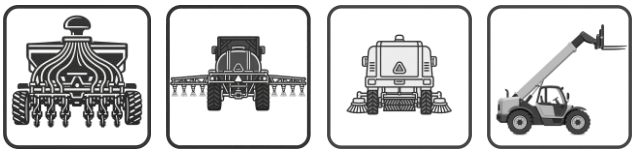
cthECU is designed for agricultural machinery, off-highway vehicles and special-purpose equipment.

Agriculture

- Seed drill row-valve actuation;
- Metering and section shut-off;
- Motorized valve control;
- Sprayer boom nozzle actuation;
- Hydraulic solenoid valve control;
- Shutter and gate adjustment;
- Vineyard and orchard machinery;
- Fertilizer spreaders and application equipment.

Off-highway and special vehicles

- Snowplows and salt spreaders;
- Road sweepers;
- Refuse collection and compaction vehicles;
- Earthmoving machinery;
- Construction machinery;
- Road maintenance machinery;
- Industrial equipment.



Models

Code	Description
CTHJAA	cthECU output expansion unit – J1939 protocol
CTHCAA	cthEVU output expansion unit – CANopen protocol