



## Quick Reference Guide AMPMODU System 50

The AMPMODU System 50 connector family includes a wide variety of high density board-to-board (through hole and surface mount) and cable-to-board connectors. AMPMODU System 50 receptacles and header assemblies can be categorized in three groups: board mount headers, board mount receptacles and cable-to-board receptacles. AMPMODU System 50 cable applied receptacles are available in ribbon cable or Flat Flexible Cable (FFC) cable termination. The variety of components and application possibilities, combined with small size and outstanding quality, make AMPMODU System 50 suitable for high density systems.

### FEATURES AND BENEFITS

- Categorized in three groups: board mount headers, board mount receptacles, and cable-to-board receptacles
- Available in single and double row, vertical or right-angle, shrouded or unshrouded
- Formed from high conductivity copper alloy and selectively plated with gold for higher performance and reliability
- Housings on all board mounted assemblies are made of high-temperature tolerant materials and incorporate stand-offs for free drainage of flux cleaning solutions
- Integral latches for positive locking to shrouded mating headers
- Suitable for high density systems
- RoHS compliant parts (Non-RoHS compliant parts available)

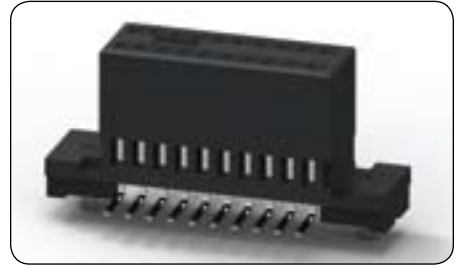
### PRODUCT APPLICATIONS

- Medical equipment
- Gaming equipment
- Automotive controls
- Servers
- Test/measurement devices
- Factory automation
- Telecommunication equipment
- Storage equipment

**Receptacles — Board-to-Board**

Product Specification — 108-1093

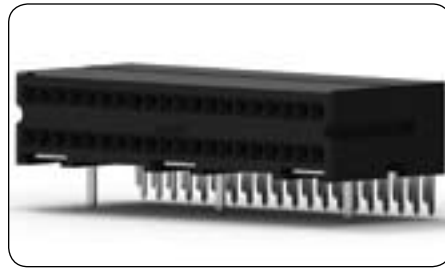
Application Specification — 114-25031, 114-25035 (SMT)



RECEPTACLES — Through Hole Vertical		
Part	Part Number	Positions
Single Row	5-104192-2	10
	5-104192-4	15
	5-104192-7	30

RECEPTACLES — Through Hole Vertical		
Part	Part Number	Positions
Double Row	5-104078-3	10
	5-104078-2	40
	5-104078-8	100

RECEPTACLES — Surface Mount Vertical*		
Part	Part Number	Positions
Double Row	5-104550-1	10
	5-104550-2	20
	5-104550-9	100

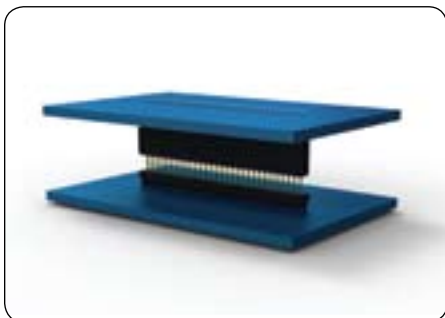


RECEPTACLES — Through Hole Right-Angle		
Part	Part Number	Positions
Single Row	5-104196-8	5
	5-104196-5	20
	5-104196-7	30

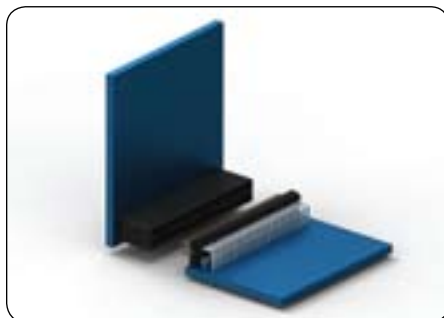
RECEPTACLES — Through Hole Right-Angle		
Part	Part Number	Positions
Double Row	5-103911-1	10
	5-103911-5	40
	5-103911-8	100

\*Surface mount parts are available in tubes or tape and reel packaging.

**Available AMPMODU Board-to-Board Configurations**



**Parallel**



**Right-Angle**



**Co-Planar**

Headers — Board-to-Board

Product Specification — 108-1093

Application Specification — 114-25031, 114-25035 (SMT)



HEADERS — Through Hole Vertical		
Part	Part Number	Positions
Single Row Shrouded	5-104071-7	4
	5-104071-4	20
	6-104071-9	50



HEADERS — Through Hole Vertical		
Part	Part Number	Positions
Double Row Shrouded	5-104068-2	10
	6-104068-8	68
	1-104068-7	100



HEADERS — Through Hole Vertical		
Part	Part Number	Positions
Single Row Unshrouded	5-104178-1	4
	6-104178-3	25
	6-104178-9	50



HEADERS — Through Hole Vertical		
Part	Part Number	Positions
Double Row Unshrouded	5-103916-3	8
	6-103916-1	40
	6-103916-7	100



HEADERS — Surface Mount Vertical*		
Part	Part Number	Positions
Double Row Shrouded	5-104549-1	10
	5-104549-2	20
	6-104549-0	100



HEADERS — Through Hole Vertical		
Part	Part Number	Positions
Double Row Shrouded w/ Card Slots	5-104076-5	10
	5-104076-8	100

\*Surface mount parts are available in tubes or tape and reel packaging.

**Headers — Board-to-Board**

Product Specification — 108-1093

Application Specification — 114-25031



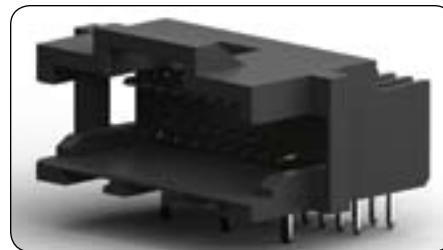
HEADERS — Through Hole Right-Angle		
Part	Part Number	Positions
Single Row Unshrouded	5-104186-1	4
	6-104186-1	20
	6-104186-7	40



HEADERS — Through Hole Right-Angle		
Part	Part Number	Positions
Double Row Unshrouded	5-104118-3	10
	5-104746-2	22
	5-104746-1	100



HEADERS — Through Hole Right-Angle		
Part	Part Number	Positions
Single Row Shrouded	5-104074-7	4
	5-104074-3	15
	6-104074-9	50



HEADERS — Through Hole Right-Angle		
Part	Part Number	Positions
Double Row Shrouded	5-104069-8	8
	6-104069-8	68
	6-104069-7	100

**Cable Assembly Receptacles**

CABLE ASSEMBLY RECEPTACLES		
Part	Part Number	Positions
Single Row Plain Receptacle Housing	487544-1	4
Double Row Plain Receptacle Housing	487938-8	8
Double Row FFC Receptacle Housing w/Latch	2-487937-0	20
Single Row Plain Receptacle Housing	4-487544-7	50
Double Row Ribbon Cable Receptacle	1-111196-1	50
Paddleboard Ribbon Cable Receptacle	1-111595-1	50
Double Row Plain Receptacle Housing	487938-1	100
FFC Receptacle Contacts	1-487547-1	N/A



**Flat Flexible Cable (FFC) Connectors**

Product Specification — 108-16022

Application Specification — 114-16008

**Ribbon Cable Connectors**

Product Specification — 108-1109

Application Specification — 114-25029, 114-25040 (Paddleboard)





## Questions that will help you better select the product that you need:

### What is the available space?

0.050 centerline spacing for single row.  
0.050 inch x 0.100 inch (between rows) centerline spacing for double row.

### What is the Current rating (amp) requirement?

0.5 amp maximum for a single, crimped receptacle contact in free air, 88 V (operating voltage) — cable connector.  
3.0 amp maximum for a single, contact in free air, 222 V (operating voltage) — board mounted connector.

### What wire type and size requirements are there?

0.025 inch centerline ribbon cable having 30 AWG solid or stranded conductors or 32 AWG stranded conductors.  
0.050 centerline Flat Flexible Cable (FFC) with 0.026 inch wide x 0.003 inch thick conductors.

### What is the number of positions that are required?

4 through 50 positions for single row.  
8 through 100 positions for double row.

### What configuration/orientation is required?

Single/double row vertical and right-angle through hole.  
Double row vertical surface mount (SMT).

### What is the operating temperature requirements?

-65° C to 105° C range

### What are the environmental considerations?

Refer to TE Connectivity Product Specifications 108-1093 (board-to-board) and 108-1109 (cable-to-board).

## FOR MORE INFORMATION

### TE Technical Support Center

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

Part numbers in this brochure are RoHS Compliant\*, unless marked otherwise.

\*as defined [www.te.com/leadfree](http://www.te.com/leadfree)

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