



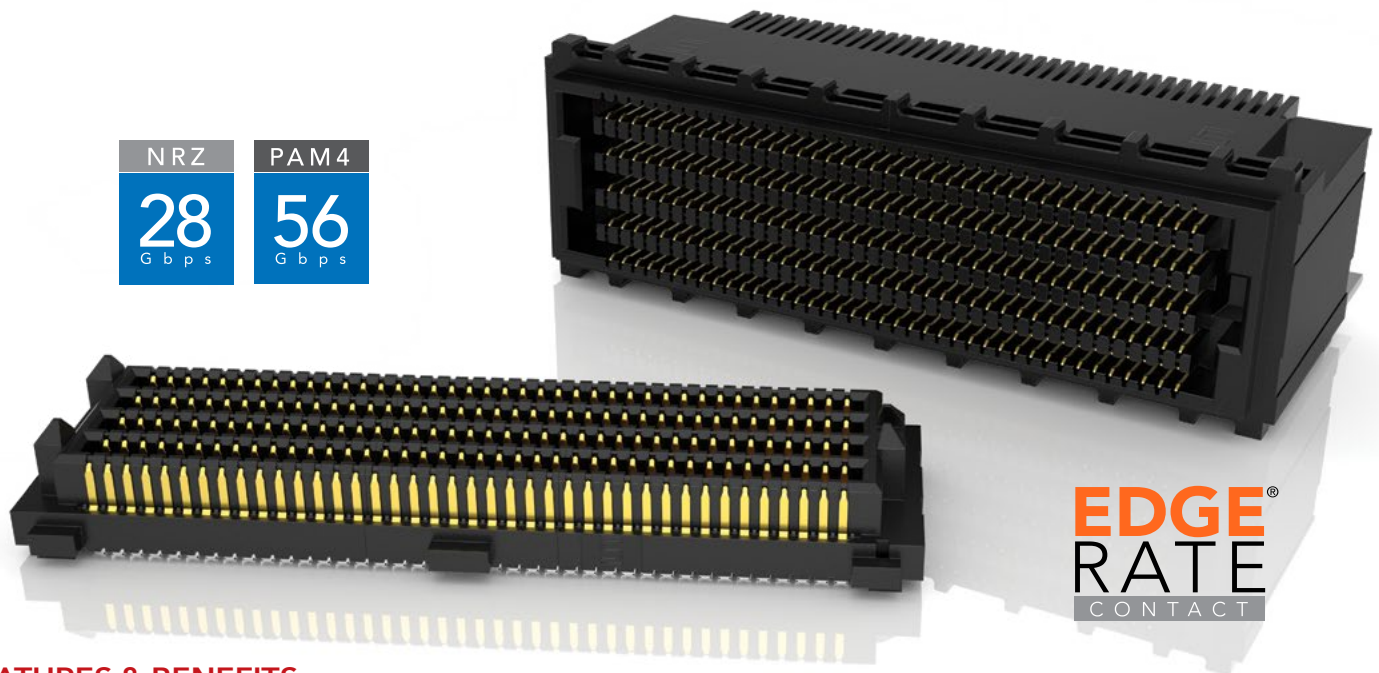
**THE DATASHEET OF  
SEAF8-50-05.0-S-04-2-K**



# SEARAY™ .8mm

## ULTRA HIGH-DENSITY, HIGH-SPEED OPEN-PIN-FIELD ARRAYS

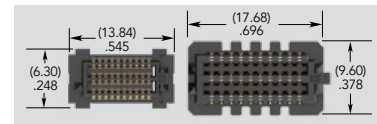
(0.80 mm) .0315" PITCH



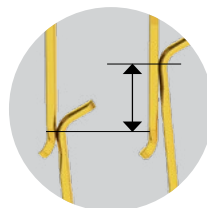
NRZ	PAM4
28 Gbps	56 Gbps

### FEATURES & BENEFITS

- 0.80 mm (.0315") pitch grid
- 50% board space savings versus .050" (1.27 mm) pitch arrays
- Performance up to 28 Gbps NRZ/56 Gbps PAM4
- Rugged Edge Rate® contact system
- Up to 500 I/Os
- 7 mm and 10 mm stack heights
- Solder charge terminations for ease of processing
- Lower insertion/withdrawal forces
- Severe Environment Testing qualified (SEAM8/SEAF8); aligns with MIL-DTL-55302. Visit [samtec.com/set](http://samtec.com/set)

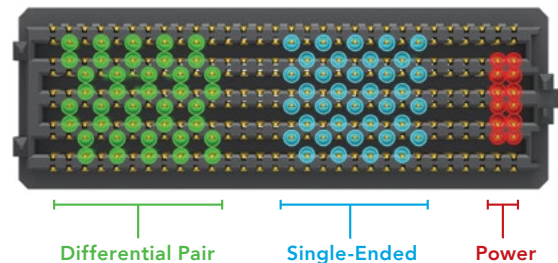


0.80 mm pitch vs. 1.27 mm pitch (60 pins shown)



(1.12 mm) .044" Nominal Wipe

### MAXIMUM GROUNDING & ROUTING FLEXIBILITY



### KEY SPECIFICATIONS (SEAF8/SEAM8)

SERIES	INSULATOR MATERIAL	CONTACT MATERIAL	PLATING	OPERATING TEMP RANGE	CURRENT RATING	VOLTAGE RATING	LEAD-FREE SOLDERABLE
SEAM8	Black LCP	Copper Alloy	Au or Sn over 50 μ" (1.27 μm) Ni	-55 °C to +125 °C	1.3 A per pin (10 adjacent pins powered)	220 VAC	Yes
SEAF8					1.1 A per pin (10 adjacent pins powered)		
SEAF8-RA							

**(0.80 mm) .0315" PITCH • ULTRA HIGH-DENSITY ARRAYS**

SERIES	NO. PINS PER ROW	LEAD STYLE	PLATING OPTION	NO. OF ROWS	SOLDER TYPE	OPTION	"X"R
SEAM8 Terminal	-10, -20, -30, -40, -50	-S02.0 = 2 mm Body Height (SEAM8 only)	-L = 10 μ" (0.25 μm) Gold on contact area, Matte Tin on solder tail	-04	-1 = Tin/Lead Alloy Solder Crimp (-STL only)	-GP = Guide Post (-S02.0 lead style only) (Mates with SEAF8-RA-GP)	Tape & Reel is standard. Leave blank for Tape & Reel.
		-S05.0 = 5 mm Body Height (SEAM8 only)	-S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on solder tail	-06			
SEAF8 Socket	-10, -20, -30, -40, -50	-S05.0 = 5 mm Body Height (SEAM8 only)	-S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on solder tail	-08	-3 = Lead-Free Solder Crimp	-GP = Guide Post (-S02.0 lead style only) (Mates with SEAF8-RA-GP)	-FR = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks)
		-05.0 = 5 mm Body Height (SEAF8 only)	-STL = 30 μ" (0.76 μm) Gold on contact, Tin/Lead on solder tail (-1 solder type only)	-10			

**SEAM8**  
Board Mates:  
SEAF8  
Cable Mates:  
ESCA  
Standoffs:  
JSO





LEAD STYLE	B
-S02.0	(4.54) .179
-S05.0	(7.54) .297

NO. OF ROWS	A
-04	(4.30) .169
-06	(6.30) .248
-08	(8.30) .327
-10	(10.30) .406

View complete specifications at: [samtec.com?SEAM8](http://samtec.com?SEAM8)

SERIES	NO. PINS PER ROW	LEAD STYLE	PLATING OPTION	NO. OF ROWS	SOLDER TYPE	OPTION	"X"R
SEAF8	-20, -30, -40, -50	-S02.0 = 2 mm Body Height (SEAF8 only)	-L = 10 μ" (0.25 μm) Gold on contact area, Matte Tin on solder tail	-04	-2 = Lead-Free Solder Crimp	-GP = Guide Post Holes	Tape & Reel is standard. Leave blank for Tape & Reel.
		-S05.0 = 5 mm Body Height (SEAF8 only)	-S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on solder tail	-08			
SEAF8-RA (Right-angle)	-20, -30, -40, -50	-S05.0 = 5 mm Body Height (SEAF8 only)	-S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on solder tail	-10	-2 = Lead-Free Solder Crimp	-GP = Guide Post Holes	-FR = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks)
		-05.0 = 5 mm Body Height (SEAF8 only)	-STL = 30 μ" (0.76 μm) Gold on contact, Tin/Lead on solder tail (-1 solder type only)	-10			

**SEAF8**  
Board Mates:  
SEAM8  
Cable Mates:  
ESCA  
Standoffs:  
JSO





**MATED HEIGHTS\***

SEAF8 LEAD STYLE	SEAM8 LEAD STYLE	
	-S02.0	-S05.0
-05.0	(7.00) .276	(10.00) .394

\*Processing conditions will affect mated height.

View complete specifications at: [samtec.com?SEAF8](http://samtec.com?SEAF8)

Notes:  
Polyimide Pick & Place Pad standard without specifying -K.  
Severe Environment Testing qualified; aligns with MIL-DTL-55302. Visit [samtec.com/set](http://samtec.com/set)

SERIES	NO. PINS PER ROW	LEAD STYLE	PLATING OPTION	NO. OF ROWS	SOLDER TYPE	OPTION	"X"R
SEAF8	-20, -30, -40, -50	-S02.0 = 2 mm Body Height (SEAF8 only)	-L = 10 μ" (0.25 μm) Gold on contact area, Matte Tin on solder tail	-04	-2 = Lead-Free Solder Crimp	-GP = Guide Post Holes	Tape & Reel is standard. Leave blank for Tape & Reel.
		-S05.0 = 5 mm Body Height (SEAF8 only)	-S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on solder tail	-08			
SEAF8-RA (Right-angle)	-20, -30, -40, -50	-S05.0 = 5 mm Body Height (SEAF8 only)	-S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on solder tail	-10	-2 = Lead-Free Solder Crimp	-GP = Guide Post Holes	-FR = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks)
		-05.0 = 5 mm Body Height (SEAF8 only)	-STL = 30 μ" (0.76 μm) Gold on contact, Tin/Lead on solder tail (-1 solder type only)	-10			

**SEAF8-RA**  
(Right-angle)  
Board Mates:  
SEAM8  
Cable Mates:  
ESCA





NO. OF ROWS	A	B
-04	(12.48) .491	(7.46) .294
-08	(16.48) .649	(11.46) .451
-10	(18.48) .728	(13.46) .530

NO. PINS PER ROW	C	D
-20	(29.62) 1.166	(24.12) .950
-30	(37.62) 1.481	(32.12) 1.265
-40	(45.62) 1.796	(40.12) 1.580
-50	(53.62) 2.111	(48.12) 1.894

View complete specifications at: [samtec.com?SEAF8-RA](http://samtec.com?SEAF8-RA)

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View SEAF8-50-05.0-S-04-2-K on WIN SOURCE](#)
- ⊖ [Samtec Inc. Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management