ESSENTRA COMPONENTS

🛒 **Buyer's Guide**

A QUICK GUIDE TO
PCB HARDWARE

MAKING IT EASIER

PCB HARDWARE **SOLUTIONS**

Which standoff and spacer mounting type should you choose? Which card guide and LED hardware best suits your needs? This guide is designed to help.

From managing space to conductivity in your application, there are lots of factors to take into consideration when building electrical solutions.

When it comes to circuit board hardware, material and mounting type are key. We strongly recommend that you try before you buy – request **free samples** so that your team can ensure they have the perfect solution for the application. They can also download **free CADs**.

This guide is designed to give buyers an introduction. For expert advice, we're always happy to help. We can also help with our vast range of **PCB standoffs and spacers**, **PCB support pillars**, **PCB card guides** and **LED mounts and holders**.

Here's a look at the **printed circuit board components** your team will need:

SUPPORTS

When your application is in constant use you require reliable components. Maintain functionality and end-user safety with our range of heat-stabilised and easy-to-apply PCB support posts.

PERFECT FOR:
WHITE GOODS

FEATURES:

- Support types include Adhesive Base, Edge Locking, Reverse Locking, Screw Locking and Snap Lock
- Fixing methods are diverse, covering Fir Tree Mount, Locking Arrowhead, Locking Bayonet, Quarter-Turn and Flat Rest

MATERIAL:

- Available in Acetal, Nylon, EPDM, allowing operation in temperatures between -40°C (-40°F) and 85°C (185°F)

SELF-ADHESIVE PCB SUPPORT PILLARS - NON-LOCKING

View online ↗

- Adhesive backed PCB support
- Release tab for quick release

PCB SUPPORT PILLARS - ARROWHEAD SNAP-LOCK/BAYONET NOSE SNAP-FIT
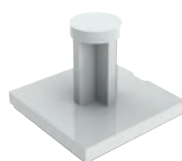
View online ↗

- Snap locking PCB support
- Quick assembly in stacking applications
- Snap-lock and snap-fit features add a secure hold

PCB SUPPORT PILLARS - FLAT REST MOUNT

View online ↗

- Self-adhesive PCB support
- Release tab for quick release
- Flat rest mount provides secure support option

PCB SUPPORT PILLARS - HEXAGONAL/ THREADED MALE/MINI

View online ↗

- Male end mounts securely using hex nut
- Releasable snap-fit fastener with low profile

PCB SUPPORT PILLARS - TWO PRONG SNAP LOCK/TWO PRONG SNAP LOCK/SPRING

View online ↗

- Snap locking PCB support
- Supports act as a spring when the pin is inserted into the spacer
- Part flexes and can provide continuous support to the PCB

WHICH IS THE **RIGHT MOUNTING** TYPE?

Choosing the right spacing component as part of your PCB hardware design can be a challenge. Many considerations such as board substrate, application and material are key elements in the decision-making process. However, one of the most important choices you can make is mounting type.

HERE ARE SOME EXAMPLES:

1 **THREADED** – **1. Standard:** Held in position with the use of a nut to give a very secure fixing that can be released and re-tightened.

2. Undercut: Provides a more secure connection by being fixed into the thread.

3. Self-tapping: No closing washers or nuts necessary due to self-tapping thread.

2 **SNAP FIT** – Quickly pushes into a panel or chassis hole, giving a strong but efficient mounting that saves you time when undergoing installation.

DIFFERENT TYPES AVAILABLE: edge lock, bayonet and fir tree.

3 **SNAP LOCK** – Pushes into a panel or chassis hole, giving a secure but easily releasable fix.

4 **PRESS FIT / BLIND HOLE** – Fins hold securely to a range of binding holes with a painted style that drives easily into applications with space restrictions.
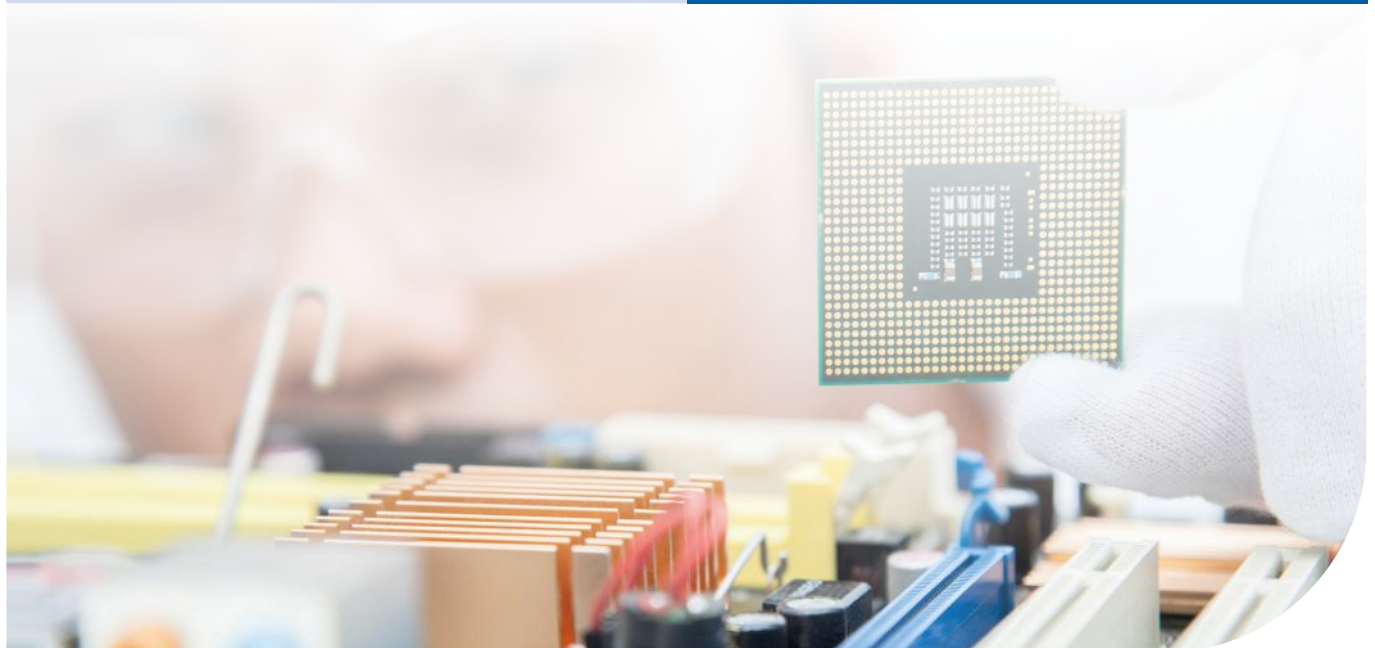
5 **ADHESIVE BASE** – Adhesive tape eliminates the need for a mounting hole, providing time and space efficiencies.

WHAT ELSE SHOULD YOU KNOW?

To learn about PCB substrate materials, click here.

To learn how to efficiently design your PCB, click here.

SPACERS & STANDOFFS

Applications often have limited space whilst needing to house lots of components. Our range of solutions provide versatility and space, giving your customers ease of access and peace of mind.

**PERFECT FOR:
DATA CABINETS
AND CONSUMER
ELECTRONICS**

FEATURES:

- Choose from varied internal diameter and length options to ensure the right position for your application. PCB standoffs available in Male-Male, Female-Male and Female-Female variants

- **Bodies available:** hexagonal standoff, round standoff – also, Round with Crossed Body, allowing for different tightening possibilities

- **Also available:** metric threaded standoff, standoff insulator, self-tapping standoff, and more

MATERIAL:

- Ceramic spacers, PCB plastic spacers (Heat-Stabilised Nylon, Impact Modified Nylon, Acetal, PVC and Polystyrene). Also, Nylon PCB standoffs, plus Glass-Filled Nylon and Nylon with Brass Inserts

CERAMIC NON-THREADED SPACER

View online 🗗

- Non threaded spacer requires no assembly equipment – apply by hand
- Suitable for range of applications

PCB SPACER - NON-THREADED/ ROUND/THROUGH

View online 🗗

- Non threaded spacer
- No assembly equipment required – apply by hand
- Round spacers available in a range of materials

PCB SPACER - SNAP-FIT

View online 🗗

- Nylon PCB spacer supports heavily loaded printed circuit board design
- No through hole needed on board
- Flanged base to keep board steady

PCB STANDOFFS - ROUND/ METRIC THREADED/ INSULATOR/NYLON & BRASS

View online 🗗

- Female to female threaded round standoffs
- Metric nylon standoffs with brass inserts
- No assembly equipment required – apply by hand
- Ideal for when high mechanical strength is required
- Provides sturdy, insulated spacing for high-power electronic applications
- Also available as male to male round standoff spacers and male to female

PCB STANDOFFS - HEXAGONAL BOTTOM/INSULATOR/ NYLON & BRASS

View online 🗗

- Male hexagonal standoffs
- No assembly equipment required – apply by hand
- Ideal for when high mechanical strength is required
- Provides sturdy, insulated spacing for high-power electronic applications

PCB STANDOFFS - HEXAGONAL /THREADED/SELF-TAPPING

View online 🗗

- Female through standoffs
- Self-tapping screw threads the plastic for a strong hold
- Hexagonal body

FEMALE TO FEMALE STANDOFF - HEXAGONAL BOTTOM, METRIC-THREADED, INSULATOR, NYLON/BRASS

View online 🗗

- Round Nylon standoff with hexagonal bottom
- No assembly equipment required – apply by hand

CARD GUIDES

Access is essential in electrical cable enclosures and electrical cabinets. Ensure your circuitry is fully accessible with our range of easy-to-install- and -remove PCB card guides and circuit card pullers.

**PERFECT FOR:
ELECTRICAL CABINETS**

FEATURES:

- Available in different mounting directions. Mounting methods range from Screw, Snap In, Adhesive and Push Fit, offering a semi-permanent or removable locking function

MATERIAL:

- Material options include Acetal, Stainless Steel, Polystyrene, Nylon, Polycarbonate, PVC, and ABS giving operating temperatures ranging between -40°C (-40°F) and 140°C (284°F)

PCB CARD GUIDES - VERTICAL/ THREADED/PLASTIC PIN

View online

- PCB vertical card guide
- Locking Threaded Plastic Pin to hold PCB boards
- Pins easily engaged and disengaged with a finger press
- Tension guides support boards vertically
- Double channel permits side-by-side mounting

PCB CARD GUIDES – VERTICAL/SNAP-IN/ LOCKING/LATCHED

View online

- Vertical mount PCB card guide
- Locking tab holds board securely in place
- Tension guides mount into square hole to prevent rotation
- Fast, easy installation

PCB CARD GUIDES - HORIZONTAL/ ADHESIVE/NO MOUNT

View online

- For mounting a PCB board assembly in tight spaces
- Supports horizontal mounting
- Adhesive-based mounts provide an added stability

PCB CARD GUIDES – HORIZONTAL/AD-HESIVE/NO MOUNT/SLIDE IN/ONE SIDED
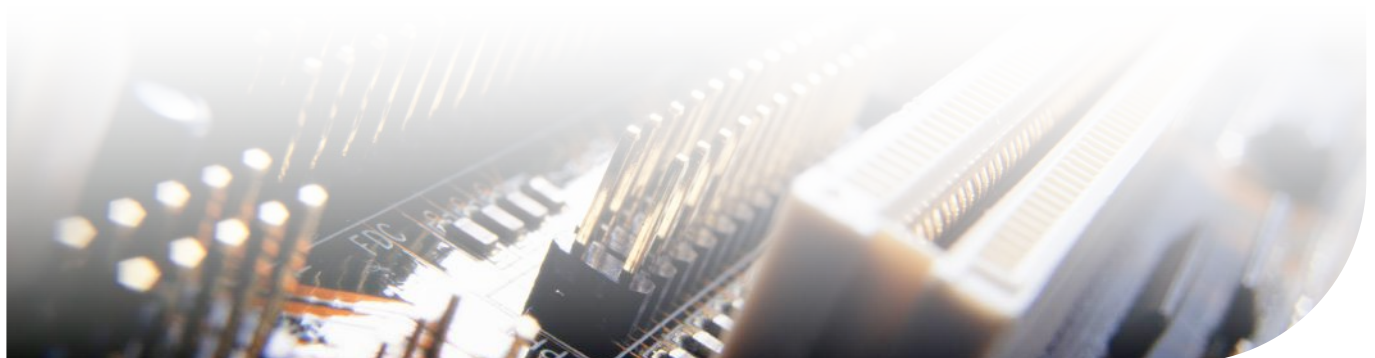
View online

- Innovative horizontal mounting method
- Firm retention for any board width
- Easy installation and removal for PCB placement

PCB CARD GUIDES - HORIZONTAL/ SNAP-IN/DEEP CHANNEL

View online

- Card guides nylon 6.6
- Slot depth allows for maximum PCB retention
- Ideal for high vibration and shock

LED HARDWARE

Ensure product quality and prevent malfunctions with a range of easy-to-install solutions that provide an impactful and attractive finish. Our LED light guide shows you how: LED Light Guide for Product and Panel Building.

PERFECT FOR: APPLIANCES, WHITE GOODS, GREY GOODS, BLACK GOODS

FEATURES:

- Range built to get the most from LEDs, including these categories: LED Lens Holder, LED Light Pipe, LED Light Mount and LED Spacer
- LED Mounts provide an easy snap-in application and give users the opportunity to mount LEDs in an upright or 90° angle

ADAPTABILITY:

- LED Spacers give height control and wire retention with a number of LED types, designed to fit your PCB

LED LENS HOLDER

View online

- LED lens holder designed to hold a standard T-1 3/4 LED while transmitting light at a 10˚ angle
- Available with or without a sealing O-ring

LED LIGHT PIPE

View online

- Available with either a flat or domed front shape
- Provides LED ESD protection (electrostatic discharge)

LED MOUNT – 90˚ANGLE

View online

- Mounts LEDs at a 90˚ angle
- Mounts easily by hand

LED SPACERS - ROUND, METRIC SPACERS

View online

- Three different styles to accommodate both T-1 and T-1 3/4 LEDs
- Provides height control
- Lead wire retention and stability

LED SPACERS - SQUARE

View online

- Minimises shifting and height variation
- Ensures product uniformity and production ease
- Square design ideal for angled applications

LED SPACERS - ROUND, IMPERIAL SPACERS, MOULDED, T-1 3/4

View online

- Internal tapered dividers guide lead wires and prevent the leads from shorting
- Minimises shifting and height variation
- Ensures product uniformity and production ease

ESSENTRA
COMPONENTS

DOWNLOAD FREE CADS
AND TRY BEFORE YOU BUY

Free CADs are available for most solutions, which you can download for free. You can also request free samples to ensure the solutions you've chosen are exactly what you need. If you're not quite sure which product will work best for your application, our experts are always happy to advise you.

Request your **free samples** or download **free CADs** now.

www.essentracomponents.com

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PRODUCTS AVAILABLE

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TRY BEFORE YOU BUY

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RELIABLE DELIVERY

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