

TTConnect 616 Configurable Switch

Description

The TTConnect 616 Configurable Switch is designed for application development and support of Ethernet in-vehicle network architectures.

The versatile switch includes 6 x 100BASE-T1 BroadR-Reach® physical layer interfaces that enable 100 Mbit/s full-duplex communication over unshielded twisted single pair (UTSP) cabling in addition to one 100BASE-TX port for diagnostics and flashing.

TTConnect 616 was specifically developed for vehicles and machines used in rugged operating environments and at extreme operating temperatures. It is protected by proven, robust and compact housing, designed for the off-highway and agricultural industry.



Specifications

Parameter		Unit
Unit dimensions	147 x 92 x 38	mm
Dimensions for minimum connector release clearance	208 x 92 x 38	mm
Weight	330	g
Operating temperature	-40 to +85	°C
Supply voltage	8 to 16	V
Peak voltage	16	V _{max}
Standby current	≤400	mA _{max}
-Total load current	≤5	A _{max}

Standards

CE-Mark	2014/30/EU
E-Mark	ECE-R10
EMV	ISO 7637-2 EN 55025 ISO 11452-1, -2, -4, -5
ESD	ISO 10605
Load dump	ISO 16750-2 Load dump +35V, 2 Ohm, 400ms
Ingression protection	EN 60529 IP67 ISO 20653 IP 6K9K
Temperature	EN 60068-2-14 Na, Nb 60068-2-78, -30 Db, -2, -1
Climatic	EN 50581
Vibration, shock	IEC 60068-2-64, -27

Features

- Infineon AURIX 32-bit super-scalar CPUs with 3 cores @ 300 MHz
- Up to 8 MB of Program Flash
- Up to 768 kB Data Flash usable for EEPROM emulation
- Up to 728 kB RAM
- 2 x SJA1105T - 5 port Ethernet Switch Chip

Interfaces

- 6 x 100BASE-T1 BroadR-Reach® 100 Mbit/full-duplex
- 1 x 100BASE-TX Ethernet for diagnostics and flashing

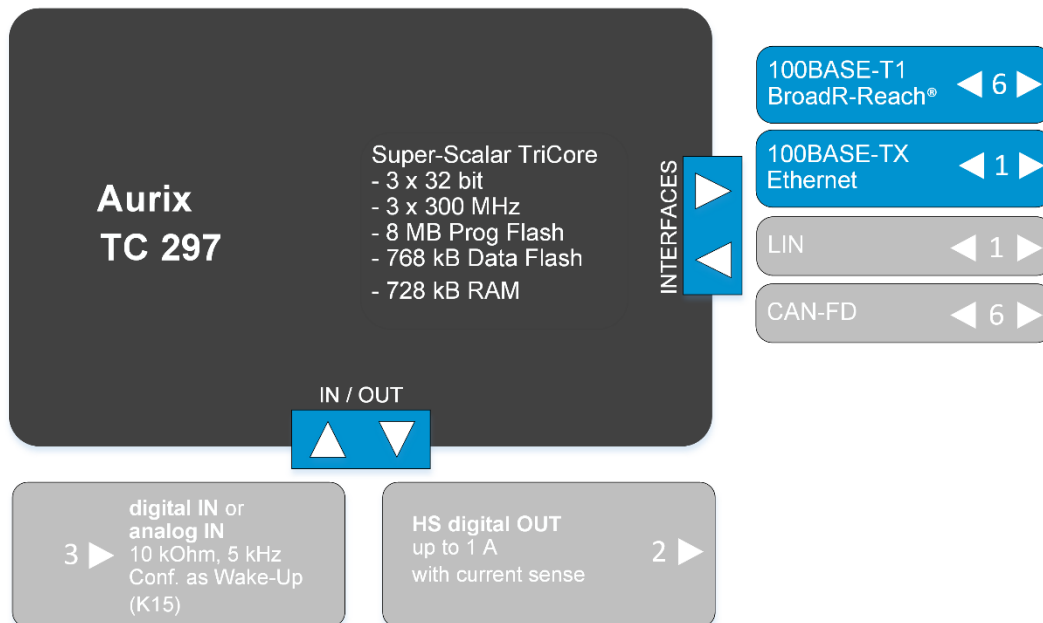
Configurability

- VLANs
- Master/Slave ports
- Simple configuration of switch using templates
- Additional parameter configuration can be supplied

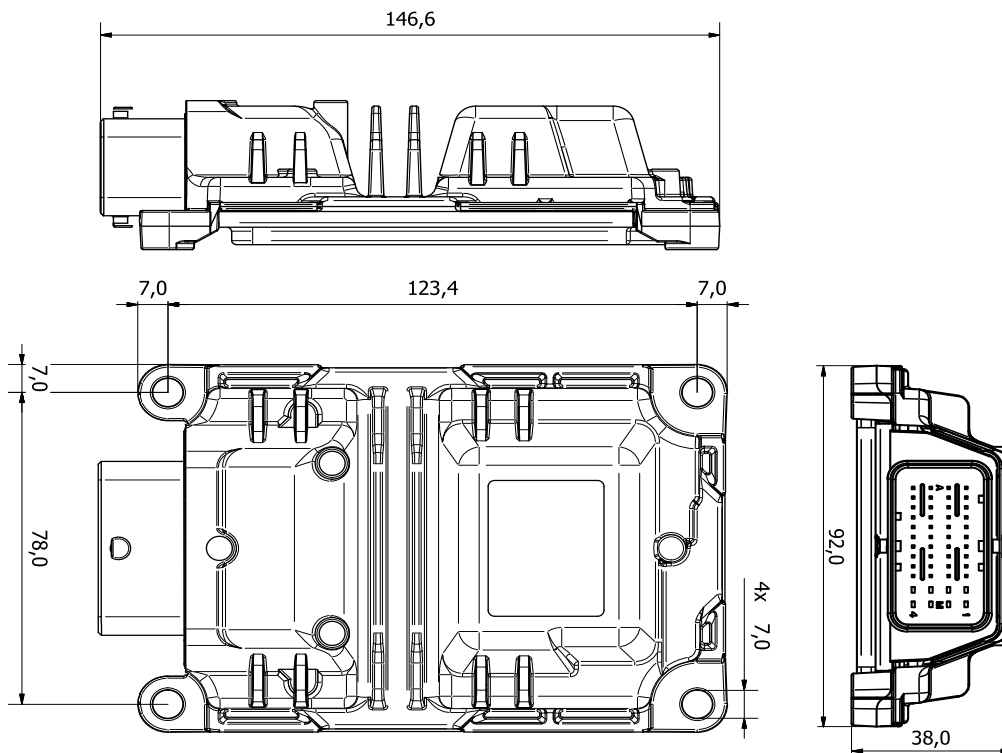
All I/Os and interfaces are protected against short circuits to GND and BAT+ and can be configured by software.

Details about the standards can be found in the user manual.

Block diagram



Unit housing with dimensions (not to scale)



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