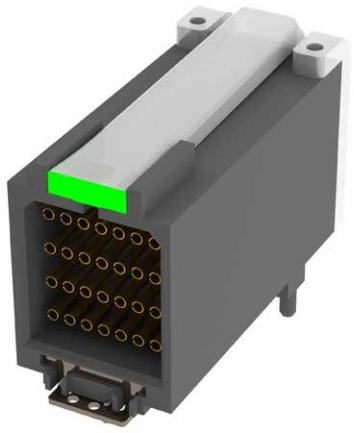
HD4™

HD4™ expands on our verSI line adding high contact density in an open-pin field product. The requirements for high-speed, high-density, signal-integrity applications are assured while still delivering the reliability customers have come to expect from AirBorn.

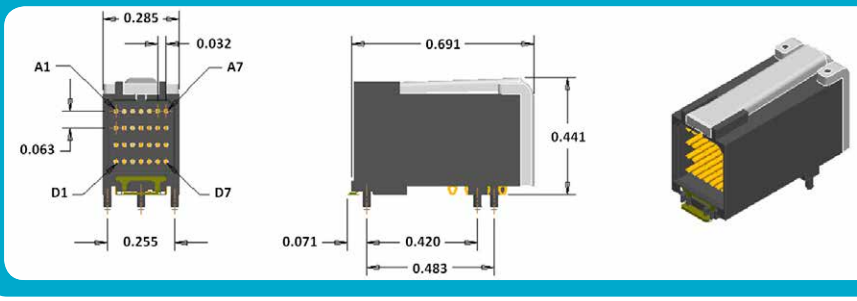


HD4™

HD4 – Right Angle SI Connector

HD4™ high-density, signal-integrity connectors are used in right angle, PCB-mount applications where a female interface is required. HD4™ connectors allow for six 4x interfaces in the low-profile PCIe add-on card when used with part number V4001-06.

DIMENSIONS



Sample Part Number Format: HD4-04-07-50-20-LP

HD4	–	☐☐	–	☐☐	–	☐☐	–	☐☐	–	☐☐
SERIES		ROWS		COLUMNS		CONTACT PLATING		TERMINATION		OPTIONS

SERIES
Right Angle
SI Connector
(Female)

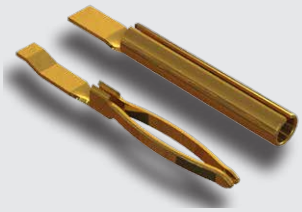
ROWS
04 – 4 Rows

COLUMNS
07 – 7 Columns

CONTACT PLATING
30 – 30 µ" Au
50 – 50 µ" Au

TERMINATION
01 – Paste-in-hole
20 – Surface-mount

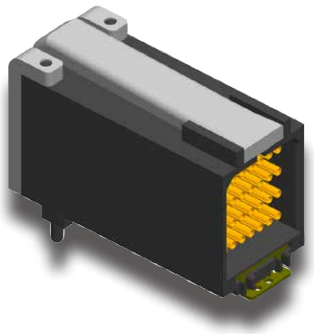
OPTIONS
LP – Light pipe
00 – Without light pipe



PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

FEATURES

HD4™ connectors feature low mating force/high-reliability contact system with four points of contact.



MATERIALS and FINISHES

Socket Contact: . . . . . BeCu per UNS C17460
Contact Finish: . . . . . Localized gold finish per MIL-G-45204 over nickel per ASTM-B689 Type I
Molded Insulators: . . . . . Glass-filled liquid crystal polymer (LCP) per ASTM-D5138

NOTE: AirBorn can manufacture other configurations to your exact specifications.

PERFORMANCE

Contact Rating . . . . . 1 amperes maximum
Operating Temperature . . . . . -55° to 125° C
Contact Wipe . . . . . 1.5 mm (0.060")
Contact Normal Force . . . . . 35-40 grams
Max Recommended Voltage . . . . . 200 VDC
Insulation Resistance . . . . . 1,000 megaohms @ 600 VDC
Durability . . . . . 1000 connector mating cycles
Sinusoidal Vibration . . . . . 15 g (EIA-364-28, condition IV)
Random Vibration . . . . . TBD
Shock . . . . . 100 g (EIA-364-27, condition G)

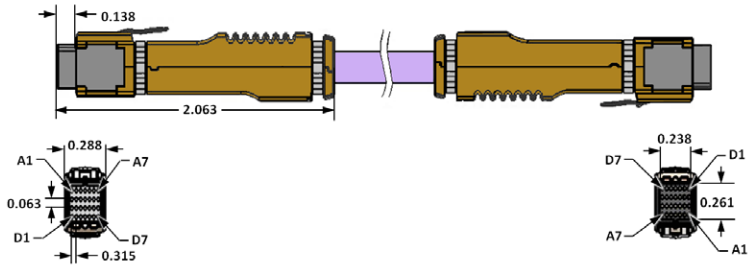
NOTE: Performance values are estimates at this time. Actual values will be determined when final product testing is complete.

HD4™

HD4C – Differential Pair Twinax Copper Cable Assembly

HD4C™ high-density cable assemblies are designed for differential pair, twinax applications. These cable assemblies come in two standard lengths but custom lengths and configurations can also be requested.

DIMENSIONS



Sample Part Number Format: HD4C-04-07-30-100-S08

HD4C – ☐ – ☐ – ☐ – ☐ – ☐ – ☐ ☐

SERIES
Differential Pair, Twinax Assembly, Copper

ROWS
04 – 4 Rows

COLUMNS
07 – 7 Columns

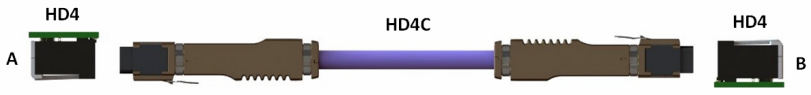
CONTACT PLATING
30 – 30 µ" Au
50 – 50 µ" Au

IMPEDANCE VALUE
085 – 85 Ω
100 – 100 Ω

WIRE TYPE
S – Solid conductor
C – Stranded wire

LENGTH*
03 – 0.3 M
04 – 0.4 M
05 – 0.5 M
06 – 0.6 M
07 – 0.7 M
08 – 0.8 M
09 – 0.9 M
10 – 1.0 M
15 – 1.5 M
20 – 2.0 M
30 – 3.0 M

Insertion Loss (Point A to Point B)



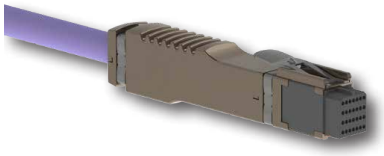
4.0 GHz = 8 Gb/s PCIe Gen III

	0.5 Meter	1 Meter	1.5 Meters	2 Meters	2.5 Meters	3.0 Meters
85 Ω	3.5 dB	7 dB	10.5 dB	14 dB	17.5 dB	21 dB
100 Ω	3 dB	6 dB	8.9 dB	11.9 dB	14.9 dB	17.9 dB

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

FEATURES

HD4™ connectors feature a low mating force/high-reliability contact system with four points of contact. HD4™ cables incorporate an integrated management interface accessed over I²C to query cable details such as unique device serial number, cable length, and cable nominal impedance.



		COLUMN						
		1	2	3	4	5	6	7
ROW	A	VDD	TX1p	TX1n	Gnd	TX3p	TX3n	SCL
	B	Gnd	TX2p	TX2n	Gnd	TX4p	TX4n	Gnd
	C	SS	Rx2p	Rx2n	Gnd	Rx4p	Rx4n	SDA
	D	Gnd	Rx1p	Rx1n	Gnd	Rx3p	Rx3n	Gnd

MATERIALS and FINISHES

Pin Contact: . . . . . BeCu per ASTM-B194
Contact Finish: . . . . . .Localized gold finish per MIL-G-45204 over nickel per ASTM-B689 Type I
Molded Insulators: . . . . . Glass-filled liquid crystal polymer (LCP) per ASTM-D5138

NOTE: AirBorn can manufacture other configurations to your exact specifications.

PERFORMANCE

Contact Rating . . . . . 1 amperes maximum
Operating Temperature . . . . . -55° to 125° C
Contact Wipe . . . . . 1.5 mm (0.060")
Contact Normal Force . . . . . 35-40 grams
Max Recommended Voltage . . . . . 200 VDC
Insulation Resistance . . . . . 1,000 megaohms @ 600 VDC
Durability . . . . . 1000 connector mating cycles
Sinusoidal Vibration . . . . . 15 g (EIA-364-28, condition IV)
Random Vibration . . . . . .TBD
Shock . . . . . 100 g (EIA-364-27, condition G)

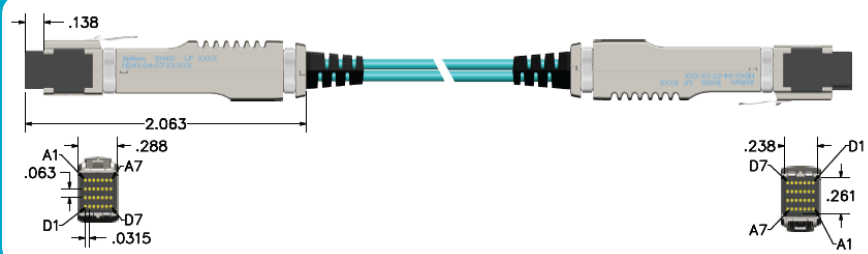
NOTE: Performance values are estimates at this time. Actual values will be determined when final product testing is complete.

XXHD4X

HD4X – Active Optical Cable Assembly

HD4™ high-density, active optical cable assemblies are capable of 10 Gb/s, full duplex over four independent transmit and receive channels. The HD4X AOC is interchangeable with our HD4C passive copper cable assembly having the same active electronics and board management interface.

DIMENSIONS



Sample Part Number Format: HD4X-04-07-30-050

HD4X – ☐ – ☐ – ☐ – ☐

SERIES
Active Optical
Cable Assembly

ROWS
04 – 4 Rows

COLUMNS
07 – 7 Columns

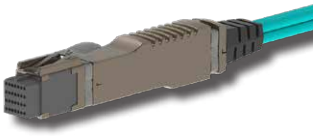
CONTACT PLATING
30 – 30 µ" Au
50 – 50 µ" Au

LENGTH
005 – 5 M
010 – 10 M
015 – 15 M
025 – 25 M
050 – 50 M
075 – 75 M
100 – 100 M

PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

FEATURES

HD4™ connectors feature a low mating force/high-reliability contact system with four points of contact. HD4™ cables incorporate an integrated management interface accessed over I²C to query cable details such as unique device serial number, cable length, and cable nominal impedance.



		COLUMN						
		1	2	3	4	5	6	7
ROW	A	VDD	TX1p	TX1n	Gnd	TX3p	TX3n	SCL
	B	Gnd	TX2p	TX2n	Gnd	TX4p	TX4n	Gnd
	C	SS	Rx2p	Rx2n	Gnd	Rx4p	Rx4n	SDA
	D	Gnd	Rx1p	Rx1n	Gnd	Rx3p	Rx3n	Gnd

MATERIALS and FINISHES

Pin Contact: . . . . . BeCu per ASTM-B194
Contact Finish: . . . . . .Localized gold finish per MIL-G-45204 over nickel per ASTM-B689 Type I
Molded Insulators: . . . . . Glass-filled liquid crystal polymer (LCP) per ASTM-D5138

NOTE: AirBorn can manufacture other configurations to your exact specifications.

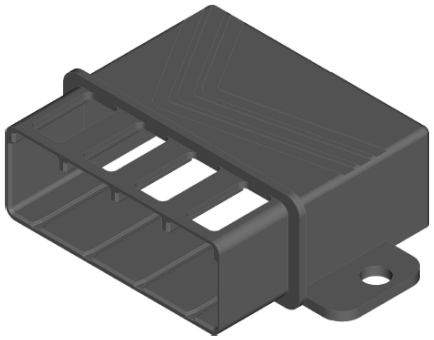
PERFORMANCE

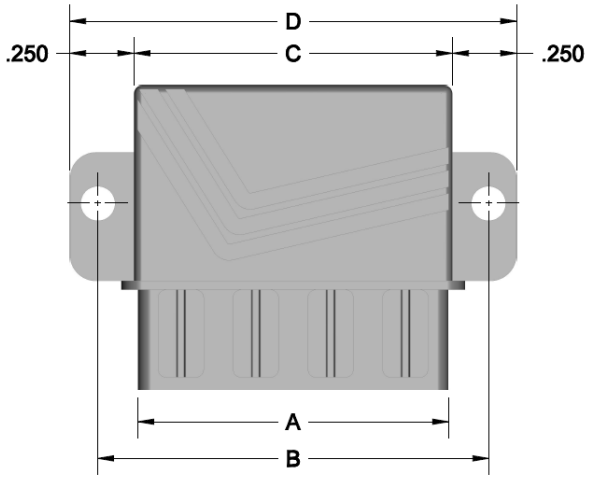
Contact Rating . . . . . 1 amperes maximum
Operating Temperature . . . . . 0° to 70° C
Operating Humidity . . . . . 5 to 90%, non-condensing
Storage Temperature . . . . . -40° to 85° C
Supply Voltage . . . . . 3.05 to 3.47 V (3.3, typ.)
Power Consumption . . . . . 490 mW, typ. (2 x 200 mVpp)
Power Supply Current . . . . . 150 mA, typ.
Contact Wipe . . . . . 1.5 mm (0.060")
Contact Normal Force . . . . . 35-40 grams
Durability . . . . . 1000 connector mating cycles

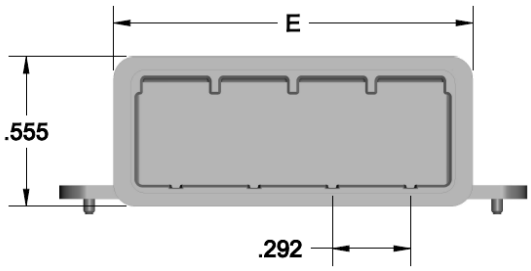
NOTE: Please refer to ESL6007 for further information.

V4000-04 HOOD

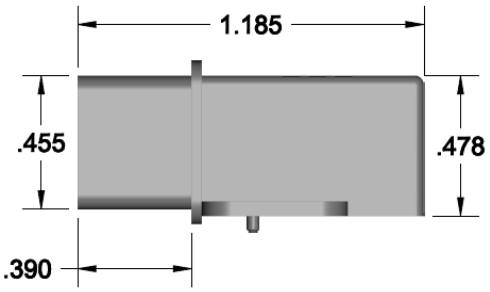
XHD4™







Part Number	Positions	A	B	C	D	E
V4000-01	1	.335	.648	.365	.865	.465
V4000-02	2	.627	.940	.657	1.157	.757
V4000-04	4	1.211	1.524	1.241	1.741	1.341
V4000-08	8	2.379	2.692	2.409	2.909	2.509



MATERIALS and FINISHES

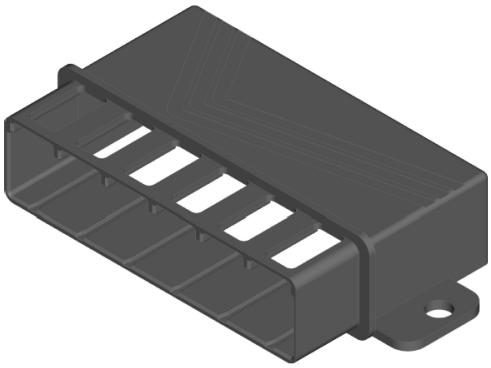
Material: Zinc alloy per ASTM-AG40A

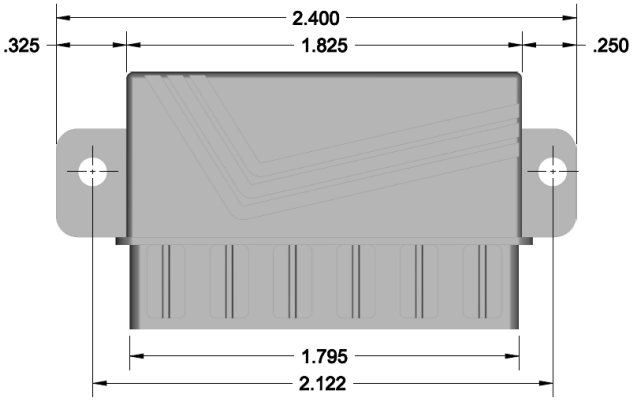
Finish: 50–100µ″ nickel per AMS-QQ-N-290

V4001-06 HOOD

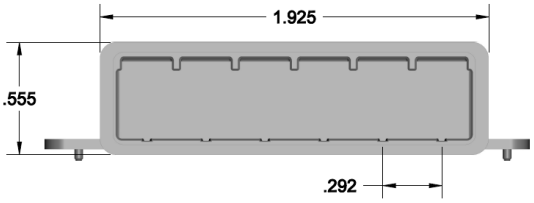
XCXHD4™

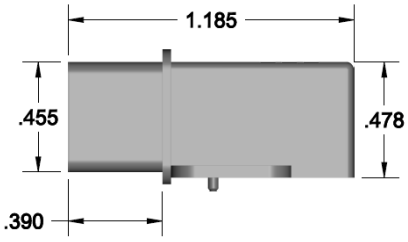
Specifically designed for PCIe applications.





Part Number	Positions
V4001-06	6





MATERIALS and FINISHES

Material: Zinc alloy per ASTM-AG40A

Finish: 50–100µ″nickel per AMS-QQ-N-290

Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

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Наши контакты:

Телефон: +7 812 627 14 35

Электронная почта: sales@st-electron.ru

Адрес: 198099, Санкт-Петербург, Промышленная ул, дом № 19, литера Н, помещение 100-Н Офис 331