Quick Reference Guide
Micro MATE-N-LOK Connector System

The Micro MATE-N-LOK 3 mm connector system offers wire-to-wire and wire-to-board connections with contacts on a 3 mm [.118] centerline and current ratings up to 5 Amps max. per line. Both single-row and dual-row configurations are available. Crimp, snap-in pin and receptacle contacts are used to terminate 30-18 [0.05-0.9 mm^2] AWG wire with insulation diameters up to 1.52 mm. Plug and receptacle housings allow wire-to-wire and wire-to-panel configurations and header assemblies offer wire-to-board connections in vertical and right angle configurations. These IR reflow process compatible headers are available in through-hole and surface mount configurations with multiple board mount options.

FEATURES AND BENEFITS

- Wire-to-wire and wire-to-board pin and receptacle connector system
- Contacts are on 3 mm centerline spacing and are available in strip form or loose piece
- Panel mount or free-hanging versions
- Dual beam receptacle contact design for improved reliability
- PCB mount pin header assemblies available in both vertical and right angle styles and surface mount or through hole versions
- Available in low profile design (<4.7 mm)
- Discrete wire interconnect available in 2-12 position single row and 2-24 position dual row
- Housings available to accommodate 18 AWG wire in select circuits up to 6 position
- UL, CSA & VDE approved

PRODUCT APPLICATIONS

- Household appliances
- Lighting
- Factory automation
- Data storage
- Gaming
- Vending
- Garage door openers
- Security systems

te.com/**products/micromatenlok**

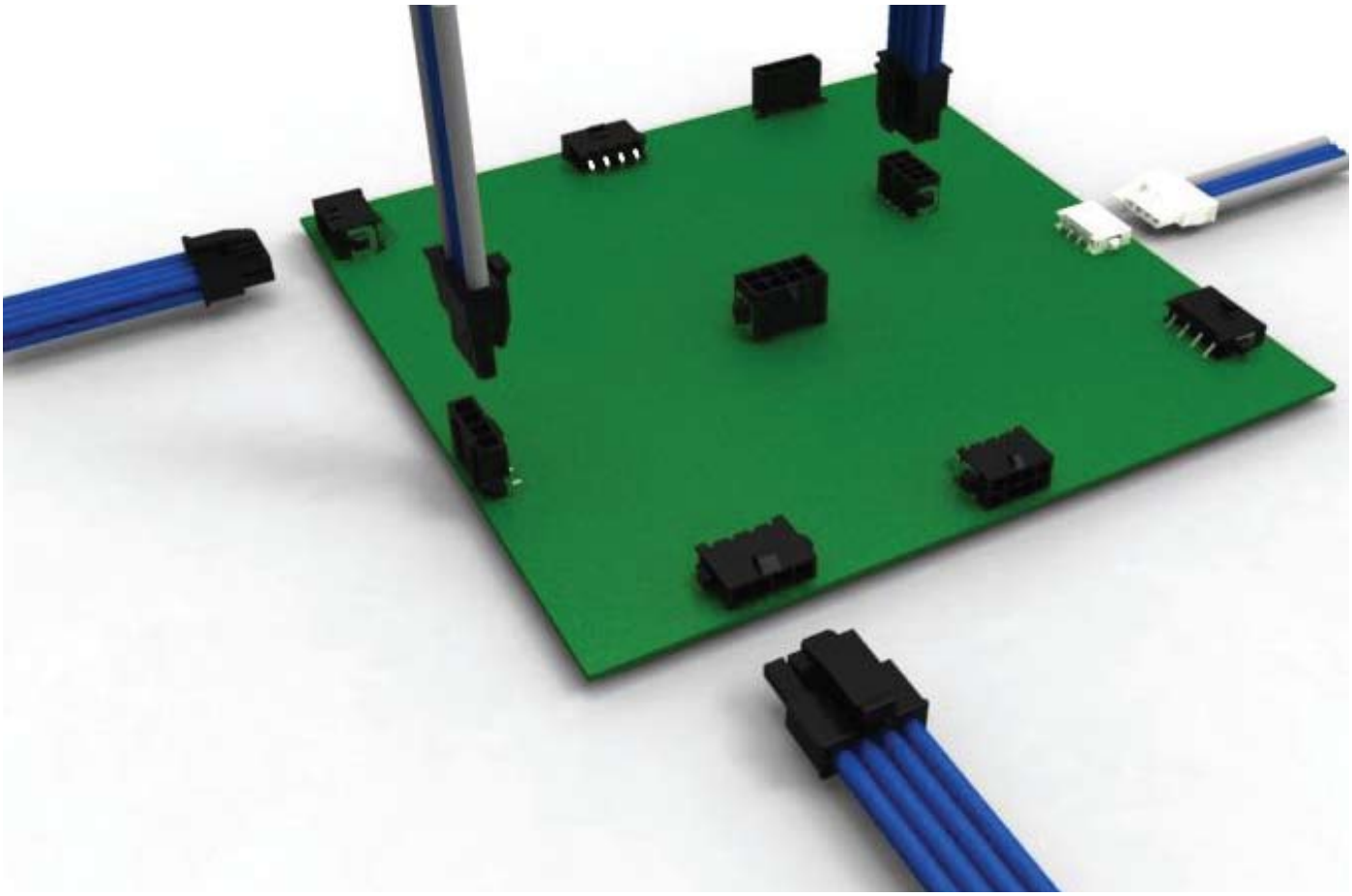
TE connectivity

CONTACTS

Wire Size Range AWG (mm2)	Insulation Diameter Range	Receptacle	Pin	Contact Base Part No. (PN)		Plating			Application Tooling*	Hand Tool
				Strip Form	Loose Piece	Tin	15µ Gold	30µ Gold		
26-30 0.12-0.05	.035-.060 0.89-1.52	x		794607	794611	PN-1	1-PN-1	1-PN-2	680894-x	91502-1
20-24 0.50-0.20	.035-.060 0.89-1.52	x		794606	794610	PN-1	1-PN-1	1-PN-2	680893-x	91501-1
22-18 0.3-0.9	.059-.110 1.50-2.79	x		2008625		PN-1	PN-2	PN-3	1530194-1	
26-30 0.12-0.05	.035-.060 0.89-1.52		x	794609	794613	1-PN-0	1-PN-1	1-PN-2	1385377-x	91502-1
20-24 0.50-0.20	.035-.060 0.89-1.52		x	794608	794612	1-PN-0	1-PN-1	1-PN-2	1385194-x	91501-1

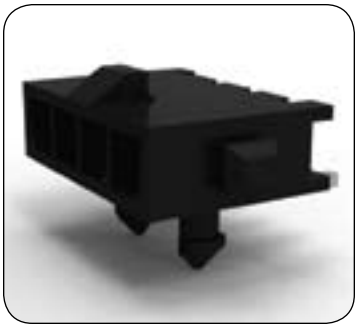
*For application tooling, use -1 for AMPOMATOR CLS Machine, -2 for AMP-O-LECTRIC Model K Terminator, -3 for AMP-O-LECTRIC Model G Terminator.

Note: To select a contact and plating, first select the contact base part number and add appropriate plating prefix and suffix. For example, for a loose piece receptacle with 30µ gold plating, select base part number 794610 and add the plating prefix and suffix for 30µ gold to obtain part number 1-794610-2.



SINGLE ROW HEADERS

Part No. (PN)	Position	Single Row	Plating Style			Vertical	Right Angle	SMT	Thru-hole	SMT Hold Down	Metal Hold Down	Plastic Hold Down	Packing Type		Mating Half
			Tin	15µ gold	30µ gold								Tray	Tape & Reel	
x-1445050-x	2-12	x	x			x			x			x	x		x-1445022-x
x-1445051-x	2-12	x	x			x		x	x		x		x		x-1445022-x
x-1445052-x	2-12	x	x			x		x	x		x			x	x-1445022-x
x-1445053-x	2-12	x	x			x		x		x					x-1445022-x
x-1445054-x	2-12	x	x				x		x		x		x		x-1445022-x
x-1445055-x	2-12	x	x				x		x			x	x		x-1445022-x
x-1445056-x	2-12	x	x				x	x	x		x			x	x-1445022-x
x-1445057-x	2-12	x	x				x	x		x				x	x-1445022-x
x-1445058-x	2-12	x	x				x	x				x		x	x-1445022-x
x-1445084-x	2-12	x		x		x			x			x	x		x-1445022-x
x-1445085-x	2-12	x		x		x		x	x		x	x	x		x-1445022-x
x-1445086-x	2-12	x		x		x		x	x		x			x	x-1445022-x
x-1445087-x	2-12	x		x		x		x		x					x-1445022-x
x-1445088-x	2-12	x		x			x		x		x		x		x-1445022-x
x-1445089-x	2-12	x		x			x		x			x	x		x-1445022-x
x-1445090-x	2-12	x		x			x	x	x		x			x	x-1445022-x
x-1445091-x	2-12	x		x			x	x		x				x	x-1445022-x
x-1445092-x	2-12	x		x			x	x				x		x	x-1445022-x
x-1445093-x	2-12	x			x	x			x			x	x		x-1445022-x
x-1445094-x	2-12	x			x	x							x		x-1445022-x
x-1445095-x	2-12	x			x	x		x	x		x			x	x-1445022-x
x-1445096-x	2-12	x			x	x		x		x					x-1445022-x
x-1445097-x	2-12	x			x		x		x		x		x		x-1445022-x
x-1445098-x	2-12	x			x		x		x			x	x		x-1445022-x
x-1445099-x	2-12	x			x		x	x	x		x			x	x-1445022-x
x-1445100-x	2-12	x			x		x	x		x				x	x-1445022-x
x-1445101-x	2-12	x			x		x	x				x		x	x-1445022-x



PART NUMBER EXPLANATION

2-PN-2	2 Position Header
2-PN-3	3 Position Header
2-PN-4	4 Position Header
2-PN-5	5 Position Header
2-PN-6	6 Position Header
2-PN-7	7 Position Header
2-PN-8	8 Position Header
2-PN-9	9 Position Header
3-PN-0	10 Position Header
3-PN-1	11 Position Header
3-PN-2	12 Position Header

Note: To select the complete part number:

- Use 2- prefix for single row headers up to 9 positions.
- Use 3- prefix for single row headers from 10 to 12 positions.
- The -X suffix indicates number of positions.

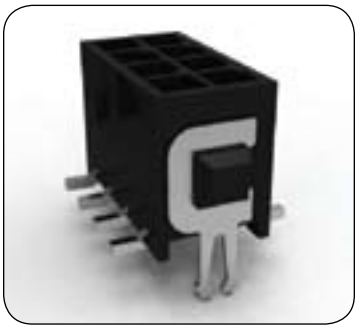
(Example: 2-1445050-5 would be a 5 position header.
3-1445050-1 would be an 11 position header.)

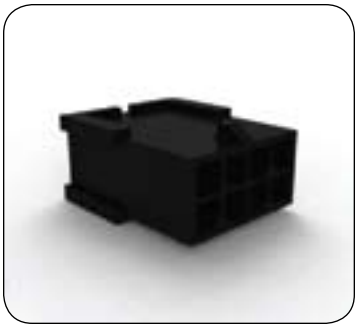
DOUBLE ROW HEADERS

Part No. (PN)	Position	Double Row	Plating Style			Vertical	Right Angle	SMT	Thru-hole	SMT Hold Down	Metal Hold Down	Plastic Hold Down	Packing Type		Mating Half
			Tin	15µ Gold	30µ Gold								Tray	Tape & Reel	
x-794618-x	2-24*	x	x				x		x			x	x		x-794617-x
x-794619-x	2-24*	x		x			x		x			x	x		x-794617-x
x-794620-x	2-24*	x			x		x		x			x	x		x-794617-x
x-794621-x	2-24*	x	x				x	x				x		x	x-794617-x
x-794622-x	2-24*	x		x			x	x				x		x	x-794617-x
x-794623-x	2-24*	x			x		x	x				x		x	x-794617-x
x-794624-x	2-24*	x	x				x	x	x		x			x	x-794617-x
x-794625-x	2-24*	x	x				x	x	x		x			x	x-794617-x
x-794626-x	2-24*	x			x		x	x	x		x			x	x-794617-x
x-794627-x	2-24*	x	x				x	x		x				x	x-794617-x
x-794628-x	2-24*	x		x			x	x		x		x		x	x-794617-x
x-794629-x	2-24*	x			x		x	x		x		x		x	x-794617-x
x-794630-x	2-24*	x	x			x			x**				x		x-794617-x
x-794631-x	2-24*	x		x		x			x**				x		x-794617-x
x-794632-x	2-24*	x			x	x			x**				x		x-794617-x
x-794633-x	2-24*	x	x			x		x			x			x	x-794617-x
x-794634-x	2-24*	x		x		x		x			x			x	x-794617-x
x-794635-x	2-24*	x			x	x		x			x			x	x-794617-x
x-794636-x	2-24*	x	x			x		x		x				x	x-794617-x
x-794637-x	2-24*	x		x		x		x		x				x	x-794617-x
x-794638-x	2-24*	x			x	x		x		x				x	x-794617-x
x-794677-x	2-24*	x	x				x		x		x		x		x-794617-x
x-794678-x	2-24*	x		x			x		x		x		x		x-794617-x
x-784679-x	2-24*	x			x		x		x		x		x		x-794617-x
x-794680-x	2-24*	x	x			x			x**		x		x		x-794617-x
x-794681-x	2-24*	x		x		x			x**		x		x		x-794617-x
x-794682-x	2-24*	x			x	x			x**		x		x		x-794617-x

*Available in even positions only.

**With retention feature on solder tail.





PART NUMBER EXPLANATION

3-PN-2	2 Position Header
3-PN-4	4 Position Header
3-PN-6	6 Position Header
3-PN-8	8 Position Header
4-PN-0	10 Position Header
4-PN-2	12 Position Header
4-PN-4	14 Position Header
4-PN-6	16 Position Header
4-PN-8	18 Position Header
5-PN-0	20 Position Header
5-PN-2	22 Position Header
5-PN-4	24 Position Header

Note: To select the complete part number:

- Use 3- prefix for dual row headers up to 8 positions.
- Use 4- prefix for dual row headers from 10 to 18 positions.
- Use 5- prefix for dual row headers from 20 to 24 positions.
- The -X suffix indicates number of positions.

(Example: 3-794630-4 would be a 4 position header. 4-794630-4 would be a 14 position header. 5-794630-4 would be a 24 position header.)

HOUSINGS

No. of Circuits	Part No.	Plug	Receptacle	Single Row	Double Row	Free Hanging	Panel Mount	With Mates
2-12	x-1445049-x	x		x		x		x-1445022-x
2-12	x-1445048-x	x		x			x	x-1445022-x
2-24*	x-794616-x	x			x	x		x-794617-x
2-24*	x-794615-x	x			x		x	x-794617-x
2-12	x-1445022-x		x	x				x-1445049-x, x-1445048-x All single row headers
2-24*	x-794617-x		x		x			x-794616-x, x-794615-x, All double row headers

Note: Use the prefix and suffix to indicate position size. (Example: 794617-2 would be a 2 position housing and 2-794617-4 would be a 24 position housing.)

SELECT 18 AWG RECEPTACLE HOUSINGS

No. of Position	Part No.[1]	18 AWG Circuits[2]	Black	Top Latch	Side Latch
2	2008570-2	1, 2	x		x
3	2008570-3	1, 3	x		x
4	2008570-4	1, 4	x		x
5	2008570-5	1, 3, 5	x		x
6	2008570-6	1, 3, 6	x		x
2	2008571-2	1, 2	x	x	
3	2008571-3	1, 3	x	x	
4	2008571-4	1, 4	x	x	
5	2008571-5	1, 3, 5	x	x	
6	2008571-6	1, 3, 6	x	x	

Notes: 1. For natural color add 1- prefix to base part number.
2. Remaining circuits accommodate 20 AWG wire or smaller using standard contacts.

LOW PROFILE RECEPTACLE HOUSINGS

Positions	Color & Part No.	
	Natural	Black
2	2029102-2	2029047-2
3	2029102-3	2029047-3
4	2029102-4	2029047-4

LOW PROFILE RIGHT ANGLE SURFACE MOUNT

Positions	Color & Part No.	
	Natural	Black
2	2029104-2	2029030-2
3	2029104-3	2029030-3
4	2029104-4	2029030-4

ADDITIONAL CONNECTOR KITS AVAILABLE

Kit Part No.	Kit Description
2-2110852-2	Micro MATE-N-LOK Single Row Plug and Receptacle Connector Kit
2-2110852-3	Micro MATE-N-LOK Dual Row Plug and Receptacle Connector Kit
2-2110852-4	Micro MATE-N-LOK Through Hole Single Row Vertical Header and Receptacle Connector Kit
2-2110852-5	Micro MATE-N-LOK Through Hole Single Row Right Angle Header and Receptacle Connector Kit
2-2110852-6	Micro MATE-N-LOK Through Hole Dual Row Vertical Header and Receptacle Connector Kit
2-2110852-7	Micro MATE-N-LOK Through Hole Dual Row Right Angle Header and Receptacle Connector Kit
2-2110852-8	Micro MATE-N-LOK Surface Mount Single Row Right Angle Header and Receptacle Connector Kit
2-2110852-9	Micro MATE-N-LOK Deluxe Single and Dual Row Vertical and Right Angle Header, Plug and Receptacle Kit

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

What are the current and voltage requirements for your application?
The Micro MATE-N-LOK 3 mm connector system has a maximum current rating of 5 Amps per line and is rated for 250 Volts AC/DC.

What are the wire type and size requirements?
The Micro MATE-N-LOK 3 mm connector system contacts are approved for use with 22-18 [0.3-0.9], 24-20 [0.2-0.6] and 30-26 [0.05-0.15] AWG wire with a maximum insulation diameter of .110 [2.79].

What are the number of positions?
The Micro MATE-N-LOK 3 mm connector system is available in 2-12 position single row and 2-24 position dual row configurations on a 3.0 mm pitch.

What are the operating temperature requirements?
The Micro-MATE-N-LOK 3 mm connector system has a maximum operating temperature of 105°C. For more information regarding operating temperatures refer to Product Specification 108-1836.

What packaging types are offered for headers and housings?
The Micro MATE-N-LOK 3 mm connector system offers tape and reel packaging for surface mount headers, tray packaging for thru-board headers and bulk packaging for all receptacle and plug housings.

What is the benefit of choosing low-profile receptacle housings?
The Micro MATE-N-LOK 3 mm connector system offers a low profile receptacle housing for applications that need to meet minimal height requirements. This low profile design offers a mated height of only 4.7 mm and is available in 2, 3 and 4 positions, in black or natural color.

What is the benefit of using an 18 AWG select circuit receptacle housing?
The Micro MATE-N-LOK 3 mm connector system offers a special 18 AWG wire-to-board select circuit housing for low voltage lighting applications. Designed to accommodate 18 AWG UL1007 wire in select circuits of the 2, 3, 4, 5 and 6 position housings, this product is ideal to minimize millivolt drops on long wire runs sometimes required by low voltage conventional and solid state lighting.

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

te.com

© 2011 Tyco Electronics Corporation, a TE Connectivity Ltd. Company. All Rights Reserved.

1773458-4 CIS LUG FP 1M 10/2011

AMP-O-LECTRIC, AMPOMATOR, MATE-N-LOK, TE Connectivity and the TE connectivity (logo) are trademarks.
Other logos, product and company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this brochure are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.