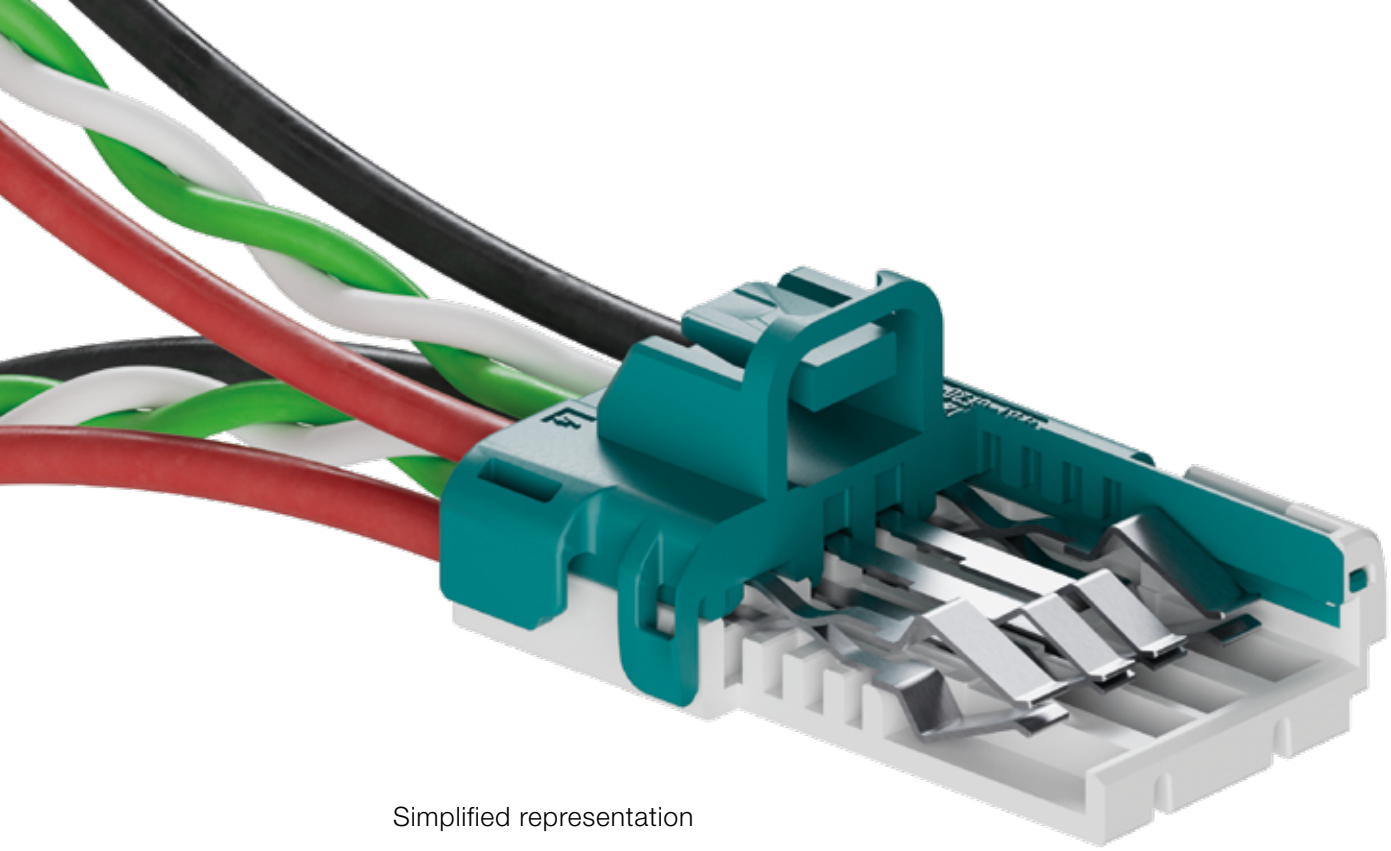
Rosenberger

One Interface. Three Functions.

EDC – Expanded Daisy Chain

AUTOMOTIVE DATA CONNECTORS

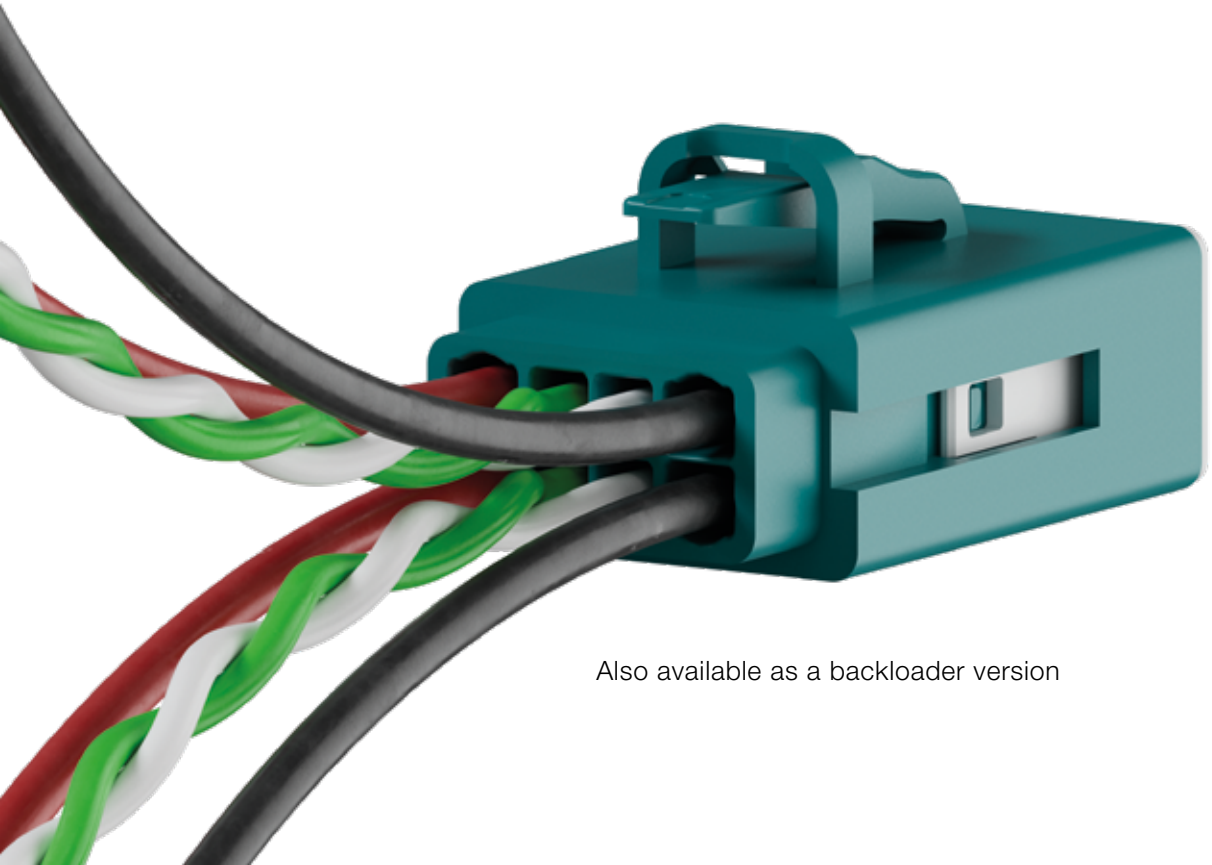


Simplified representation

EDC – Expanded Daisy Chain

Daisy chain systems are a connection concept commonly used in electronics, industrial, and automation technology. They allow multiple devices or modules to be easily linked together in series.

The assembled connectors ensure continuous signal transmission to the following units, even when unplugged. At the same time, additional units can be mounted independently, while individual units can be replaced or removed without affecting the rest of the system.



Also available as a backloader version

Benefits

- Connection of the individual Daisy Chain units (e.g. PCB) with or without impact on the following units (depending on the selected contact version 1, 2 or 3)
- Compact, modular and economic automotive connection system
- Reduction of installation space due to PCB direct contact
- Cost savings through direct PCB contacting – no PCB connector required
- Supports differential signals and power transmission
- Storable standardized subassemblies
- Designed for fully automated assembly

Applications

- Data and power transmission in differential BUS or point to point systems
- Signal transmission in Bus or Ethernet systems
- Power supply for LED lighting or sensors
- Plugged-in devices can be connected directly without having to wait for the last device
- Audio and video technology: Easy retrofit of devices or aftermarket components, e. g. monitors, speakers, etc. can be retrofitted thanks to the loop-through function (contact version 1 & 2)
- BUS systems like CAN, 10BASE-T1S
- 100Base T1

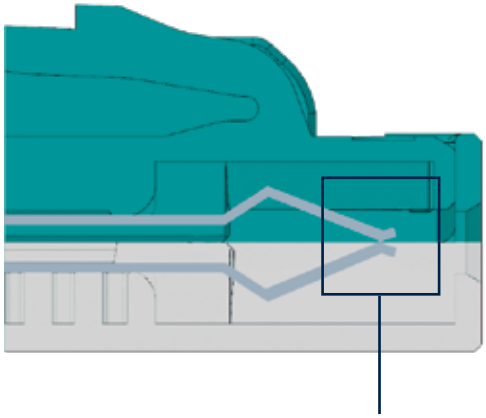
PCB direct contact system with input and output (unmated through)

Contact version 1 for 100BASE-T1 (point to point)

Signal is looped through the connector while the PCB (Daisy Chain device) is not mated.

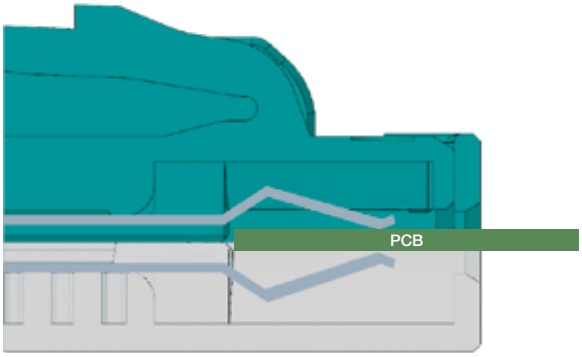
Signals are seperated between top and bottom side when the connector is mated (two indivitual point to point links).

Unplugged

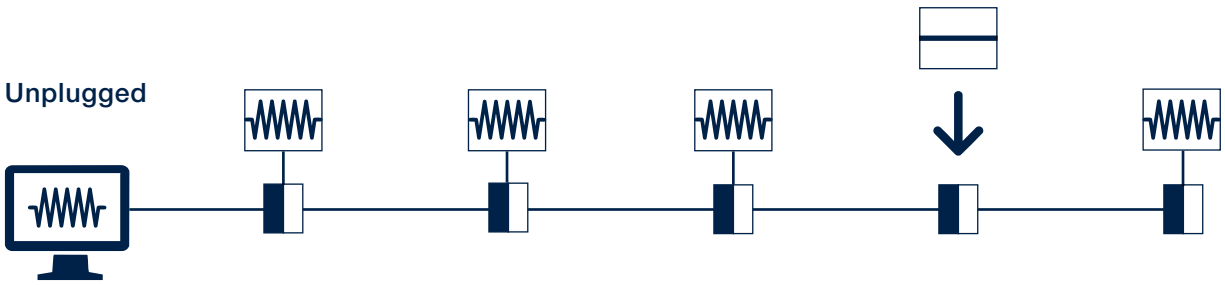


unmated through

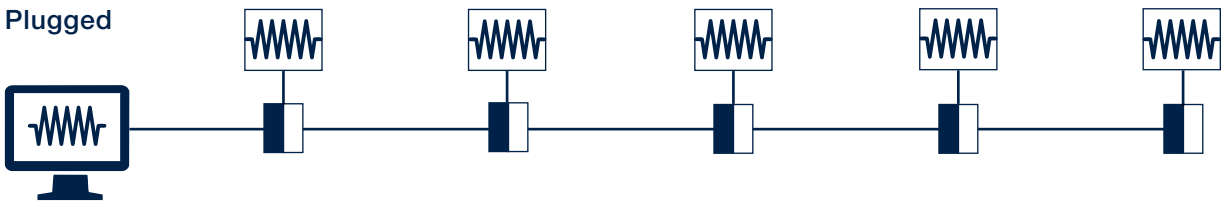
Plugged



Unplugged



Plugged



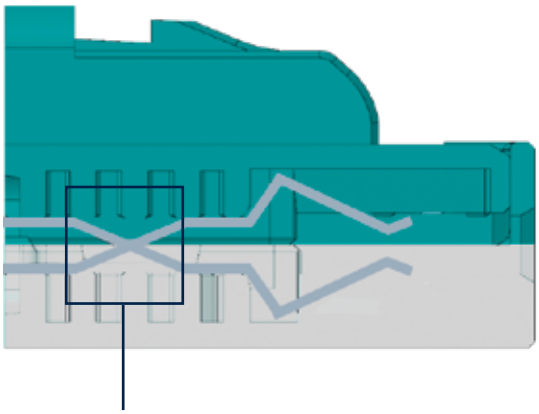
PCB direct contact system (permanent through)

Contact version 2 for BUS systems like CAN, 10BASE-T1S or power supply

Signal (suitable for power delivery) is still looped through the connector although the PCB is mated.

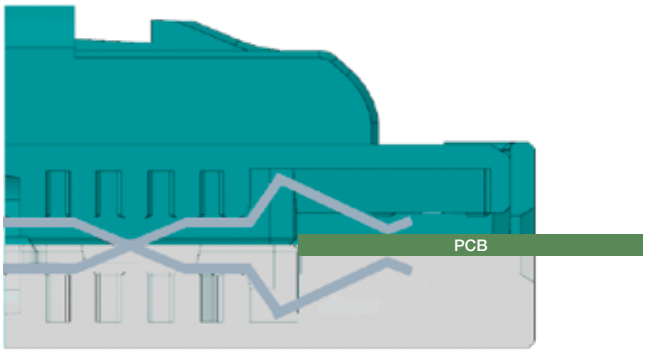
Loop-through power in the connection interface (permanently independent of the connected BUS device).

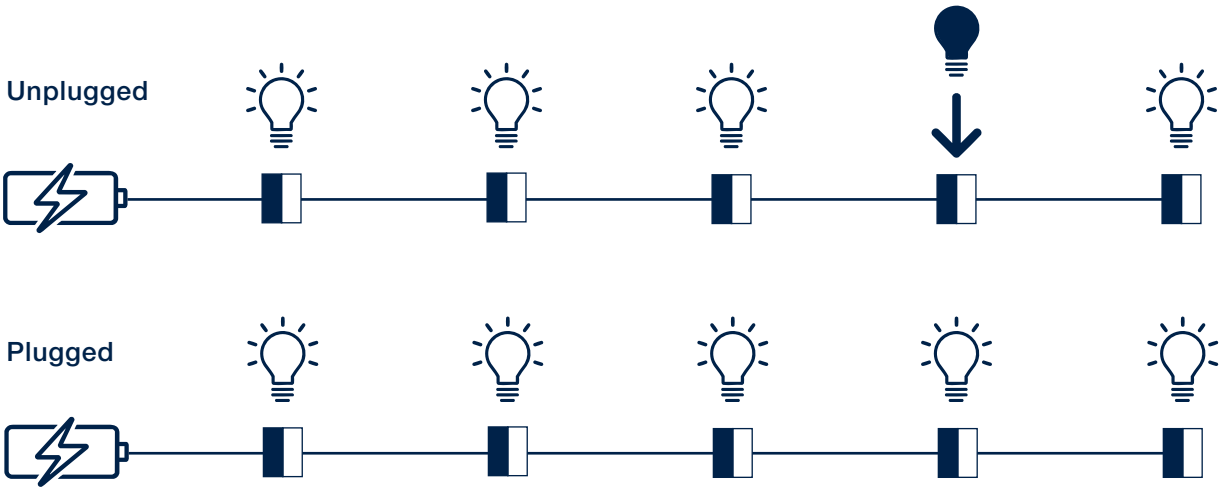
Unplugged



permanent through

Plugged



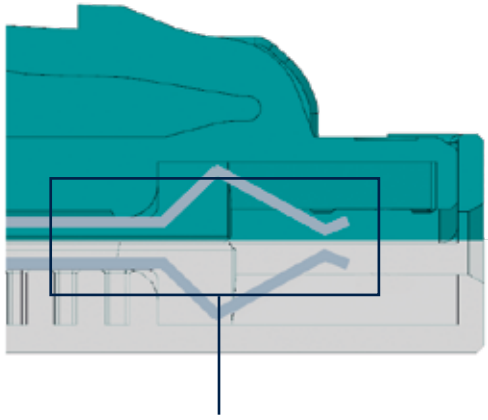


PCB direct contact system (no through)

Contact version 3 for 100BASE-T1 and BUS systems like CAN, 10BASE-T1S or power supply

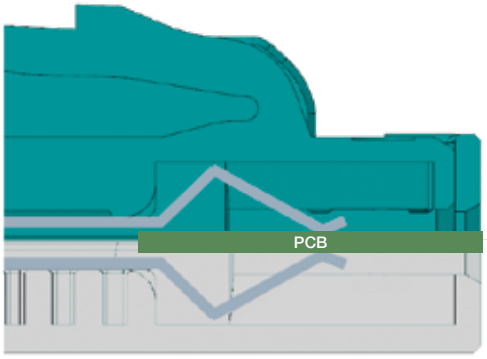
No connection between upper and lower row at any time.
Two independent point to point links.

Unplugged

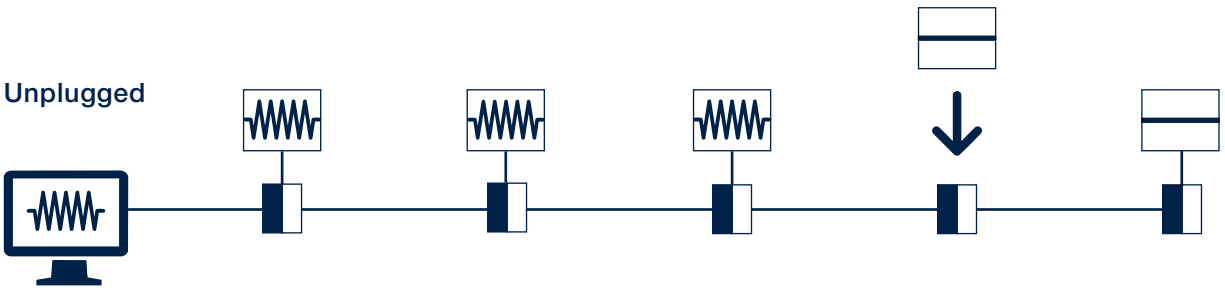


no through

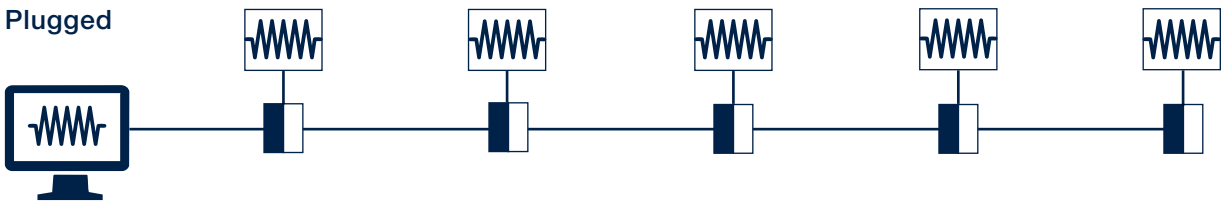
Plugged



Unplugged

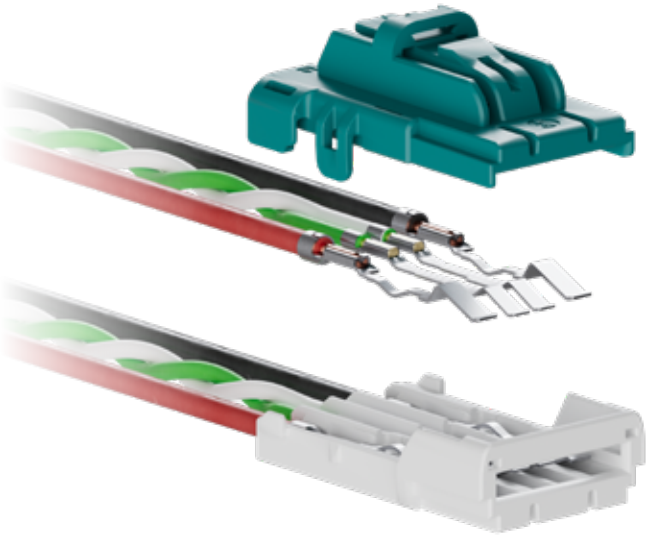


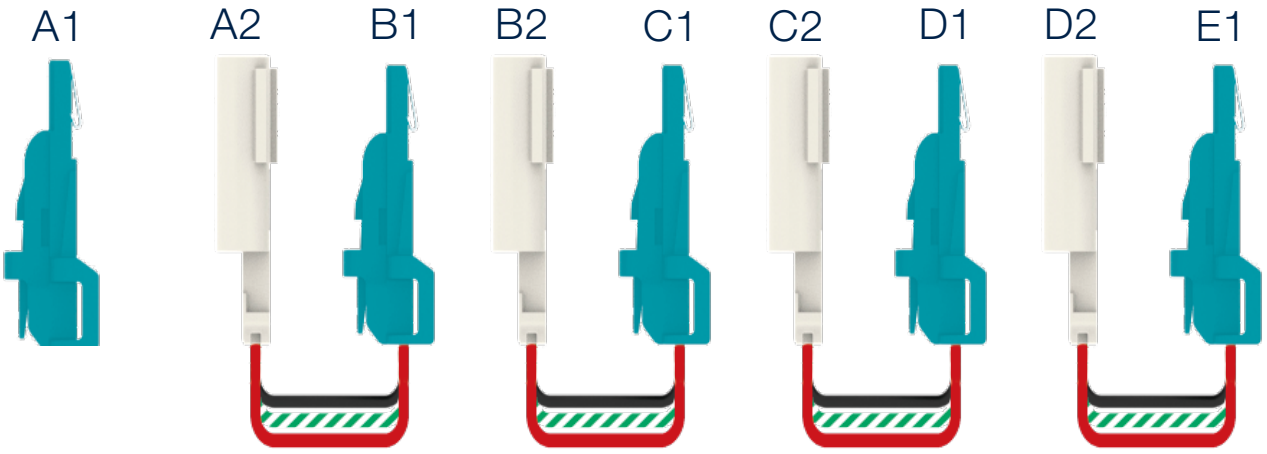
Plugged



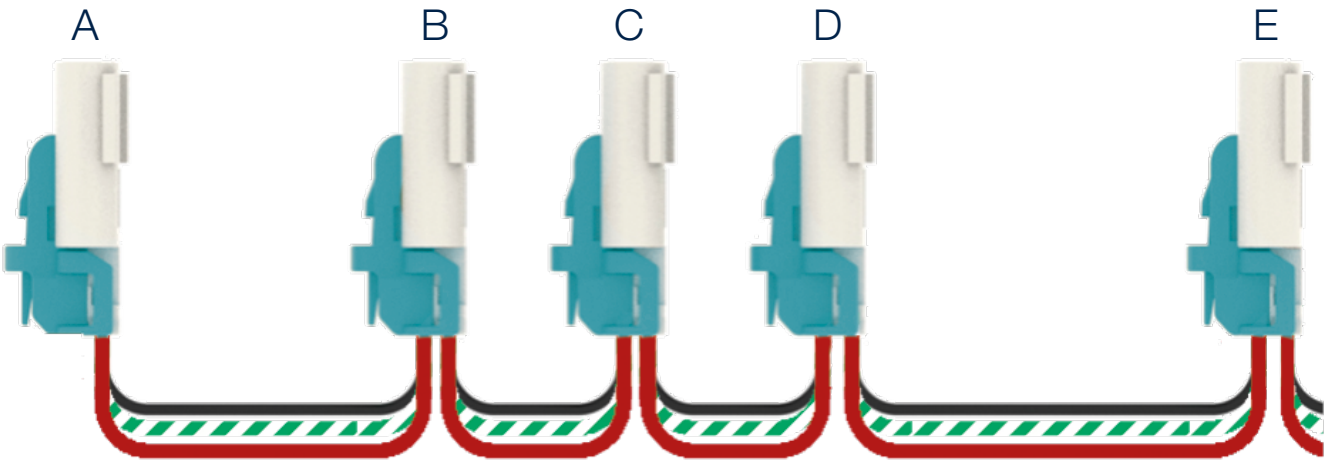
Standardized Subassemblies

Ready-made cable sections in different standard cable lengths can be assembled together to create any custom specific combination, as required. The entire line can be tested as a single unit, since the signal is looped through the complete transmission path. Not available as backloader.





PWR/GND and UTP pair.



Website

For more information refer to our website:
www.rosenberger.com/daisychain

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