

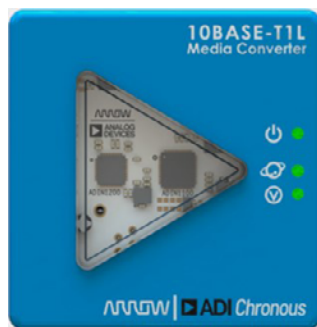
# Ethernet Media Converter for Industry 4.0

## 10BASE-T1L to 10BASE-T

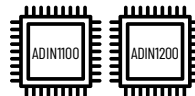
### Accelerating Development of 10BASE-T1L Solutions

The 10BASE-T1L-MC media converter is a plug and play solution which enables seamlessly interfacing from single twisted pair (SPE) long reach Industrial Ethernet ("10BASE-T1L") to standard Ethernet ("10BASE-T").

The converter is built using the industry leading PHY technology from Analog Devices ADI Chronous Family, namely the ADIN1100, 10BASE-T1L PHY and the ADIN1200, 10BASE-T PHY. This device is pre-programmed to configure both the PHY ICs in 10Mbps full-duplex auto-negotiation mode.



10BASE-T1L-MC media converter



#### Enabled with ADIN1100 and ADIN1200 PHYs.

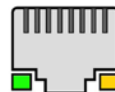
Both the PHYs are configured at 10 Mbps speed, full-duplex and auto-negotiation mode.



Operates on +5V  $\pm 10\%$ , 500mA USB supply over Type-C Connector.



For SPE (10BASE-T1L) connection with Harting IEC63171-6 connector or terminal block connector.



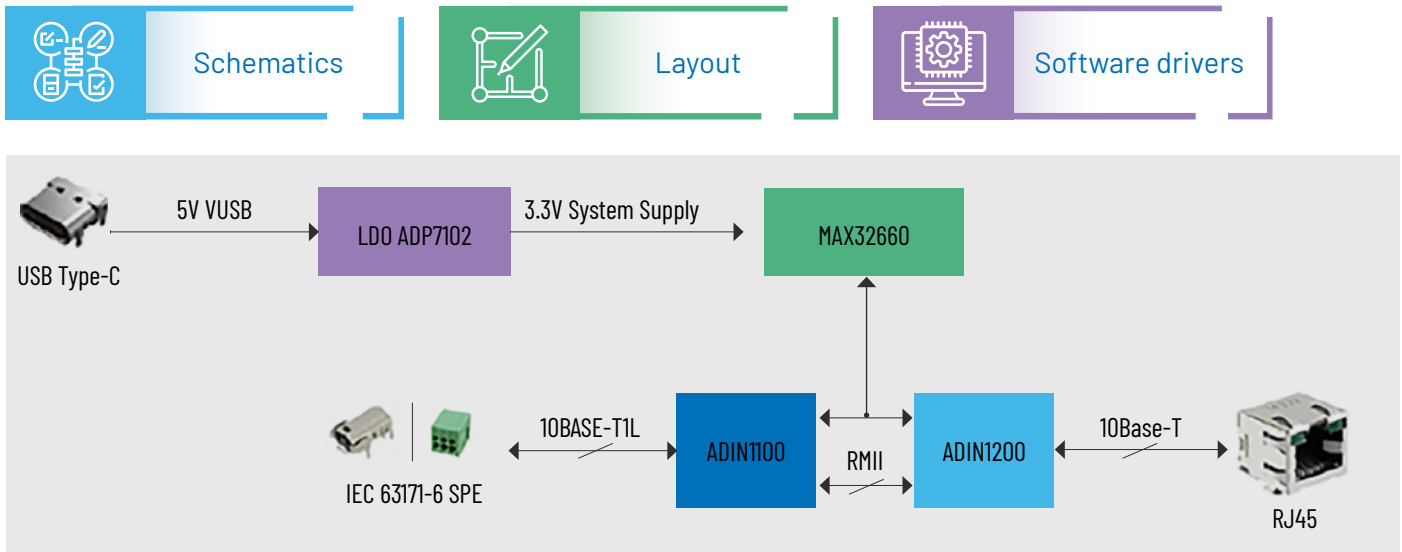
For Standard Ethernet (10BASE-T) Connection  
Shielded RJ45 connector with LED indication for Link/ Activity Status.

## Application Use Cases:





- Easy evaluation of the new 10BASE-T1L Ethernet physical layer standard (IEEE 802.3cg-2019)
- Bridging standard 10BASE-T / RJ45 and 10BASE-T1L single pair ethernet (SPE)
- Edge-to-cloud connectivity in process automation
- Long-reach, robust, 10BASE-T1L Ethernet connectivity to brownfield installations in process and building automation
- Conversion of existing 4 mA to 20 mA equipment with HART or other field bus communications to 10BASE-T1L and bridging to standard 10BASE-T Ethernet

## Build Your Own Solution

Take this proven hardware and software design and easily replicate to accelerate the development of custom 10BASE-T1L devices. Design, documentation and evaluation tools are available for free.



## Featured Products:

| Product Name  | Description   |
|---|---|
|  <b>ADIN1100</b> | Robust, Low Power 10BASE-T1L PHY  |
|  <b>ADIN1200</b> | Robust, Industrial, Low Power, 10/100 Mbps Ethernet PHY   |
|  <b>MAX32660</b> | Tiny, Ultra-Low-Power Arm Cortex-M4 Processor with FPU-Based Microcontroller (MCU) with 256KB Flash and 96KB SRAM |
|  <b>ADP7102</b>  | 20 V, 300 mA, Low Noise, CMOS LDO   |

## Ordering Information

10BASE-T1L-Media Converter To order, contact your local Arrow Account Manager, visit [arrow.com](https://arrow.com),  
Order Code: 10BASE-T1L-MC

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