

# Amphenol High Density HDB<sup>3</sup>/HSB<sup>3</sup> Connectors



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### HDB<sup>3</sup> and HSB<sup>3</sup> Typical Markets:

- Transportation
- Medical Equipment
- Military & Commercial Avionics
- C4ISR
- UAVs
- Naval
- High Definition Cameras



### New/Featured Product

#### Amphenol's HDB<sup>3</sup> High Density Brush Series with Tighter (.070 inch X .060 inch) Staggered Grid Spacing

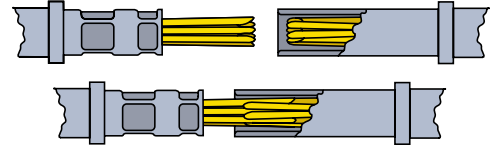
This new connector series of brush connectors incorporates a higher density contact pattern and lower mated height than Amphenol's standard low mating force rectangular connectors. HDB<sup>3</sup> connectors utilize the same durable and reliable B<sup>3</sup> brush contact in a tighter .070" X .060" staggered grid pattern.

#### HDB<sup>3</sup> Advantages over Competitive Connectors:

- Higher density contact pattern
- Uses less board space
- Allows for shorter mated height
- Provides the durability and performance of the Brush contact
- Low cost

#### AMPHENOL'S BRUSH CONTACT - THE SUPERIOR CHOICE FOR BOARD LEVEL INTERCONNECTS

##### BRUSH CONTACT



Multiple strands of high tensile strength wire bundled together to form brush-like contacts. See Brush Contact Technology section of this catalog for further description.

##### CONVENTIONAL PIN AND SOCKET CRIMP CONTACT



AMPHENOL HDB<sup>3</sup> COMPARED TO COMPETITION

Connector Features	Amphenol HDB <sup>3</sup>	Hypertronics HPH	Airborn RM4
Contact System	Brush	Hyperloid	Pin & Socket
Durability, Mating Cycles	100,000	2,000	500
Contact Mating Forces (ounces)	1.5	1.5	2.5
Mother Board	.070 X .060	.075 X .075	.075 X .070
Daughter Board	.070 X .060	.075 X .100	.075 X .100
Connector Width	.350	.443	.400
Mated Height, MB to 4th row of DB	.680	.986	.915



### HIGH DENSITY STYLES

#### HDB<sup>3</sup> Daughter Board/Mother Board

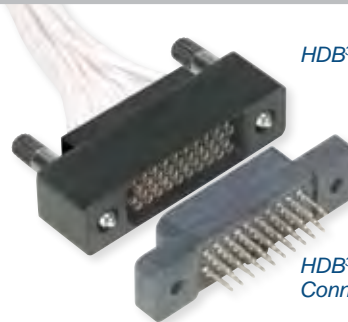
HDB<sup>3</sup> Daughter Board Connector



HDB<sup>3</sup> Mother Board Connector

#### HDB<sup>3</sup> I/O Connector

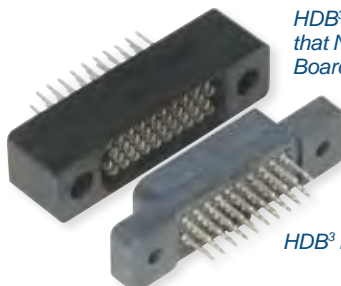
HDB<sup>3</sup> I/O Connector



HDB<sup>3</sup> Mother Board Connector

#### HDB<sup>3</sup> Stacker

HDB<sup>3</sup> Stacker for Applications that Need or Demand Parallel Boards



HDB<sup>3</sup> Mother Board Connector

#### HSB<sup>3</sup> High Speed

HSB<sup>3</sup> High Speed Connectors are Capable of 6.250 Gbps



Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Options - Fiber Optics / Staggered/  
GEN-X  
Hi Speed/RF/Power  
Accessories

Ruggedized  
VME64x/  
VITA 60, 66

High Density  
HDB<sup>3</sup>  
HSB<sup>3</sup>  
Hi Speed

Low Mating Force MIL-DTL-55302  
Docking Conn./  
Accessories/Install.  
Hybrids - Signal/Power/  
Standard  
Coax/Fiber Optics  
Brush

Rack & Panel  
Brush  
Ruggedized

LMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects

## INTRODUCTION: FEATURES & PERFORMANCE

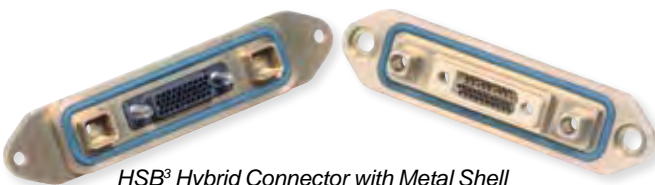


HDB<sup>3</sup> 120 pin Mother Board and Daughter Board

### HDB<sup>3</sup> & HSB<sup>3</sup> HIGH DENSITY CONNECTOR PERFORMANCE:

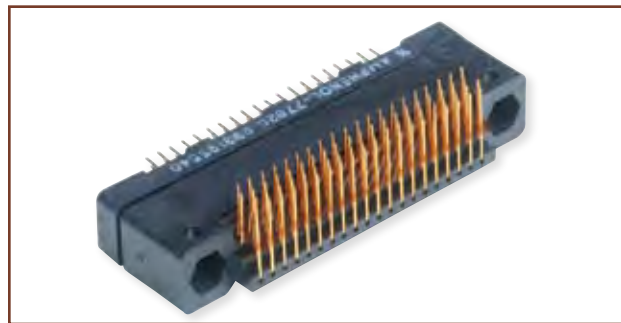
Durability	100,000 mating cycles
Insertion/Extraction Force:	1.5 ounce typical per contact
Operating Temperature:	-65° to 125°C
Current Rating:	2 amperes Hot swap 1 ampere maximum (load dependent)
Insulation Resistance:	5 gigaohms minimum
Dielectric Withstanding Voltage:	750 volts, 60 hertz, rms @ Sea Level, 250 volts, 60 hertz, rms @ 70,000 feet elevation
Solderability:	MIL-STD-202, Method 208
Salt Fog:	48 Hours IAW MIL-STD-1344, method 1001, test condition B
Humidity:	IAW MIL-STD-1344, method 1002, type II
Vibration:	4 hours in each of 3 mutually perpendicular axes IAW MIL STD-1344, method 2005, test condition V, letter H
Shock:	1 shock along each of three mutually perpendicular axes IAW MIL-STD-1344, method 2004, test condition G
Data Rate (HSB <sup>3</sup> ):	Capable of up to 6.250 Gbps (consult Amphenol for arrangement)

### CUSTOM DESIGN AVAILABILITY:



HSB<sup>3</sup> Hybrid Connector with Metal Shell and RF Contacts supplied by SV Microwave\*

\* See more information on SMPM RF contacts in Other Rectangular Interconnects Section, page 126. SMPM RF contacts can be supplied by Amphenol SV Microwave. Phone: 561-840-1800 Website: www.svmicrowave.com



HDB<sup>3</sup> Mother Board and Daughter Board Mated

### HDB<sup>3</sup> & HSB<sup>3</sup> HIGH DENSITY CONNECTOR FEATURES:

Polarization:	“D” shaped design
Keying:	Optional keys offer 36 unique keying combinations
Guide Pins	Optional guide pins provide additional alignment
Radial Misalignment:	Capable of correcting up to a 0.20” initial radial misalignment
Angular Misalignment:	Capable of mating with up to a 2° initial angular misalignment

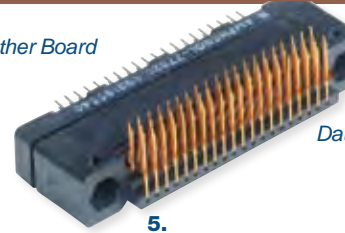
### MATERIALS:

Insulator:	Liquid crystal polymer, 30% glass filled
Contact: Wire:	Beryllium copper per ASTM B197; finish is gold per ASTM B488 over nickel per AMS-QQ-N-290
Holder:	Brass similar to UNS C33500; available finishes include gold per MIL-G-45204, tin-lead per MIL-P-81728 or tin per MIL-T-10727 (RoHS Compliant)
Sleeve:	Stainless steel per AMS-5514, passivated IAW QQ-P-35 (Daughter-board, I/O and Stacker connector)

Introduction/ Pkg. Solutions/ Brush Contact	LRM (Line Replaceable Modules)	Ruggedized VME 64x/ VITA 60, 66	High Density HDB <sup>3</sup>   HSB <sup>3</sup> Hi Speed	Low Mating Force MIL-DTL-55302	Rock & Panel Brush Ruggedized	UMD/LMS Rectangular Interconnects	Other Rectangular Interconnects
Staggered/ GEN-X	Hybrids - Fiber Optics/ Hi Speed/RF/Power	Options/ Accessories	Standard   Hybrids - Signal/Power/ Cook/Fiber Optics	Docking Conn./ Accessories/Install.			



Mother Board



Daughter Board

### HDB<sup>3</sup> MOTHER BOARD - HOW TO ORDER

Mates with:

- Daughter Board
- I/O
- Stacker

#### 1. Connector Type

##### HDB-M4

Designates HDB<sup>3</sup> Mother Board

	1.	2.	3.	4.	5.	6.
	Connector Type	Number of Contacts	Brush Wire Plating	Termination	Contact Termination Finish	Less Hardware (Purchased separately see pg XX for hardware options)
<b>HDB-M4</b>	<b>HDB-M4</b>	<b>-040</b>	<b>M</b>	<b>24</b>	<b>2</b>	<b>X</b>

#### 2. Number of Contacts

	Number of Contacts	Dimension A	Dimension C
<b>040</b>	40	1.375	1.075
<b>060</b>	60	1.725	1.425
<b>080</b>	80	2.075	1.775
<b>120</b>	120	2.775	2.475
<b>160</b>	160	3.475	3.175

#### 3. Brush Wire Plating

<b>M</b>	0.000050 Au Min. thick over Nickel
<b>C</b>	0.000020 Au Min. thick over Nickel

#### 4. Termination

	Type	Stickout (Dim. E)
<b>22</b>	PCB, Straight, .016 Dia	0.120
<b>23</b>	PCB, Straight, .016 Dia	0.150
<b>24</b>	PCB, Straight, .016 Dia	0.180
<b>26</b>	PCB, Straight, .016 Dia	0.240
<b>28</b>	PCB, Straight, .016 Dia	0.300

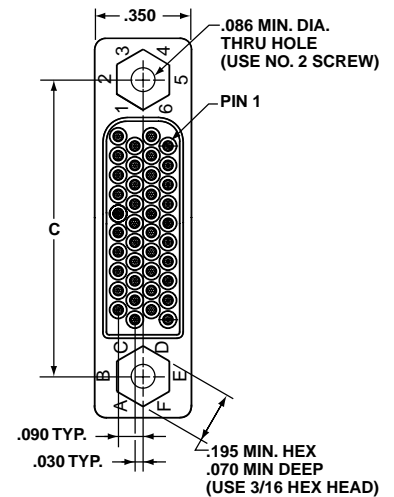
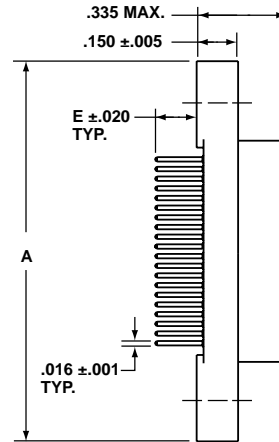
#### 5. Contact Termination Finish

<b>2</b>	Gold plated in accordance with MIL-G-45204, Type II, .000030 Min. thick Gold over .000050 Min. thick Nickel
<b>5</b>	Tin plated in accordance with ASTM B545, .00010 Min. thick Matte Tin over .00010 Min. thick Nickel
<b>6</b>	Tin-Lead plated in accordance with SAE-AMS-P-81728, .00010 Min. thick Tin-Lead over .00010 Min. thick Copper

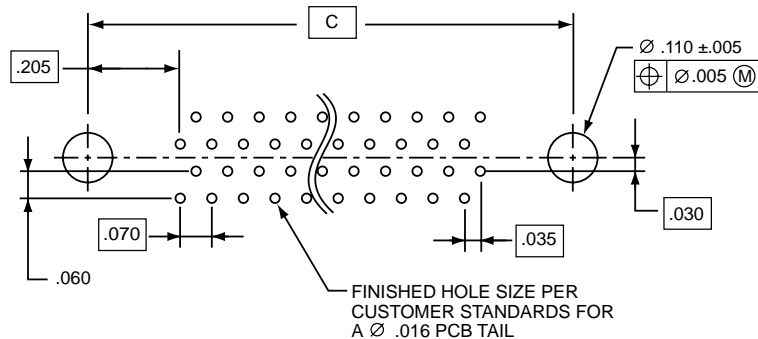
#### 6. Hardware

<b>X</b>	Less Hardware
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Hardware is purchased separately (see page 59 for hardware options).



#### Mother Board Layout



Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Options/  
Accessories

Ruggedized  
VME64x/  
VITA 60, 66

High Density  
HSB  
Hi Speed

Low Mating Force MIL-DTL-55302  
Docking Conn./  
Accessories/Install.

Rack & Panel  
Brush  
Ruggedized

LMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects

## DIMENSIONAL DRAWING & HOW TO ORDER

### HDB<sup>3</sup> DAUGHTER BOARD - HOW TO ORDER

Mates with:

- Mother Board

#### 1. Connector Type

**HDB-D4**

Designates HDB<sup>3</sup> Daughter Board

	1.	2.	3.	4.	5.	
	HDB-D4	Number of Contacts	Brush Wire Plating	Termination	Contact Termination Finish	Less Hardware (Purchased separately see pg X for hardware options)
		-040	M	01	2	X

#### 2. Number of Contacts

	Number of Contacts	Dimension A	Dimension C
<b>040</b>	40	1.375	1.075
<b>060</b>	60	1.725	1.425
<b>080</b>	80	2.075	1.775
<b>120</b>	120	2.775	2.475
<b>160</b>	160	3.475	3.175

#### 3. Brush Wire Plating

<b>M</b>	0.000050 Au Min. thick over Nickel
<b>C</b>	0.000020 Au Min. thick over Nickel

#### 4. Termination

	Type	Stickout (Dim. E)
<b>01</b>	PCB, Right Angle, .016 Dia.	0.090
<b>02</b>	PCB, Right Angle, .016 Dia.	0.120
<b>03</b>	PCB, Right Angle, .016 Dia.	0.150
<b>04</b>	PCB, Right Angle, .016 Dia.	0.180
<b>06</b>	PCB, Right Angle, .016 Dia.	0.300

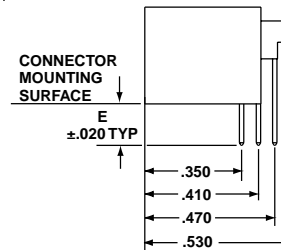
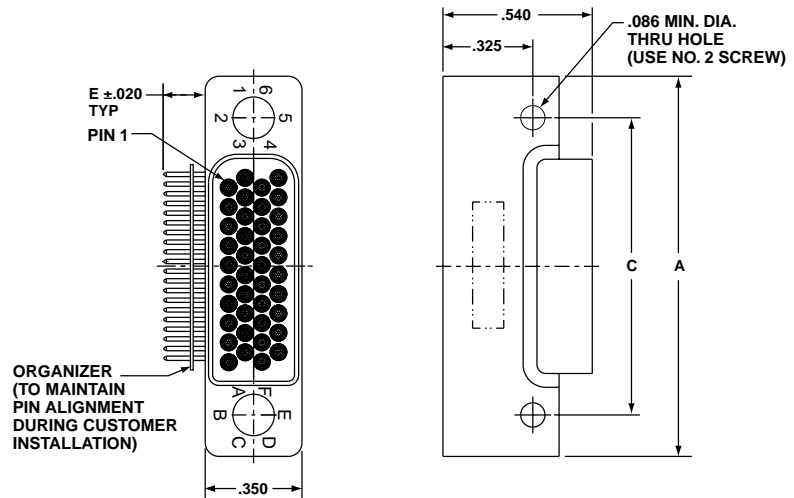
#### 5. Contact Termination Finish

<b>2</b>	Gold plated in accordance with MIL-G-45204, Type II, .000030 Min. thick Gold over .000050 Min. thick Nickel
<b>5</b>	Tin plated in accordance with ASTM B545, .00010 Min. thick Matte Tin over .00010 Min. thick Nickel
<b>6</b>	Tin-Lead plated in accordance with SAE-AMS-P-81728, .00010 Min. thick Tin-Lead over .00010 Min. thick Copper

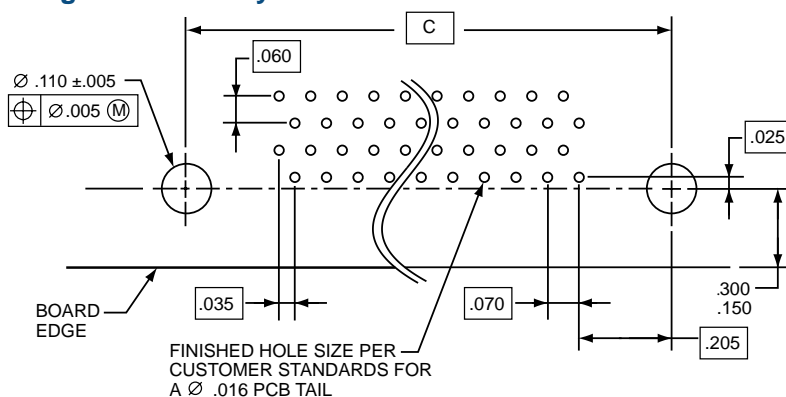
#### 6. Hardware

**X** Less Hardware

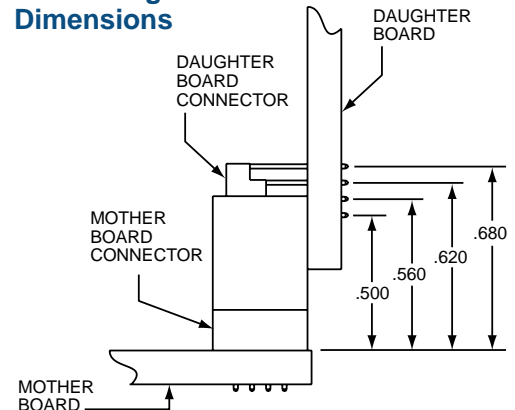
Hardware is purchased separately (see page 59 for hardware options).



#### Daughter Board Layout



#### Mated Height Dimensions



Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Staggered / Hybrids - Fiber Optics /  
GEN-X

Options/  
Accessories

Ruggedized  
VITA 64x/  
VITA 60, 66

High Density  
HDB<sup>3</sup> /  
HS<sup>3</sup> /  
Hi Speed

Low Mating Force MIL-DTL-55302  
Standard / Hybrids - Signal/Power /  
Brush

Cook/Fiber Optics

Docking Conn./  
Accessories/Install.

Rack & Panel  
Brush  
Ruggedized

UMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects

Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Options - Fiber Optics / Staggered/  
GEN-X

Ruggedized  
VME64x/  
VITA 60, 66

High Density  
HSB<sup>3</sup>  
Hi Speed

Low Mating Force MIL-DTL-55302  
Docking Conn. / Hybrids - Signal/Power / Standard  
Coax/Fiber Optics

Rack & Panel  
Brush  
Ruggedized

LMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects

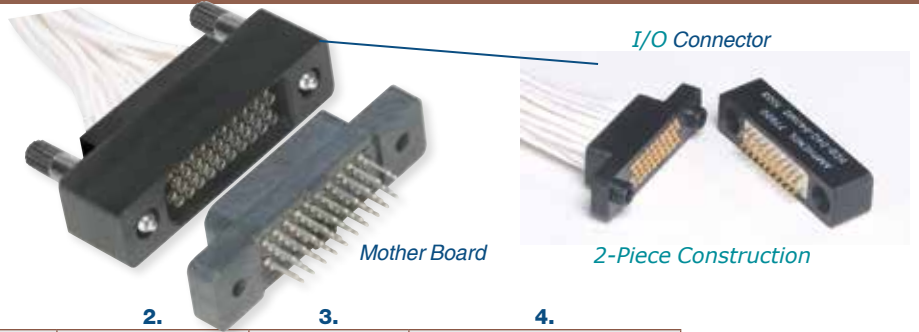
### HDB<sup>3</sup> I/O APPLICATIONS

- Cable to board applications
- Crimp termination
- Uses wire well size 22D

### HDB<sup>3</sup> I/O - HOW TO ORDER

Mates with:

- Standard Mother Board



#### 1. Connector Type

##### HDB-D4C

Designates HDB<sup>3</sup> I/O Connector

1.	2.	3.	4.
Connector Type	Number of Contacts	Brush Wire Plating	Contact Termination Finish
HDB-D4C	-120	C	2

#### 2. Number of Contacts

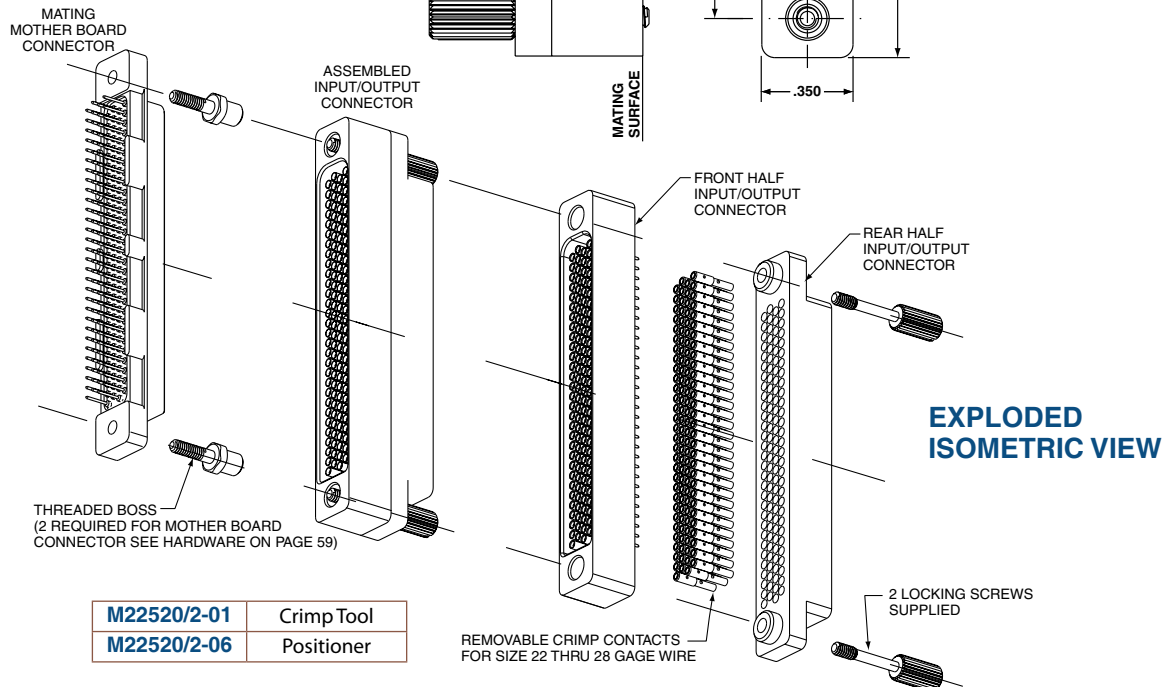
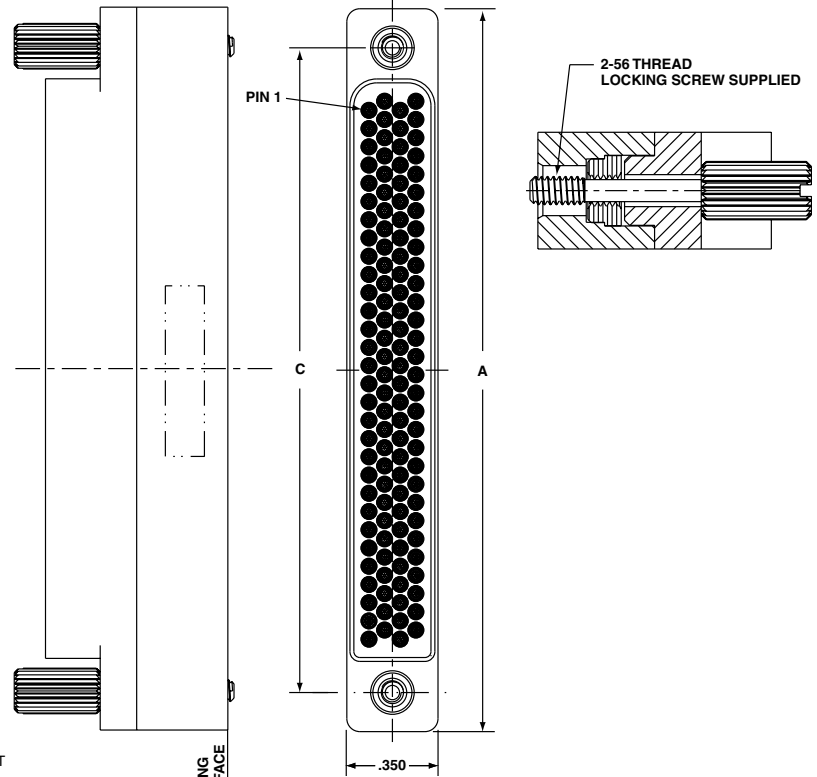
Number of Contacts	Dimension A	Dimension C
040	1.375	1.075
060	1.725	1.425
080	2.075	1.775
120	2.775	2.475
160	3.475	3.175

#### 3. Brush Wire Plating

M	0.000050 Au Min. thick over Nickel
C	0.000020 Au Min. thick over Nickel

#### 4. Contact Termination Finish

2	Gold plated in accordance with MIL-G-45204, Type II, .000030 Min. thick Gold over .000050 Min. thick Nickel
---	---



M22520/2-01	Crimp Tool
M22520/2-06	Positioner

# Amphenol® High Density HDB<sup>3</sup> Stacker Connector

## DIMENSIONAL DRAWING & HOW TO ORDER

### HDB<sup>3</sup> STACKER APPLICATIONS

For applications that need or demand parallel boards

### HDB<sup>3</sup> STACKER - HOW TO ORDER

Mates with:

- Standard Mother Board



#### 1. Connector Type

##### HDB-D4S

Designates HDB<sup>3</sup> Stacker Connector

1.	2.	3.	4.	5.	6.
	Number of Contacts	Brush Wire Plating	Termination	Contact Termination Finish	Required Field
<b>HDB-D4S</b>	<b>120</b>	<b>C</b>	<b>22</b>	<b>2</b>	<b>X</b>

#### 2. Number of Contacts

Number Diff Signals	Number of Contacts	Dimension A	Dimension C
<b>040</b>	40	1.375	1.075
<b>060</b>	60	1.725	1.425
<b>080</b>	80	2.075	1.775
<b>120</b>	120	2.775	2.475
<b>160</b>	160	3.475	3.175

#### 3. Brush Wire Plating

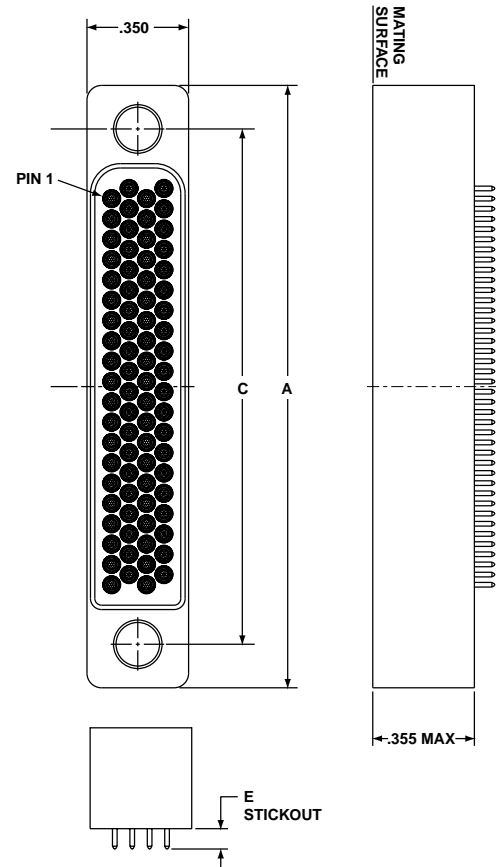
<b>M</b>	0.000050 Au Min. thick over Nickel
<b>C</b>	0.000020 Au Min. thick over Nickel

#### 4. Termination

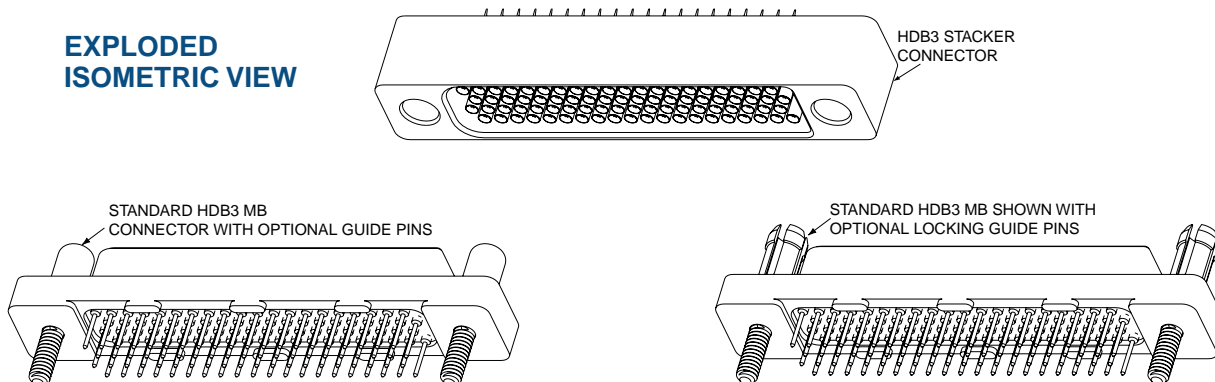
	Type	Stickout (Dim. E) ±.020
<b>22</b>	PCB, Straight, .016 Dia	0.100
<b>23</b>	PCB, Straight, .016 Dia	0.130
<b>24</b>	PCB, Straight, .016 Dia	0.160
<b>28</b>	PCB, Straight, .016 Dia	0.280

#### 5. Contact Termination Finish

<b>2</b>	Gold plated in accordance with MIL-G-45204, Type II, .000030 Min. thick Gold over .000050 Min. thick Nickel
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### EXPLODED ISOMETRIC VIEW



Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Staggered/  
GEN-X

Hi Speed/RF/Power

VME 64x/  
VITA 60, 66

High Density  
HDB<sup>3</sup>  
HSB<sup>3</sup>  
Hi Speed

Low Mating Force MIL-DTL-55302  
Standard Brush  
Hybrids - Signal/Power/  
Cook/Fiber Optics

Docking Conn./  
Accessories/Install.

Rack & Panel  
Brush  
Ruggedized

UMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects



Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Options - Fiber Optics / Staggered/  
GEN-X

Options/  
Accessories  
Hi Speed/RF/Power

Ruggedized  
VME64x/  
VITA 60, 66

High Density  
HSB<sup>3</sup>  
Hi Speed

Low Mating Force MIL-DTL-55302  
Docking Conn./  
Accessories/Install.

Rack & Panel  
Brush  
Ruggedized

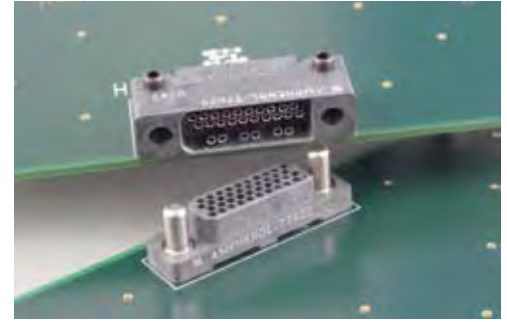
LMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects

### HSB<sup>3</sup> - HIGH SPEED SERIES 6.250 GBS

High speed configuration available that allows data rates up to 6.250 Gb/s via 100 ohm matched impedance differential pairs.

- Partially populated standard HDB<sup>3</sup> mother board and daughter board bodies
- Contact an Amphenol sales engineer for validation results



### HSB<sup>3</sup> HIGH SPEED MOTHER BOARD - HOW TO ORDER

Mates with:

- High Speed Daughter Board

#### 1. Connector Type

**HSB-M4**

Designates High Speed HDB<sup>3</sup> I/O Connector

	1.	2.	3.	4.	5.	6.	7.
		Number of Differential Pairs	Differential Signal	Brush Wire Plating	Termination	Contact Termination Finish	Less Hardware (Purchased separately see pg XX for hardware options)
<b>HSB-M4</b>	<b>HSB-M4</b>	<b>-03</b>	<b>D</b>	<b>M</b>	<b>24</b>	<b>2</b>	<b>X</b>

#### 2. Number of Contacts

Number Differential Pairs	No. Low Speed Signals	Dimension A	Dimension C
03	20	1.375	1.075
05	30	1.725	1.425
07	40	2.075	1.775
10	60	2.775	2.475
13	80	3.475	3.175

#### 3. Differential Signal

<b>D</b>	Standard
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#### 4. Brush Wire Plating

<b>M</b>	0.000050 Au Min. thick over Nickel
<b>C</b>	0.000020 Au Min. thick over Nickel

#### 5. Termination

	Type	Stickout (Dim. E)
<b>22</b>	PCB, Straight, .016 Dia	0.120
<b>23</b>	PCB, Straight, .016 Dia	0.150
<b>24</b>	PCB, Straight, .016 Dia	0.180
<b>26</b>	PCB, Straight, .016 Dia	0.240
<b>28</b>	PCB, Straight, .016 Dia	0.300

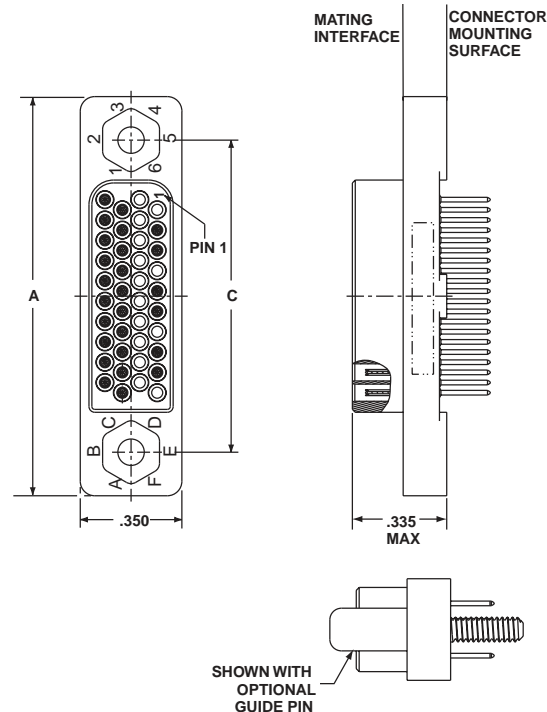
#### 6. Contact Termination Finish

<b>2</b>	Gold plated in accordance with MIL-G-45204, Type II, .000030 Min. thick Gold over .000050 Min. thick Nickel
<b>5</b>	Tin plated in accordance with ASTM B545, .00010 Min. thick Matte Tin over .00010 Min. thick Nickel
<b>6</b>	Tin-Lead plated in accordance with SAE-AMS-P-81728, .00010 Min. thick Tin-Lead over .00010 Min. thick Copper

#### 7. Hardware

<b>X</b>	Less Hardware
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Hardware is purchased separately (see page 59 for hardware options).





## DIMENSIONAL DRAWING & HOW TO ORDER

### HSB<sup>3</sup> HIGH SPEED DAUGHTER BOARD - HOW TO ORDER

Mates with:

- High Speed Mother Board

	1.	2.	3.	4.	5.	6.	7.
	Number of Differential Pairs	Differential Signals	Brush Wire Plating	Termination	Contact Termination Finish	Less Hardware (Purchased separately see pg 10 for hardware options)	
<b>HSB-D4</b>	<b>-03</b>	<b>D</b>	<b>M</b>	<b>02</b>	<b>2</b>	<b>X</b>	

#### 1. Connector Type

##### HSB-D4

Designates High Speed HSB<sup>3</sup> Daughter Board

#### 2. Number of Contacts

Number Diff Pairs	No. Low Speed Signals	Dimension A	Dimension D
03	20	1.375	1.075
05	30	1.725	1.425
07	40	2.075	1.775
10	60	2.775	2.475
13	80	3.475	3.175

#### 3. Differential Signals

<b>D</b>	Standard
----------	----------

#### 4. Brush Wire Plating

<b>M</b>	0.000050 Au Min. thick over Nickel
<b>C</b>	0.000020 Au Min. thick over Nickel

#### 5. Termination

	Type	Stickout (Dim. E)
01	PCB, Right Angle, .016 Dia	0.090
02	PCB, Right Angle, .016 Dia	0.120
03	PCB, Right Angle, .016 Dia	0.150
04	PCB, Right Angle, .016 Dia	0.180
06	PCB, Right Angle, .016 Dia	0.300

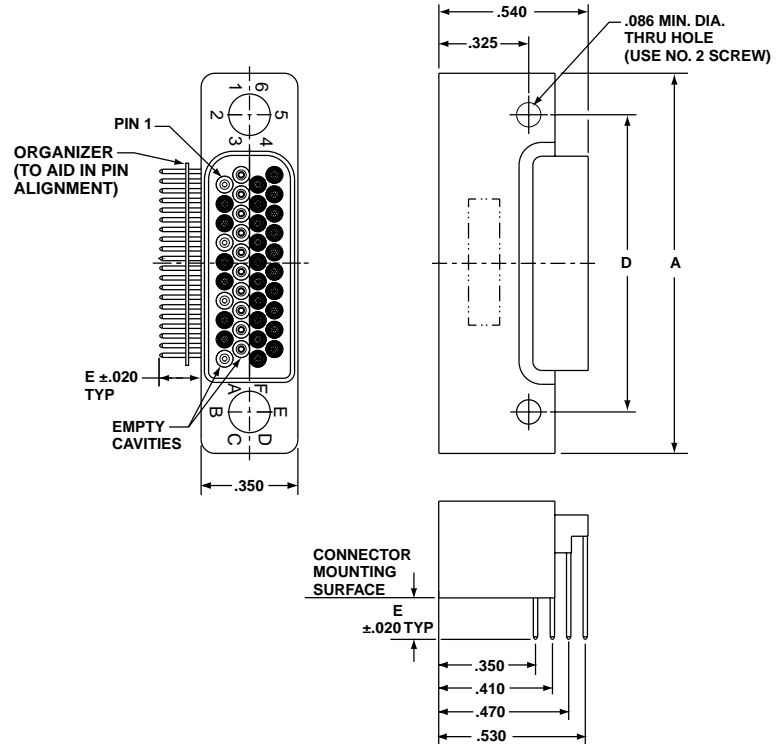
#### 6. Contact Termination Finish

2	Gold plated in accordance with MIL-G-45204, Type II, .000030 Min. thick Gold over .000050 Min. thick Nickel
5	Tin plated in accordance with ASTM B545, .00010 Min. thick Matte Tin over .00010 Min. thick Nickel
6	Tin-Lead plated in accordance with SAE-AMS-P-81728, .00010 Min. thick Tin-Lead over .00010 Min. thick Copper

#### 7. Hardware

<b>X</b>	Less Hardware
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Hardware is purchased separately (see page 59 for hardware options).



Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Staggered / Hybrids - Fiber Optics / GEN-X  
Options /  
Accessories

Ruggedized  
VME 64x/  
VITA 60, 66

High Density  
HBS<sup>3</sup>  
HSB<sup>3</sup>  
H Speed

Low Mating Force MIL-DTL-55302  
Standard / Hybrids - Signal/Power /  
Brush /  
Cook/Fiber Optics /  
Accessories/Install.

Rack & Panel  
Brush  
Ruggedized

LRM/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects

ARRANGEMENTS

Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Options/  
Accessories

Hybrids - Fiber Optics/  
Hi Speed/RF/Power

Staggered/  
GEN-X

Ruggedized  
VME64x/  
VITA 60, 66

High Density  
HSB<sup>3</sup>  
Hi Speed

HDB<sup>3</sup>

Low Mating Force MIL-DTL-55302  
Docking Conn./  
Accessories/Install.

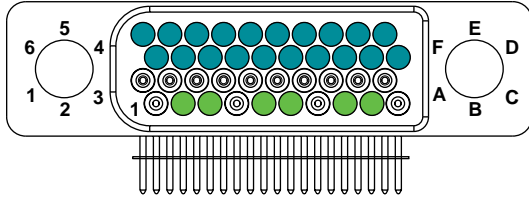
Hybrids - Signal/Power/  
Coax/Fiber Optics

Standard  
Brush

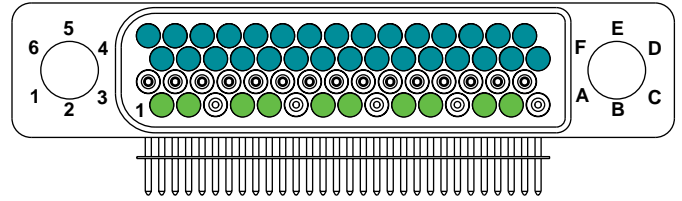
Rack & Panel  
Brush  
Ruggedized

LMD/LMS  
Rectangular  
Interconnects

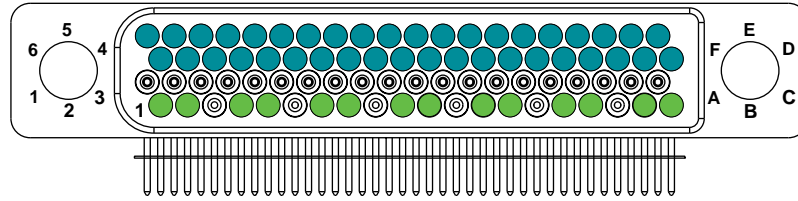
Other  
Rectangular  
Interconnects



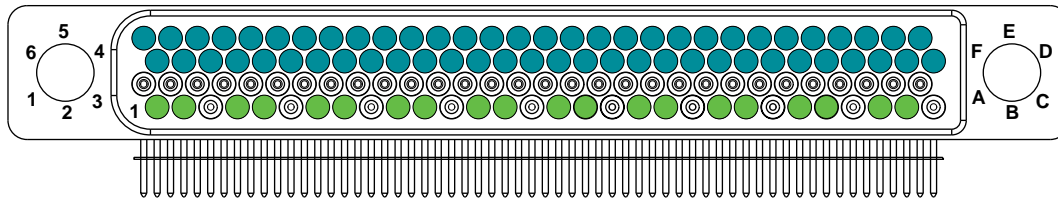
40 Pin Body with 3 Differential Pair, 20 Signal Contacts



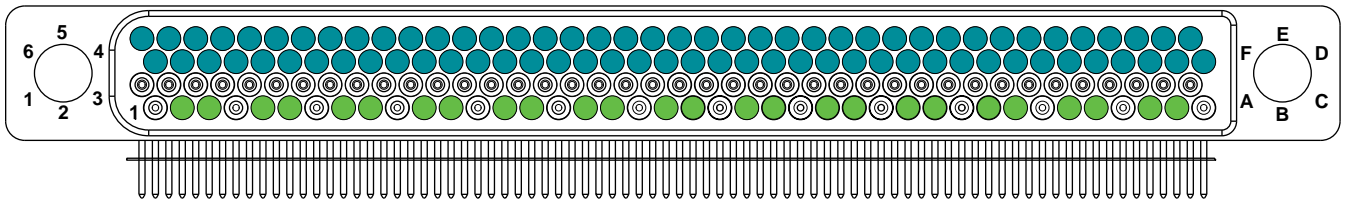
60 Pin Body with 5 Differential Pair, 30 Signal Contacts



80 Pin Body with 7 Differential Pair, 40 Signal Contacts






120 Pin Body with 10 Differential Pair, 60 Signal Contacts



160 Pin Body with 13 Differential Pair, 80 Signal Contacts

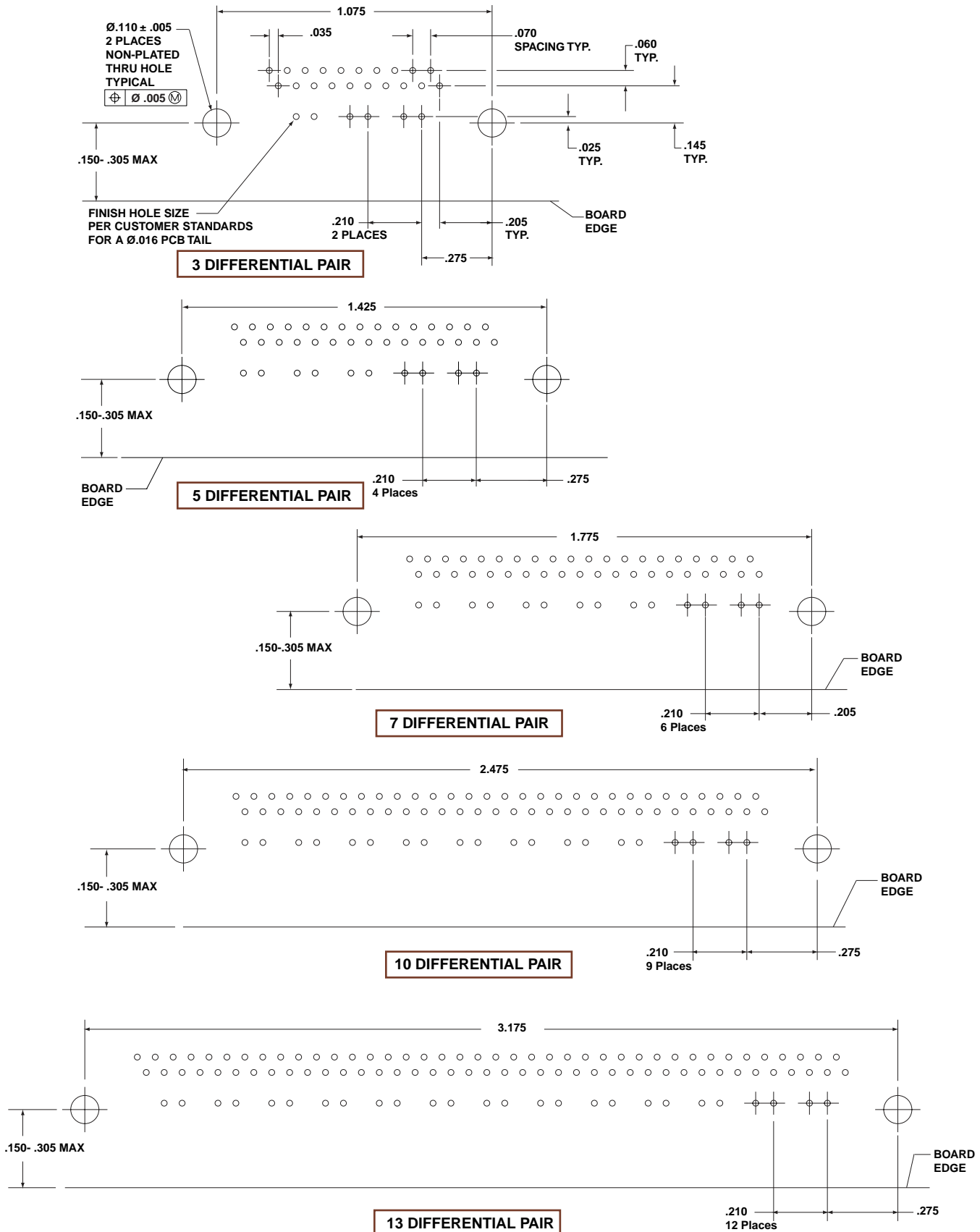
KEY

-  100 Ohm Differential Pair Contacts  
(100 Ohm Differential contact pairs capable of 6.250 Gb/s data rates)
-  Empty Contact Cavity
-  Standard Digital, Low Speed Signal Contacts

As viewed from front of daughter board connector

## RECOMMENDED BOARD LAYOUT - HSB<sup>3</sup> DAUGHTER BOARD

### HSB<sup>3</sup> DAUGHTER BOARD



- Introduction/  
Pkg. Solutions/  
Brush Contact
- LRM (Line Replaceable Modules)
- Staggered/  
GEN-X
- Hybrids - Fiber Optics/  
Hi Speed/RF/Power
- Options/  
Accessories
- Ruggedized  
VME 64x/  
VITA 60, 66
- High Density  
HSB<sup>3</sup>  
HSB<sup>3</sup>  
Hi Speed
- Low Mating Force MIL-DTL-55302  
Standard | Hybrids - Signal/Power/  
Brush | Cook/Fiber Optics
- Docking Conn./  
Accessories/Install.
- Rack & Panel  
Brush  
Ruggedized
- UMD/LMS  
Rectangular  
Interconnects
- Other  
Rectangular  
Interconnects

Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)  
Options/  
Accessories

Ruggedized  
VME64x/  
VITA 60, 66

High Density  
HSB<sup>3</sup>  
Hi Speed

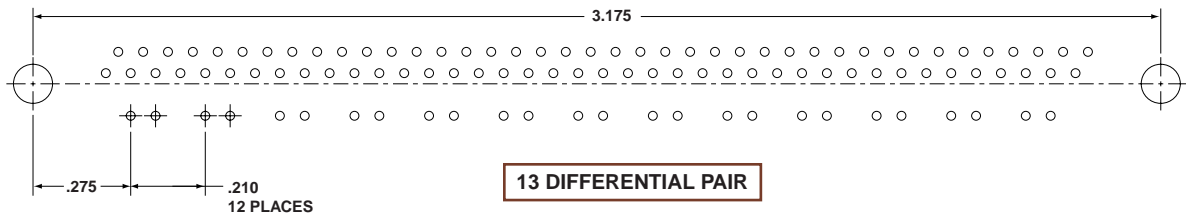
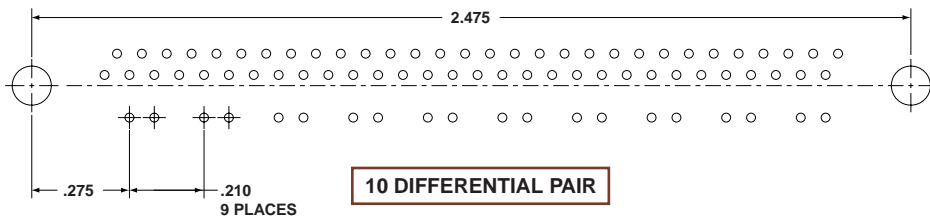
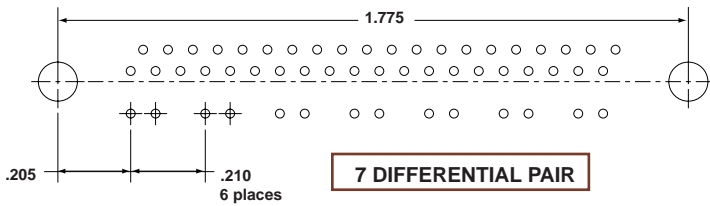
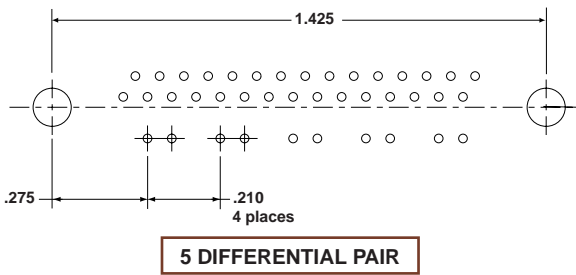
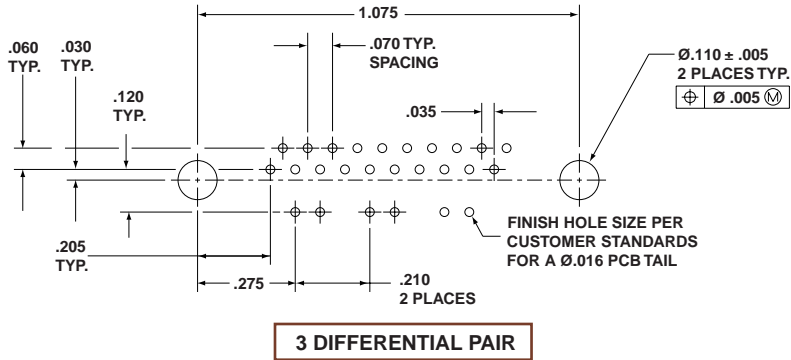
Low Mating Force MIL-DTL-55302  
Docking Conn./  
Accessories/Install.

Rack & Panel  
Brush  
Ruggedized

LMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects

**HSB<sup>3</sup> MOTHER BOARD**





## HARDWARE FOR BOTH HDB<sup>3</sup> AND HSB<sup>3</sup>

### HARDWARE FOR ALL CONFIGURATIONS (Sold Separately)

Each connector requires (2) of the component hardware listed below. These components are sold as individual units.

MOTHER BOARD			
PART NUMBER	TYPE	STICKOUT	
HDB-508803-001	POLARIZATION KEY	0.250	
HDB-508803-002	POLARIZATION KEY	0.500	
HDB-508803-003	POLARIZATION KEY	0.750	
HDB-508802-001	GUIDE PIN	0.250	
HDB-508802-002	GUIDE PIN	0.500	
HDB-508802-003	GUIDE PIN	0.750	
HDB-508808-001	THREADED BOSS*	0.250	
HDB-508808-002	THREADED BOSS*	0.500	
HDB-508808-003	THREADED BOSS*	0.750	
HDB-508808-020	LOCKING GUIDE PIN	0.250	
HDB-508808-021	LOCKING GUIDE PIN	0.500	
HDB-508808-022	LOCKING GUIDE PIN	0.750	

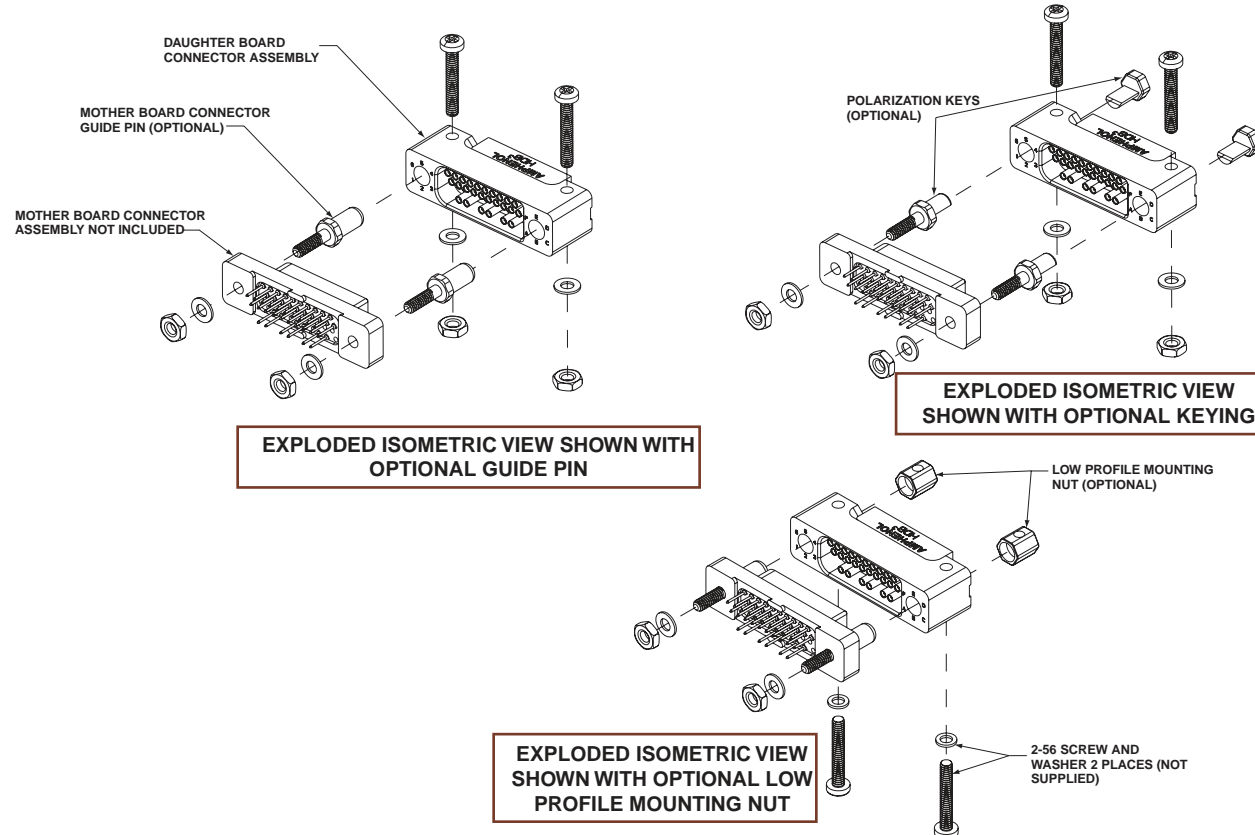
Accepts  
I/O Connector  
Jack Screw

Shown with  
Mother Board  
Connector on page 53

\* Required with Mother Board only when mating to I/O Connector

DAUGHTER BOARD		
PART NUMBER	TYPE	
HDB-508804-000	POLARIZATION KEY	
HDB-508804-001	LOW PROFILE MOUNTING NUT	

### EXPLODED ISOMETRIC VIEW



Introduction/  
Pkg. Solutions/  
Brush Contact

LRM (Line Replaceable Modules)

Staggered/  
GEN-X

Hybrids - Fiber Optics/  
Hi Speed/RF/Power

Options/  
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Cook/Fiber Optics

Docking Conn./  
Accessories/Install.

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UMD/LMS  
Rectangular  
Interconnects

Other  
Rectangular  
Interconnects