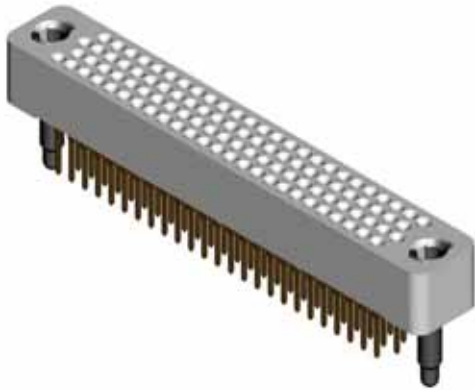




RC

RCII

STACKABLE, PRESS-FIT, COMPLIANT PIN/SOCKET



A high-density, press-fit mounted connector using patented stacking contacts consisting of a female/compliant/male configuration used in board-to-board stacking applications. Aligned field connector contact configurations for improved signal integrity are also available.

FEATURES and BENEFITS

- This is a COTS connector with less than four weeks' lead time
- RCII is optimized for signal routing; both single-ended and differential
- Board-to-board offering plus cable-to-board and flex-to-board; both high-speed and power
- Reliable "eye-of-the-needle"-compliant section design eliminates soldering
- BeCu contacts (special high-conductivity, high-temperature alloy)
- Contacts with different tail lengths can be selectively loaded in any pattern per customer requirement
- Long "wipe", high "normal force", redundant "crossed cylinder" contact interface design provides a very reliable electrical connection

MATERIALS

Contact BeCu per ASTM B768 (BeCu C17410 brush alloy 174)
 Contact Finish Gold per MIL-G-45204 over nickel per IAW QQ-N-290
 Molded Insulator Glass-filled polyphenylene sulfide (PPS) per MIL-M-24519
 Hardware Stainless steel per ASTM A582, passivated per ASTM-967
 Guide Pin/Socket. BeCu per ASTM B196/197, nickel plated per QQ-N-290

PERFORMANCE

Current Rating 3.0 amperes
 Operating Temperature -65° C to +125° C
 Insulation Resistance 5,000 megaohms minimum @ 500 VDC
 Durability 500 connector mating cycles
 Contact Resistance 3 to 5 milliohms (contact length dependent)
 Contact Engagement Force 4.0 oz (113 g) max. w/0.0246" dia. test pin
 Contact Separation Force 0.5 oz (14 g) min. w/0.0226" dia. test pin
 Compliant Insertion Force 22.5 lb (10.21 Kg) max. per contact
 Compliant Removal Force 4.5 lb (2.04 Kg) min. per contact



RCB-



SI PERFORMANCE FOR MATED PAIRS and TYPICAL PCB FOOTPRINT

SIZE	A	B	C
28	1,014	784	450
52	1,464	1,254	300
76	1,914	1,684	1,750
100	2,364	2,134	1,800
128	2,894	2,659	2,325
152	3,334	3,159	2,775
200	4,239	4,059	3,875
252	5,214	4,984	4,850
300	6,114	5,884	5,550

7 pins/row = 28 total pins

13 pins/row = 52 total pins

19 pins/row = 76 total pins

25 pins/row = 100 total pins

32 pins/row = 128 total pins

38 pins/row = 152 total pins

50 pins/row = 200 total pins

63 pins/row = 252 total pins

75 pins/row = 300 total pins

RC 4-ROW

PIN COUNT

RCII 3-ROW

RCII 4-ROW

RCB 4-ROW

RCB 3-ROW

RCB 4-ROW

PCB FOOTPRINT

RC 4-Row

RCII 3-Row

Total # of pins per bank = 25 pins

RCII 4-Row

Total # of pins per bank = 30 pins

TYPICAL PIN-OUT

RC 4 Row, Differential 100 ohm

Signal Integrity Performance (Connectors only)		
1	Diff. Insertion Loss	5 GHz @ -3dB
2	Diff. Return Loss	2.0 GHz @ -8dB
3	NEXT	4.0 GHz @ -25dB
4	FEXT	4.0 GHz @ -35dB

RC II 3 and 4 Row, Single Ended 50 ohm

Signal Integrity Performance (Connectors only)		
1	S.E. Insertion Loss	6 GHz @ -3dB
2	S.E. Return Loss	4.0 GHz @ -20dB
3	NEXT	4.0 GHz @ -35dB
4	FEXT	4.0 GHz @ -30dB

RC II 3 & 4 Row, Differential 100 ohm

Signal Integrity Performance (Connectors only)		
1	Diff. Insertion Loss	6 GHz @ -3dB
2	Diff. Return Loss	4.6 GHz @ -20dB
3	NEXT	4.0 GHz @ -50dB
4	FEXT	4.0 GHz @ -48dB

SI PERFORMANCE DATA

CONTACT CUSTOMER SERVICE
CALL 512-863-5585 x6464

VISIT US ONLINE
www.airborn.com