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 mm²] 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
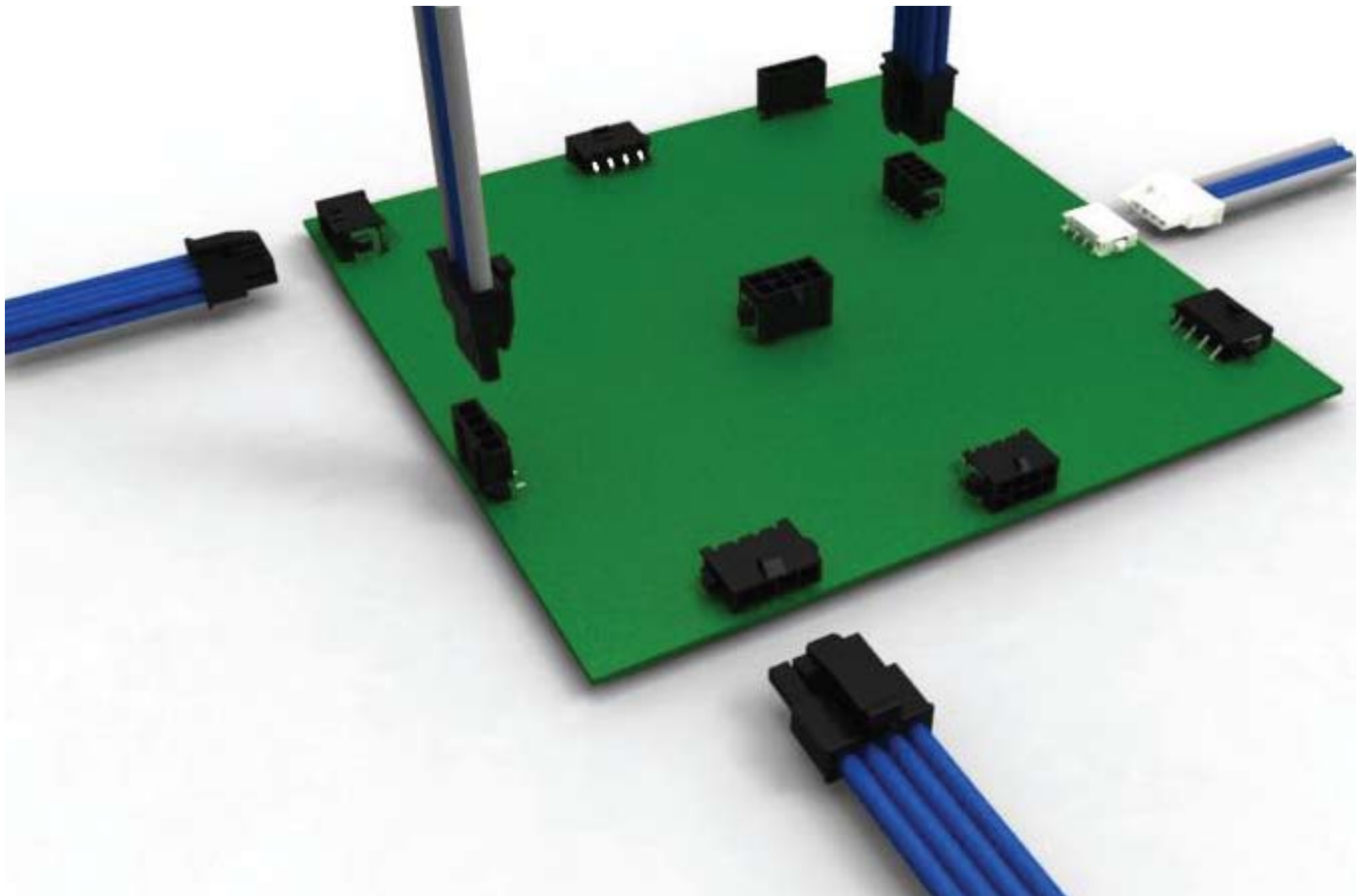- UL, CSA & VDE approved

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

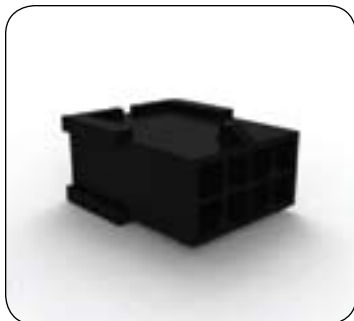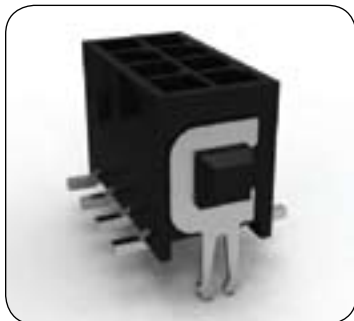**Note:** To select the complete part number:
- Use 2- prefix for single row headers up to 9 positions.
- Use 3- prefix for single row headers from 10 to 12 positions.
- The -X suffix indicates number of positions.
(Example: 2-1445050-5 would be a 5 position header.
3-1445050-1 would be an 11 position 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.

te.com

TE
connectivity