



## **POWER BUSBAR SOLUTION**

TE Connectivity offers Power distribution solutions to address customer system requirements with high expertise, consistent quality and delivery service.

# WHAT IS BUSBAR AND WHY USE BUSBAR

- Typically made from of aluminum or copper
- Typcially used in electrical power distribution
- Transmit high current power from the source to the load

#### TE BUSBAR SERVICES

### Providing solutions with:

- End-to-end power-transfer solutions
- Design for manufacturability consulting
- Complex assemblies
- On-time delivery performance
- · World-class quality

### Partnering

- Power system Design for power distribution
- · Collaboration to Optimize
  - · Power system; Space
  - Min. components; Cost
  - System performance
- System testing including rack, connector, cable and busbar
- Quick prototype sample making

## **BUSBAR SOLUTION BENEFITS**

- Long Life span and stability in power delivery
- Low space requirements as compared to cabling options
- · Better heat dissipation
- Ease and speed of installation as many connectors are hot pluggable in tapping points
- Easy installation, less labor required, less cost

## TE POWER BUSBAR ADVANTAGES

• Complete Turn Key:

Busbar, Connectors and Components full Integration

• Busbar Development:

Design, simulation, testing & manufacturing

• Cost Competitive Solutions:

Market competitive solutions meeting requirements

• Regional Capabilities:

Design Teams and Supply Chain: Asia & North America

· Quick Response:

Short lead time for both concept design and sample building

## POWER BUSBAR SOLUTIONS

## **BUSBAR MANUFACTURING CAPABILITIES**

- Copper thickness: 1mm~20mm;
- Forming:
  - · CNC cutting, laser cutting
  - CNC bending, punching, machining, die cutting
- Isolation: Epoxy coating
- Plating: Tin, Nickel, Ag, Au...
- Welding: Ultrasonic welding, Laser welding...
- Lamination
- · Press riveting

## BUSBAR WITH CABLE(SCREW AND WELDING)

#### Offering

- · Cable screw/welding on busbar
- TE connector and cable solution

#### Features and Advantages

- · High current carrying
- · More better floating
- · Lower system noise
- Better for test and maintenance

# FLEXIBLE BUSBAR: BRAIDED WIRE, MULTIPLE COPPER STACK

#### Offering

- · Round and Flat braided wire
- Insulated and uninsulated versions
- Multiple copper sheet stack version
- Felx/rigid combined solution with welding
- TE connector solutions

#### Features and Advantages

- · High current carrying
- · Good flexibility, better floating
- · Save space
- Easy to install
- Easy for test and maintenance





## **PRODUCT TYPES**

## **Rigid Busbar**





#### Capabilities

- Copper thickness: 1mm~20mm;
- · Forming: CNC/Laser cutting, Bending, punching, machining
- · Isolation: Epoxy coating
- Plating: Tin, Nickel, Ag, Au...
- · Welding: Ultrasonic welding, Laser welding

#### Value add

- · TE connector solutions
- Press riveting
- · PEM insertion and attachment

#### Features and Advantages

- · High current carrying
- · More better floating
- · Lower system noise
- · Better for test and maintenance

## Laminated Busbar



### Value add

- TE connector solutions
- Press riveting
- · PEM insertion and attachment

## Features and Advantages

- Size minimize
- · Low resistance, high capacity
- Improved heat dissipation, lower T-rise of system
- Reduce the damage from voltage peak
- Reduce system noise and EMI
- Error proof installation
- Good look

## **POWER BUSBAR SOLUTIONS**

## TARGET MARKET/APPLICATION

#### Data centers

- · Rack power distribution
- Shelf DC power transmission

#### Computers

- PCB to PCB
- Supercomputer
- · High-end Servers and Al Servers
- · High-end Switch Back plane power distribution

#### Telecom:

- Cellular base station power distribution;
- Router backplane distribution; internet router;
- Telecommunications board level power distribution
- Transportation
- Energy
- Industrial

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