


## Battery Management IC Automotive 16-Pin SO N Tube

<b>Manufacturer:</b>	<a href="#">STMicroelectronics, Inc</a>
<b>Package/Case:</b>	SOIC-16
<b>Product Type:</b>	Power Management ICs
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

L9963T is a general purpose SPI to isolated SPI transceiver intended to create a communication bridge between devices located into different voltage domains. L9963T is able to transfer communication data incoming from a classical 4-wire based SPI interface to a 2-wire isolated interface (and viceversa). The transceiver supports both transformer and capacitive isolation, since the isolated signal generated according to a proprietary protocol is suitable to be transmitted over both decoupling circuitries. The device can be configured either as Slave or as Master of the SPI bus and supports any protocol made of SPI frames 8 to 64 bit long. The transceiver manages the transfer of the information without performing any protocol check. SPI peripheral can work up to 10 MHz when configured as Slave. SPI clock frequency can be programmed among (250 kHz; 1 MHz; 4 MHz; 8 MHz) when configured as Master. Isolated SPI peripheral features two different operating modes: slow @333 kbps and fast @2.66 Mbps. The asynchronicity between the two sides is internally managed, allowing all possible configuration frequencies on both peripherals to be used in application. L9963T features an internal queue of 3 slots for the frames received on the SPI port and a queue of 20 slots for the ones received on the isolated SPI side. This allows buffering and decoupling the two different clock domains. The device is natively compatible with L9963 isolated SPI, allowing its usage in the BMS applications. L9963T is compatible with both 3.3 V and 5 V logics.

### Key Features

AEC-Q100 qualified

Full ISO26262 compliant, ASIL-D systems ready

Compatible with both 3.3 V and 5 V logics

Supports both XFMR and Capacitive isolation

10 MHz SPI peripheral for SPI Slave operation. Configurable SPI frequency (250 kHz to 8 MHz) for SPI Master operation

333 kbps and 2.66 Mbps Vertical InterFace (VIF) for isolated SPI communication

Low standby current

### Recommended For You

**L9651**

STMicroelectronics, Inc  
HSOP20

**L9678PTR**

STMicroelectronics, Inc  
LQFP-64

**L9904**

STMicroelectronics, Inc  
SOP20

**L9822EPD**

STMicroelectronics, Inc  
HSOP20

**L9951**

STMicroelectronics, Inc  
HSSOP36

**L9680TR**

STMicroelectronics, Inc  
LQFP100

**L9949**

STMicroelectronics, Inc  
HSOP20

**L9950**

STMicroelectronics, Inc  
HSSOP36

**L9848**

STMicroelectronics, Inc  
SOP28

**L9950XP**

STMicroelectronics, Inc  
SSOP36

**L9952GXP**

STMicroelectronics, Inc  
SSOP36

**L9733XP**

STMicroelectronics, Inc  
SSOP28

**L9958SBTR**

STMicroelectronics, Inc  
SSOP16

**L9651-TR**

STMicroelectronics, Inc  
HSOP20

**L9374TRLF**

STMicroelectronics, Inc  
SSOP36