

Open Pin Field Arrays



SEARAY™ High Speed/High Density Systems

Samtec's SEARAY™ products are the industry's largest offering of high speed, high density open pin field arrays. They support 28+ Gbps applications and are also Final Inch® certified for Break Out Region trace routing recommendations to save designers time and money.

SEARAY™ Open Pin Field Arrays feature a .050" x .050" (1,27 mm x 1,27 mm) pitch grid for maximum grounding and routing flexibility. This system is available in stack heights from 7 mm to 40 mm with up to 500 Edge Rate® contacts. Vertical or right angle arrays (SEAM/SEAF Series) and a mating high speed cable assembly (SEAC Series) are available as 50Ω or 100Ω solutions. High retention press fit tails (SEAMP/SEAFP Series) and an 85Ω tuned interconnect (SEAMI Series) offer greater system flexibility. Elevated board stacking up to 40 mm is achieved by Samtec's high speed, high density riser (SEAR Series).

Samtec's Edge Rate® contact system increases cycle life and minimizes the effects of broadside coupling, which decreases crosstalk for superior signal integrity performance and impedance control. This rugged contact system is also less prone to damage when "zippered" during unmating. Standard lead-free solder charge simplifies IR reflow termination and improves solder joint reliability.



Open Pin Field Flexibility

Single-Ended
Up to 28+ Gbps

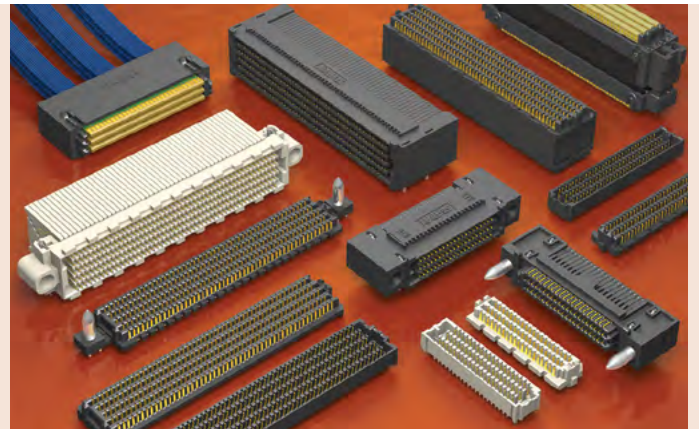
Differential Pair
Up to 28+ Gbps

Power
1.8 A/pin

Features:

- Up to 500 single ended I/Os or 125 differential pairs
- Rugged Edge Rate® contact system
- Parallel, perpendicular and coplanar applications
- Stack heights from 7 mm to 40 mm
- Solder charged terminations for ease of processing
- IPC-A-610F Class 3 solder joint
- Optional guide posts for blind mating; field termination kits available

28+
Gbps



Connectors

Vertical: SEAM, SEAF

NO. OF ROWS	A	B
-04	(7,06) .278	(5,66) .223
-05, -06	(9,60) .378	(8,20) .323
-08	(12,14) .478	(10,74) .423
-10	(14,68) .578	(13,28) .523

Right Angle: SEAM-RA, SEAF-RA

-GP= No. of positions x (1,27) .050 + (19,56) 0.77
Without -GP= No. of positions x (1,27) .050 + (11,18) 0.44

-GP= No. of positions x (1,27) .050 + (19,56) 0.77
Without -GP= No. of positions x (1,27) .050 + (9,40) 0.37

Press Fit: SEAMP, SEAFP

(1,23) .048

(0,59) .023

(4,60) .181

(1,78) .070

(5,00) .197

(1,27) .050

(1,78) .070

(1,23) .048

85Ω Tuned: SEAMI

(14,66) .577

(1,12) .044

No. of positions x (1,27) .050 + (3,58) .141

Cable: SEAC

A

B

(3,89) .153

(3,89) .153

Elevated: SEAR

NO. OF POSITIONS	A
-40	(71,42) 2.812
-50	(84,12) 3.312

(3,89) .153

(3,89) .153

SIDE A

SIDE B

POSITIONS PER ROW	A	B
-020	(30,38) 1.196	(48,26) 1.900
-030	(43,08) 1.696	(60,96) 2.400
-040	(55,78) 2.196	(73,66) 2.900
-050	(68,48) 2.696	(86,36) 3.400

For more High Density Solutions, please visit samtec.com/arrays

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