



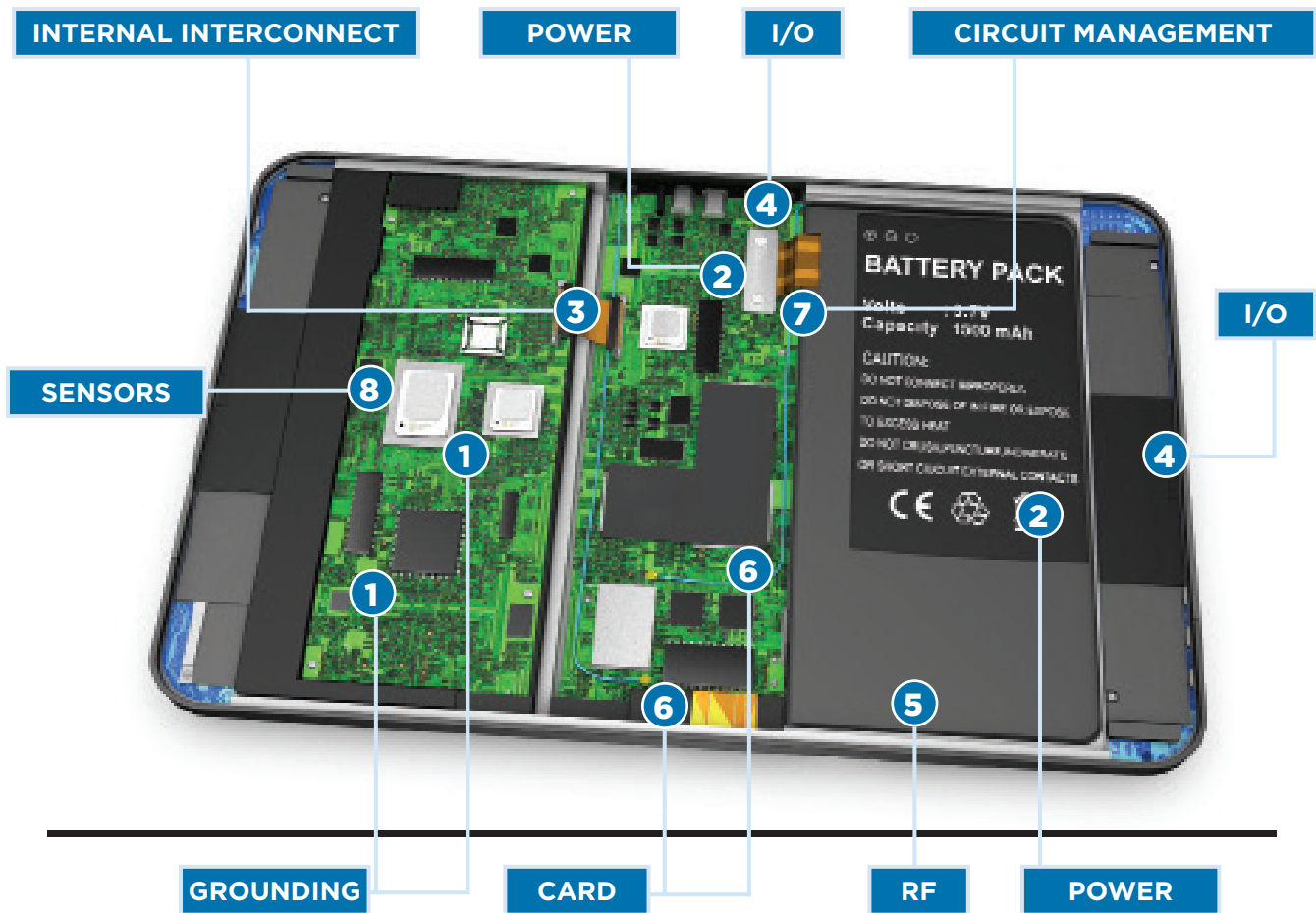
Electromechanical and electronic components that ease the transition to higher data rates, increased protection and smaller packaging

DESIGN NAVIGATOR

	Pitch (mm)	Max Current Rating (A)	Protection from EM/RFI Noise	Circuit Protection Products Available	High Vibration Performance	Low Profile Design	Standards
1 GROUNDING							
Solder Pads	1	•				•	N/A
Spring Fingers - PCB Grounding Contacts	1	•			•	•	N/A
Spring Probes	1	•			•	•	N/A
2 POWER							
Battery Connectors	10			•		•	N/A
3 INTERNAL INTERCONNECT							
0.8mm Free Height (FH) Board-to-Board Connectors	0.5			•		•	N/A
AMP CT & Mini CT Wire-to-Board Connectors	4			•		•	N/A
AMPMODU 50/50 Grid Board-to-Board & Wire-to-Board Conn.	0.5			•	•	•	UL, CSA
AMPMODU System 50 Board-to-Board & Wire-to-Board Conn.	3			•	•	•	UL, CSA
Card Edge Connectors for PCI Express Applications	1.1		•	•			MIL-STD-202*
Economy Power (EP) 2.5 Wire-to-Board Connectors	4.5			•		•	UL, CSA
Flexible Printed Circuit (FPC) Connectors	1			•	•	•	N/A
Grace Inertia Wire-Applied Connectors	7			•		•	UL, CSA
LCD Coaxial Embedded Display Interface (LCEDI) Conn.	1	•		•	•	•	VESA*
M.2 NGFF	0.5			•		•	Industry*
M8/M12 I/O Connector Systems	5	•	•	•	•		UL, CSA
Micro MATE-N-LOK Wire-Applied Connectors	5			•		•	UL, CSA, VDE
Mini-Universal MATE-N-LOK Wire-Applied Connectors	11.2			•		•	UL, CSA, VDE (250 V Max)
Signal Double Lock Wire-Applied Connectors	3			•		•	UL, CSA, VDE
Sockets	N/A			•	•		UL
Wire-to-Board High Performance Interconnects (HPI)	1-3			•	•	•	N/A
4 INPUT/OUTPUT (I/O)							
Cable Assemblies	N/A	•	•	•	•		UL, CSA, VDE
CHAMP Docking Series I/O Connectors	0.3	•	•	•	•	•	Mobile, Tablet*
Connectors for HDMI Standards	N/A	•		•		•	HDMI*
Industrial Ethernet Products	0.5	•	•	•	•		UL, CSA, ODVA Ethernet/IP, Profinet, CC-Link IE*
Micro USB Connectors	N/A			•		•	Industry*
Products Designed for DisplayPort Standard	N/A	•		•		•	VESA*
RJ45 Modular Jacks & Plugs	1.5	•	•	•	•	•	RU, UL, CSA, TIA-1096-A*
RJ point five Connector Systems	0.5	•	•	•	•	•	N/A
USB 2.0 Connectors	0.5			•	•		Industry*
USB 3.0 Connectors	0.9			•	•		Industry*
USB Stacked 3.0 Connectors	0.9			•	•		Industry*
5 RF							
Antenna Products	N/A			•			N/A
Switching Coax Connectors	0.5	•	•	•	•	•	ETSI*
6 CARD							
Connectors for Micro Secure Digital (SD)	0.5	•	•	•		•	SDA*
Connectors for Secure Digital (SD) Memory Cards	0.5	•	•	•		•	SDA*
Serial ATA (SATA)	1.27			•	•	•	Industry*
SIM Card Connectors	0.5	•		•		•	ETSI*
7 CIRCUIT MANAGEMENT							
Cable ID Labels	N/A						UL 969
Circuit Protection Devices	N/A			•			N/A
Force Guided Relays	8						UL, VDE, TUV, CQC, Industry*
Precision Resistors	N/A						N/A
Pressure Sensitive Adhesive Labels	N/A						UL, CSA, Mil, Industry*
Signal Relays	2						UL, VDE, TUV, CQC, Industry*
Slide Switches	3					•	N/A
Tactile Switches	50					•	N/A
8 SENSORS							
Humidity Sensors	N/A					•	N/A
Piezo Film Sensors	N/A					•	N/A
Position Sensors	N/A					•	N/A
Pressure Sensors	N/A					•	N/A
Temperature Sensors	N/A					•	N/A
Vibration Sensors	N/A				•	•	N/A

UL - Underwriters Laboratories Listed * Industry / Mil - Meets product specific industry standards or Mil specs
 RU - Recognized Under (see product page on te.com for more detail)
 CSA - Canadian Standards Association

TE offers solutions for your space-saving design needs.

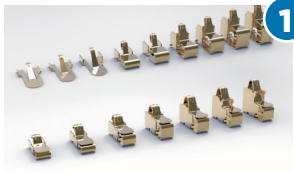


Products within each component type can be applied to small devices across various industries.

- 1 Grounding
- 2 Power
- 3 Internal Interconnect
- 4 Input/Output (I/O)
- 5 RF
- 6 Card
- 7 Circuit Management
- 8 Sensors



Featured Products



1

Spring Fingers - PCB Grounding Contacts

- Gain design versatility with small footprint
- Eliminate the cost of specialized equipment with a design utilizing standard equipment for soldering and pick-and-place
- Allow for quick design changes with a common footprint

[Website](#)
[Quick Reference Guide](#)
[Video](#)

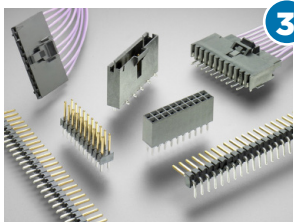


2

Battery Connectors

- Save space with low profile design
- Quick charge capability with high current capacity
- Battery to board design flexibility with multi-directional mating

[Website](#)
[Quick Reference Guide](#)



3

AMPMODU System 50 Board-to-Board & Wire-to-Board Connectors

- Save board space with high density ribbon cable connector design
- Achieve high vibration performance and reliability with integral latch locking to shrouded headers
- Support PC board processing and drainage with high temperature housings and stand-offs

[Website](#)
[Catalog](#)
[Quick Reference Guide](#)



3

LCD Coaxial Embedded Display Interface (LCEDI) Connectors

- Minimize overall package size with low profile design
- Improve retention with full lock mechanism and pull bar option
- Standardize inventory due to intermateability with I-PEX CABLINE-VS series

[Website](#)
[Quick Reference Guide](#)



3

M.2 (NGFF)

- Support enhanced data rates, including PCI Express 3.0, SATA 3.0 and USB 3.0
- Save more than 20% PCB real estate compared to the PCIe Mini Card
- Provide a range of profile heights to meet design needs

[Website](#)
[Quick Reference Guide](#)
[Product Presentation](#)
[Video](#)



3

Micro MATE-N-LOK Wire-Applied Connectors

- Maximize board space with single and dual row, vertical and right angle configurations
- Prevent accidental unmating in high vibration applications with positive latches
- Accommodate wire sizes from 30 to 20 AWG with a broad range of crimp, snap-in, pin and receptacle contacts

[Website](#)
[Quick Reference Guide](#)
[Data Sheet](#)



3

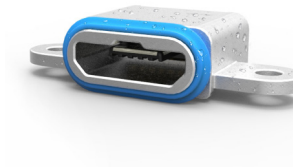
Sockets

- Quick and easy replacement of central processing units (CPU's) without soldering
- Ensure a secure fit with automated socket placement during product manufacturing
- Compliant with environmental regulations and withstands lead-free process temperatures

[Website I](#)
[Website II](#)

Featured Products

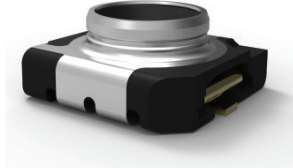
4 Waterproof IP68 Micro USB Connector




- Prevent intrusion of water and other particulate materials with IP68 sealing protection
- Provide improved signal separation and enhanced mechanical stability with staggered contact design
- Offer the lowest profile product integrating a metal shield and waterproof structure into one piece

 [Website](#)

5 Switching Coax Connectors



- Save space with ultra-low profile design
- Improve interconnection reliability with high force contacts
- Support today's faster and more efficient applications with improved data rates

 [Website I](#)
[Website II](#)
[Catalog](#)

6 SIM Card Connectors



- Meet unique design requirements with large portfolio covering several styles and card sizes
- Improve applied cost with fully-automated processing
- Gain support across all regions with global manufacturing footprint

 [Website](#)
[Quick Reference Guide](#)

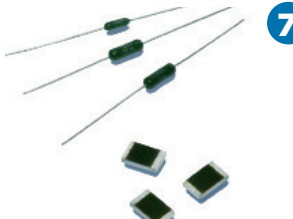
7 Circuit Protection Devices



- Help protect sensitive electronics from overcurrent and overvoltage events
- Achieve protection requirements and equipment compliance with regulatory safety certifications such as UL, IEC, TIA & ITU-T
- Help protect against thermal runaway damage caused by component failure, overcharging or short circuit

 [Website](#)
[eLearning Module](#)

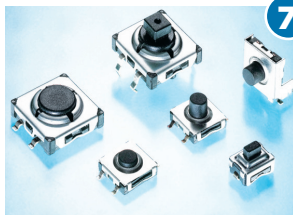
7 Precision Resistors




- Maintain long term application stability in ultra-low temperature conditions
- Minimize electronic noise with thin film precision resistor design
- Reduce inventory cost with lead-time and packaging flexibility

 [Website I](#)
[Catalog](#)

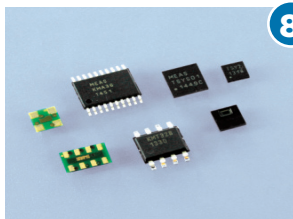
7 Tactile Switches



- Achieve system longevity with extended lifecycle design
- Prevent potential liquid or particle contamination with IP67 sealed design
- Save space with ultra-low profile design

 [Website](#)
[Catalog I](#)
[Catalog II](#)
[eLearning Module](#)

8 Sensors



- Help enable space and energy savings with compact designs featuring low power consumption
- Ensure reliable operation for critical applications with accurate readings
- Improve efficiency for precise feedback and control with fast response times

 [Website](#)

LET'S CONNECT

TE Connectivity (TE) is on the cutting edge of technology innovation and a world leader in connectivity with more than 50 years of experience. TE has an extensive understanding of electromechanical and electronic components providing solutions in support of designs with space constraints. This solutions guide will allow you to easily select the components required for small devices, while providing access to additional online information through TE.com. TE's advanced technology in product development can help ease the transition to higher data rates, increased protection and smaller packaging with our industry leading components.

Technical Support

te.com/support-center

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