

# **TTConnect 616 Configurable Switch**

### Description

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 100Mbit/s full-duplex communication over unshielded twisted single pair (UTSP) cabling in addition to one 100BASE-TX port.

TTConnect 616 was specifically developed for vehicles used in rugged operating environments and at extreme operating temperatures. It is protected by a proven, robust and compact housing, designed for automotive industry.

## **Specifications**

Unit Dimensions	147 x 92 x 38	mm
Dimensions for		
Minimum Connector	208 x 92 x 38	mm
Release Clearance		
Weight	330	g
Operating Temperature	-40 to +85	°C
Supply Voltage	8 to 16	V
Peak Voltage	16	$V_{\text{max}}$
Standby Current	≤400	mA <sub>max</sub>
Current	≤5	A <sub>max</sub>

#### **Standards**

CE-Mark	2014/30/EU	
E-Mark	ECE-R10 Rev.5	
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	
Vibration, Shock	IEC 60068-2-64, -27	
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#### **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/fullduplex
- 1 x 100BASE-TX Ethernet for diagnostics and flashing

## Configurability

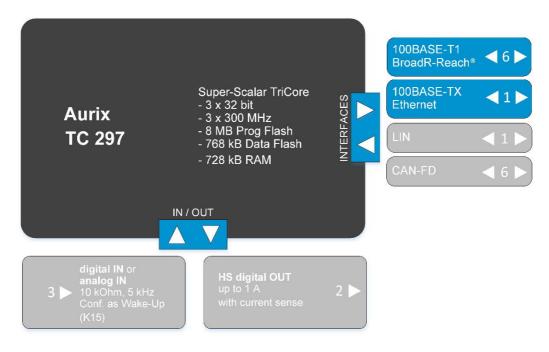
- VLANs
- Master/Slave ports
- Simple configuration of switch using templates
- Additional parameter configuration can be supplied

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

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

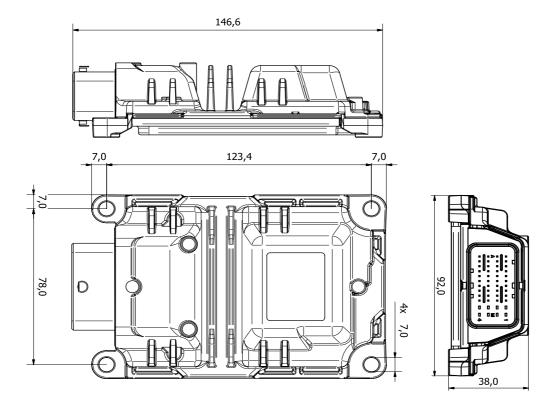


## **Block Diagram**



Note: Grey blocks are not supported in configurable switch application.

## Unit's housing with dimensions (not to scale)



For further information, including price and availability, please contact  $\underline{products@tttech-auto.com}$