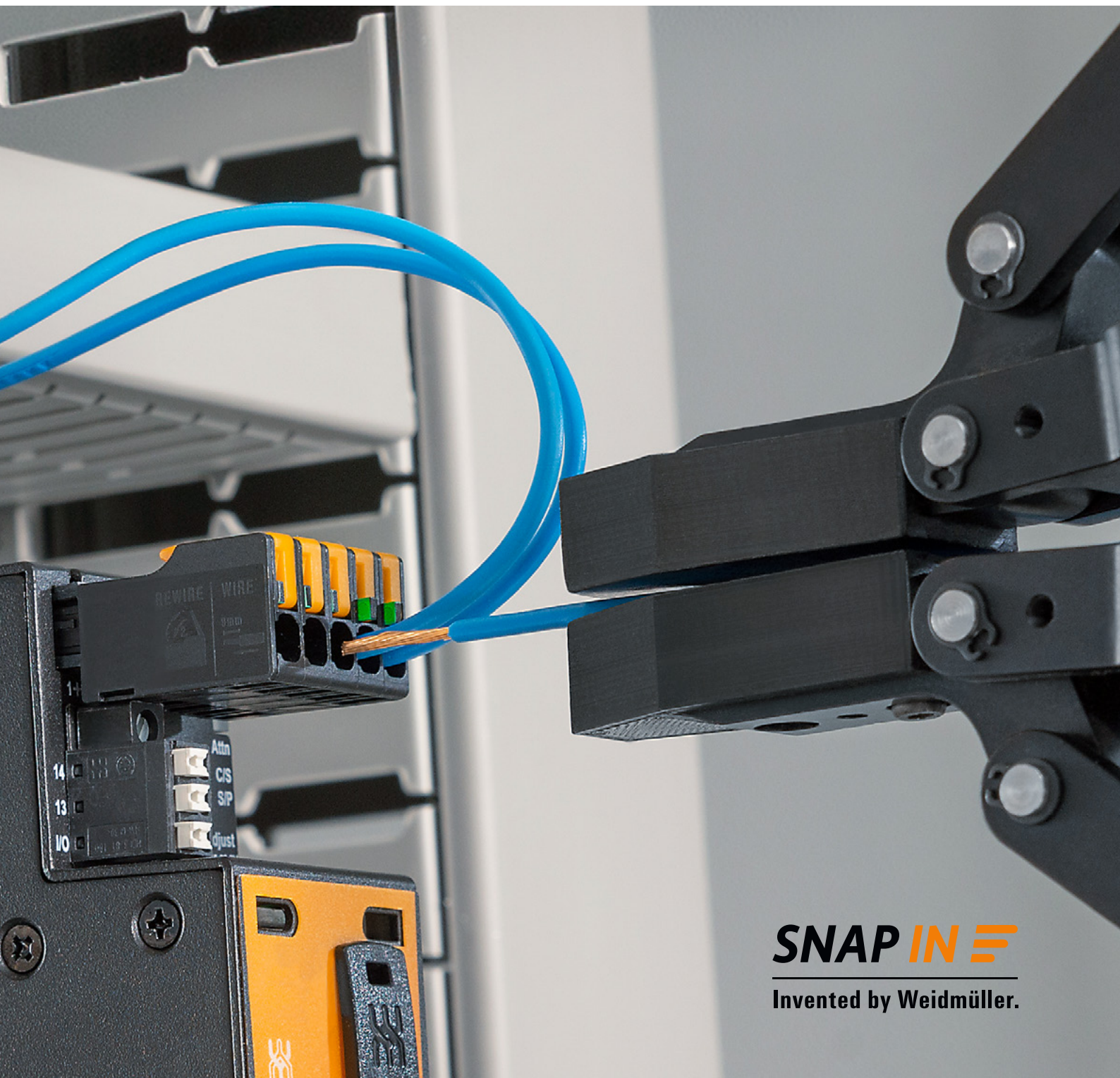


**SNAP IN**  
**Benefits for device manufacturers**

Whitepaper



**SNAP IN**   
Invented by Weidmüller.

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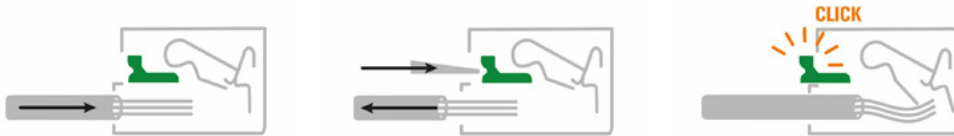
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# 1. SNAP IN connection technology

## Ready-to-Robot

In today's fast-paced business environment, time is more precious than ever. That's why at Weidmueller, we're committed to helping you accelerate your processes and get the job done faster than ever before.

With our innovative SNAP IN technology, installation and maintenance are as quick as snapping your fingers. This new connection technology is incredibly user-friendly: Simply insert the stripped wire into the open connection points, and the mechanism automatically snaps into place with a click. It's that easy! Removing the wire is just as fast — activate the lever at the PCB connectors or press the pusher at the PCB terminals to open the connection point and take out the wire. SNAP IN is a revolutionary, tool-free solution that can also be done by a robot. Experience the future of connectivity with Weidmueller's SNAP IN technology.



### 1. Insert wire

Simply insert the stripped wire into the open contact point.

### 2. Automatic connection

The contact point automatically closes. An audible click and a visible indicator confirm the secure connection.

### 3. Pull lever for unwiring

To disconnect the wire, simply pull the lever of the PCB connector or press the pusher of the PCB terminal to open the contact point. The mechanism automatically resets to the initial position, making it instantly ready for the next connection.



#### Simple

Material-saving wiring without tools and time-consuming crimping of wire-end ferrules.



#### Fast

Thanks to the preloaded spring, SNAP IN can be connected as quickly as a snap of the fingers.



#### Safe

Security you can hear!  
A noticeable "click" noise signals a secure connection.



#### Ready-to-Robot

With the innovative SNAP IN connection, fully automated wiring processes can become a reality.

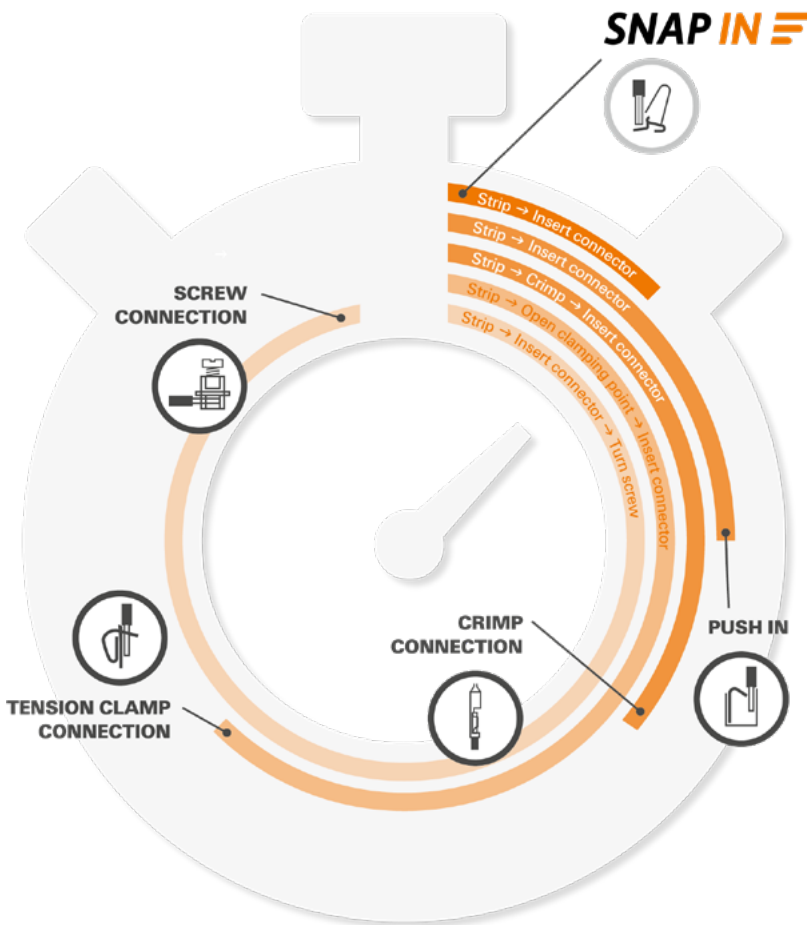
### Connection systems in comparison

The innovative SNAP IN connection is the cornerstone of OMNIMATE® 4.0, significantly accelerating the wiring process. This innovation reduces cabling efforts across diverse applications, simplifies maintenance, and automates connection processes.

Discover your potential savings with OMNIMATE® 4.0 SNAP IN compared to traditional PCB connectors in just a few clicks with our TCO calculator on our OMNIMATE® 4.0 website

**SNAP IN TO THE FUTURE**

**TCO CALCULATOR**



## 2. Cost savings with SNAP IN technology




### About SNAP IN technology

A unique spring design brings one-handed, tool-free connectivity without the need of a ferrule — and is the fastest wire connection on the market.

Simply insert a stripped conductor directly into one of the pre-loaded, open connection points and it's snapped into place. The spring mechanism only activates when the wire is inserted deep enough to ensure proper connection. Two methods then verify the wire is connected: You'll hear an audible click and see a green pusher pop up. The snap functionality eliminates uncertainty, such as worry that a wire connection would come loose in a high-vibration environment. The system can terminate stranded wires without the need for additional tools, further enhancing installation efficiency.

Releasing a connection is just as quick: Simply press the pusher to quickly re-open the connection point, enabling fast and easy disconnection. SNAP IN's spring technology makes it maintenance-free and high-vibration proof.

### Savings potential in wiring in regards to different PCB terminal connection technologies

Connection type:	Screw	PUSH IN	SNAP IN
			
Number of poles	4		
Wiring time for product (in sec.)	40	28	12
Time saving	0%	30%	70%
<b>Input values</b>			
Labor cost per hour	\$65.00		
Number of connection points per board	24		
Number of circuit boards	50,000		
Total time for wiring (hours)	3.333	2.333	1.000
<b>Time saving for wiring (hours)</b>	<b>0.000</b>	<b>1.000</b>	<b>2.333</b>
Total cost for wiring	\$216,666.67	\$151,666.67	\$65,000.00
<b>Cost saving for wiring</b>	<b>\$0</b>	<b>\$65,000.00</b>	<b>\$151,666.67</b>

Users will realize significant labor and cost savings with SNAP IN technology.

### 3. Amplifying impact with SNAP IN technology

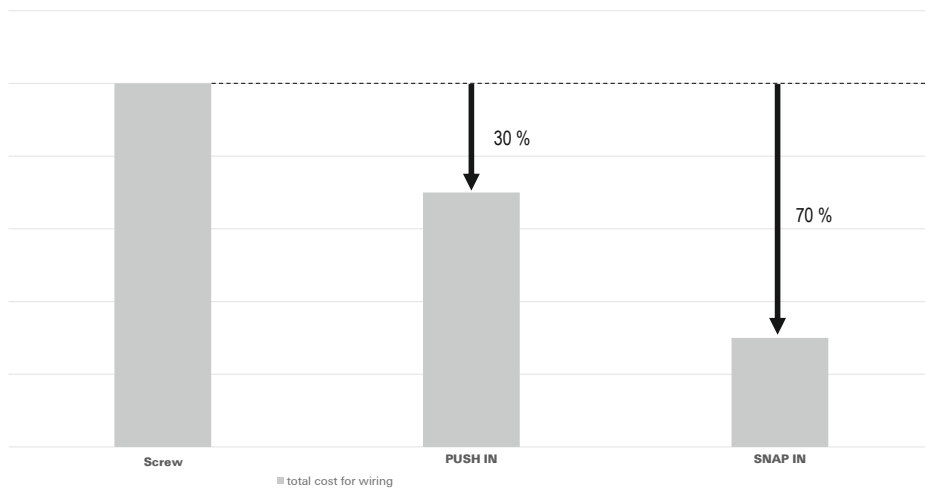
As a pioneer in connection technology, Weidmueller offers the broadest range of products available for the SMT process and continues to drive the evolution of highly efficient electronic device manufacturing. Our connection elements are designed to handle full automation together with the component assembly in a single manufacturing process, which reduces associated costs.

Applied in combination with THR, SNAP IN technology further drives:

- Faster time to market
- Reduced development costs
- Minimal wiring errors
- Improved consistency in high-volume production

An online calculator available on Weidmueller's website shows how SNAP IN can save thousands of dollars in development and labor costs based on connection points and production volume.

#### Time and cost savings



SNAP IN from Weidmueller saves time and costs when compared to other PCB connection technologies.

## 4. About the Author



**Meikel Reilender**

Product Manager,  
Device and Field Connectivity,  
Weidmueller Group

[meikel.reilender@weidmueller.com](mailto:meikel.reilender@weidmueller.com)

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Weidmüller Interface GmbH & Co. KG  
Klingenbergstraße 26  
32758 Detmold, Germany  
T +49 5231 14-0  
F +49 5231 14-292083  
[www.weidmueller.com](http://www.weidmueller.com)

Personal support can  
be found on our website:  
[www.weidmueller.com/contact](http://www.weidmueller.com/contact)

We reserve the right to make technical changes. 07/2025