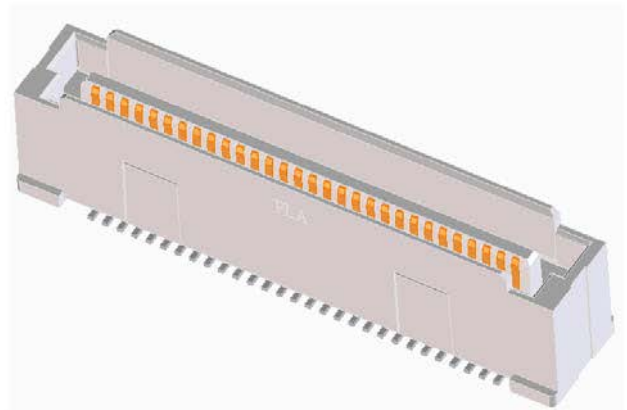
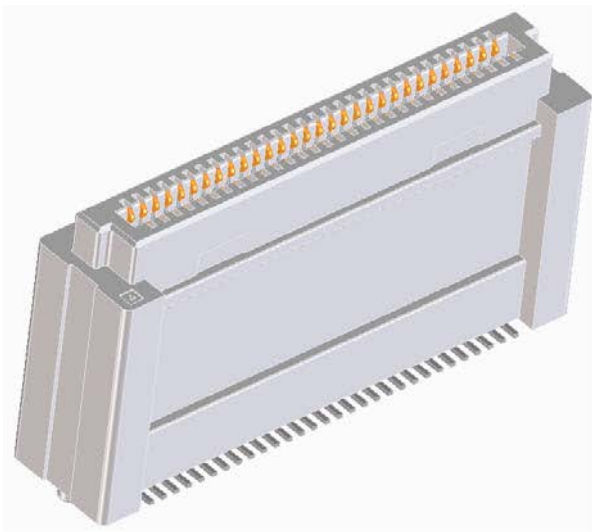


0.8mm Board to Board Connectors



0.8 mm Board to Board connector

DOUBLE ROW BOARD TO BOARD CONNECTOR —

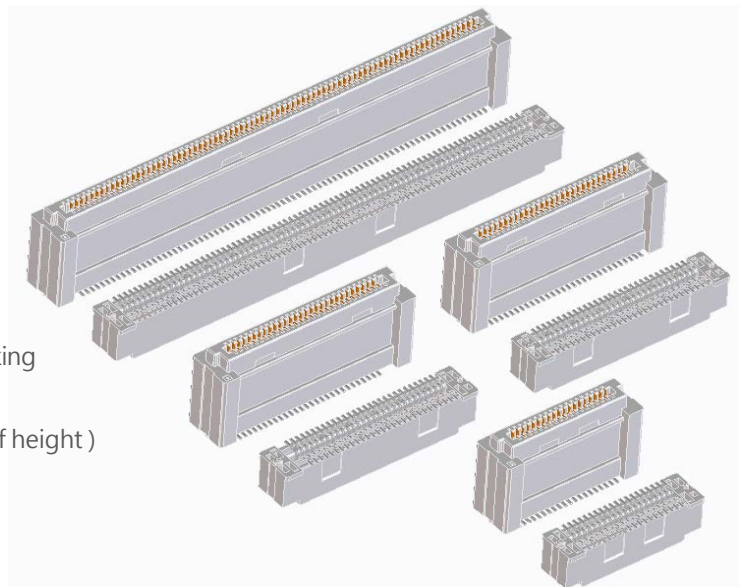
CONCEPT

Ratioplast 0.8mm BtB is a flexible solution designed for high speed and high density data transmission parallel board-to-board connector system with 16 PCB stack heights in 9 sizes up to 140 positions.

- Housing and terminal profile guarantees data transmission speed of up to 12Gb/s
- Vertical versus vertical mating configuration
- 30 to 140 position sizes in 20 position increments

TECHNICAL INFORMATION

Pitch:	0.8mm
No. of Pins:	30~140pin
PCB welding method:	SMT
Docking direction:	180 degree vertical docking
Electroplating method:	gold / tin or goldflash
PCB Docking height:	5mm~20mm(16 kinds of height)



Specifications

Durability :	100 mating cycles
Mating force :	150gf max./ Contact pair
Unmating force :	10gf min./ Contact pair
Operating temperature :	-40°C~105 °C
High temperature life :	105±2°C 250 hour
Constant temperature and humidity :	Relative humidity 90~95% 96 hours
Insulation resistance :	100 MΩ
Rated current :	0.5~1.5A/per pin
Contact resistance :	50mΩ
Rated voltage :	50V~100V AC/DC





Signal integrity

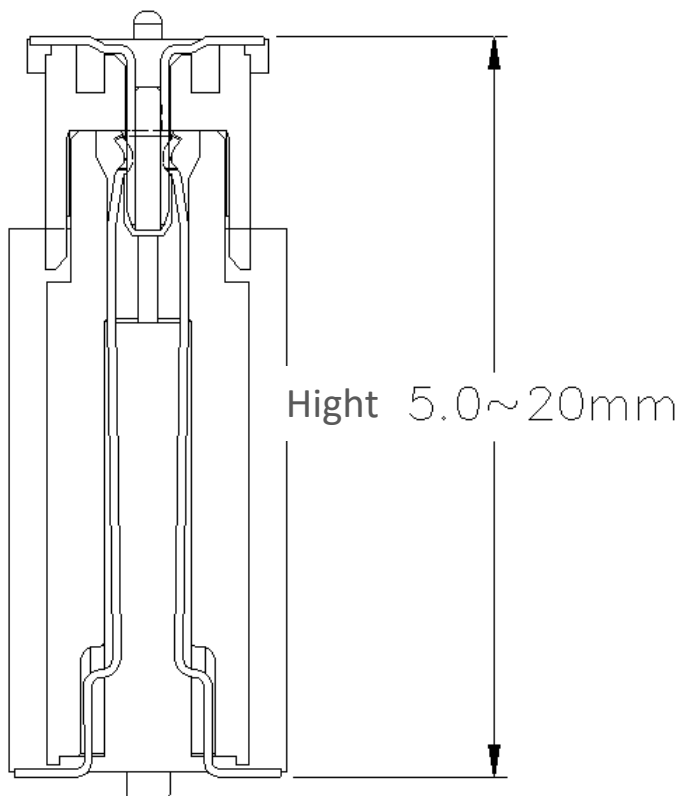
Differential impedance range :	80~110Ω 50ps(10~90%)
Insertion loss :	< 1.5dB 6GHz/12Gbps
Return loss :	< 10dB 6GHz/12Gbps
Crosstalk :	≤ -26 dB 50ps(10~90%)

0.8 mm Board to Board connector

CONCEPT —

FEATURES

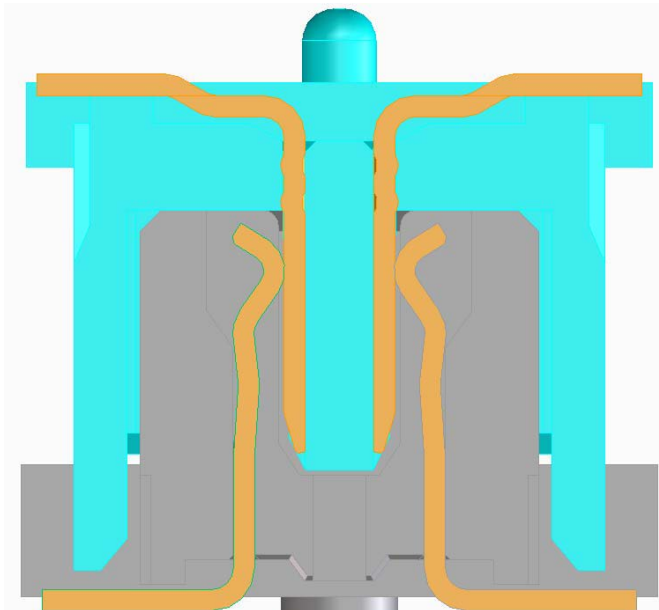
Pitch	0.80 mm
No. of Pins	30, 40, 50, 60, 80, 100, 120, 140
Termination technology	SMT
Applications	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  <p>IP Phone Router</p> </div> <div style="text-align: center;">  <p>Industrial and Instrumentation Office Equipment Point-Of-Sale Terminal Portable Industrial Terminal Test and Measurement</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="text-align: center;">  <p>Server</p> </div> <div style="text-align: center;">  <p>Diagnostics System</p> </div> </div>
Connectors	Male connector › Vertical Female connector › Vertical
Special versions	Vertical docking can achieve a height of 5~20mm, and a variety of stacking heights can be selected



0.80 mm Board to Board connector

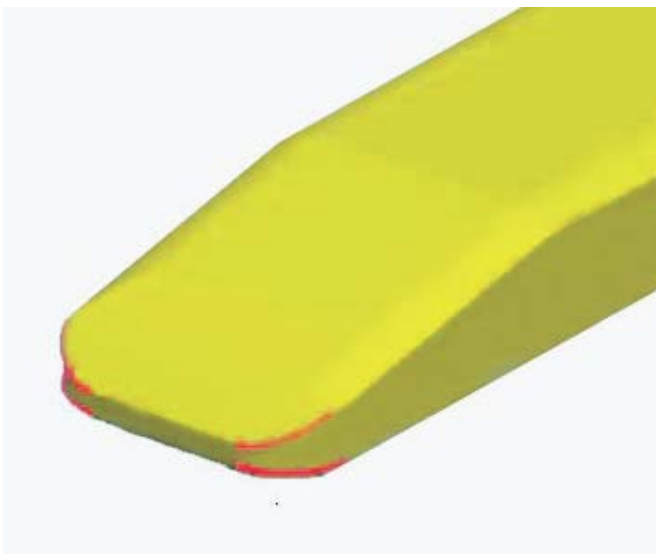
ADVANTAGE —

HIGHLY RELIABLE TERMINAL DESIGN



- The tapered contact point can achieve a large positive force to ensure reliable contact
- Unique terminal structure designed for high frequency transmission

INSERT FACE CHAMFER

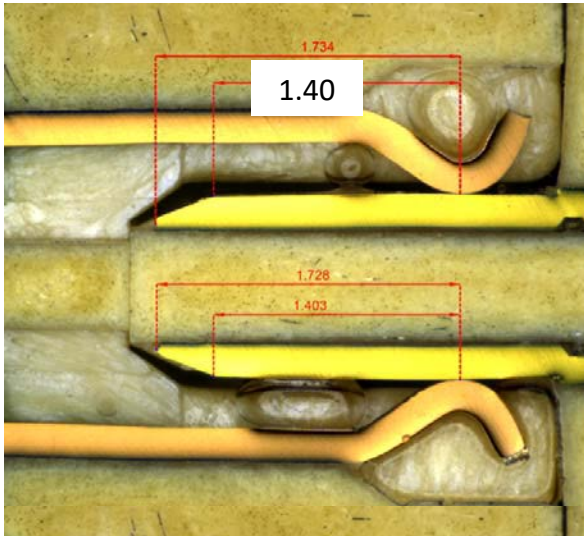


- Coined contact tips assure smooth, safe wiping action during connector mating

0.80 mm Board to Board connector

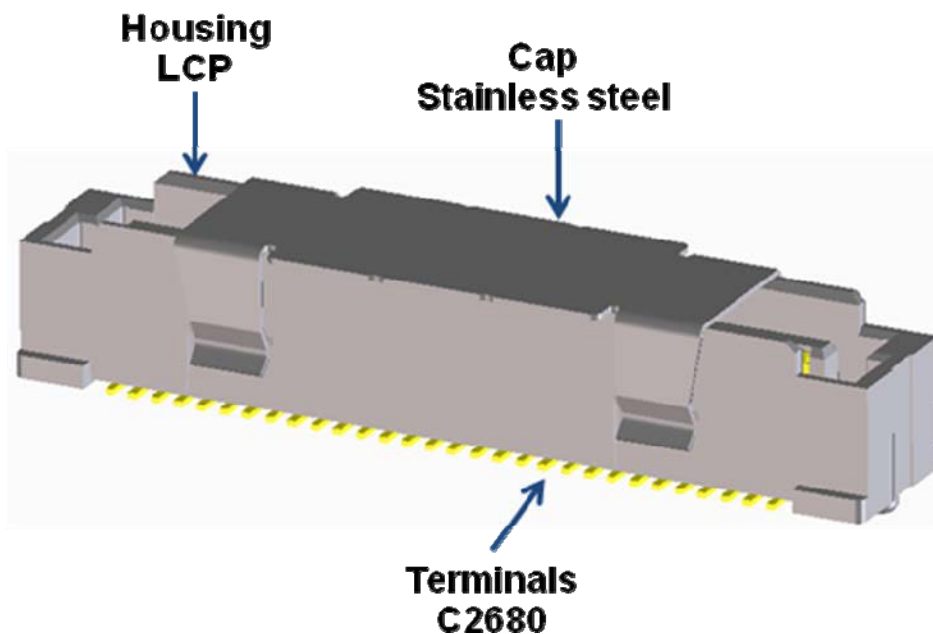
ADVANTAGE—

FRICION DISTANCE



- Larger wiper distance (1.40mm), providing contact reliability and compensating for tolerances between different heights

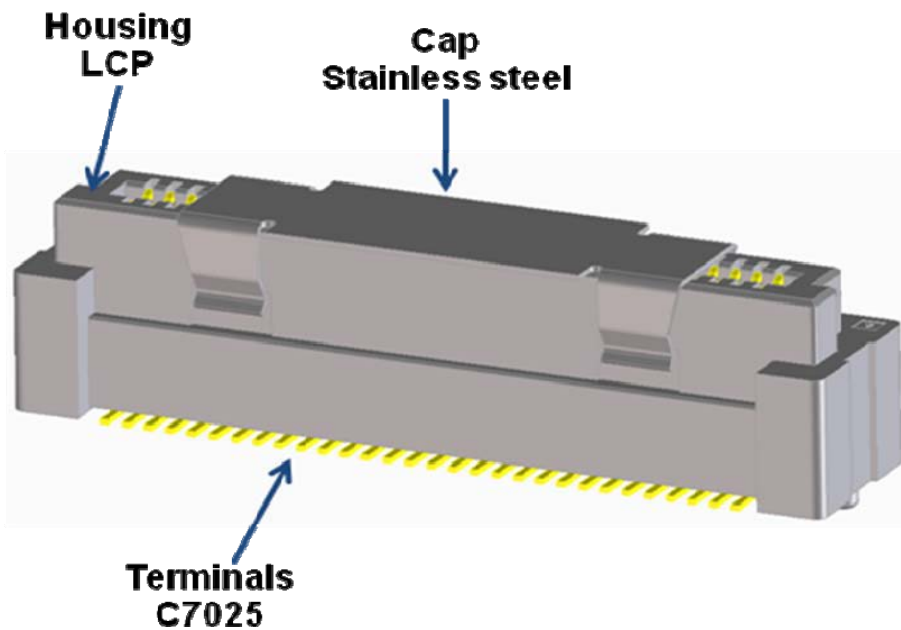
MALE END MATERIAL



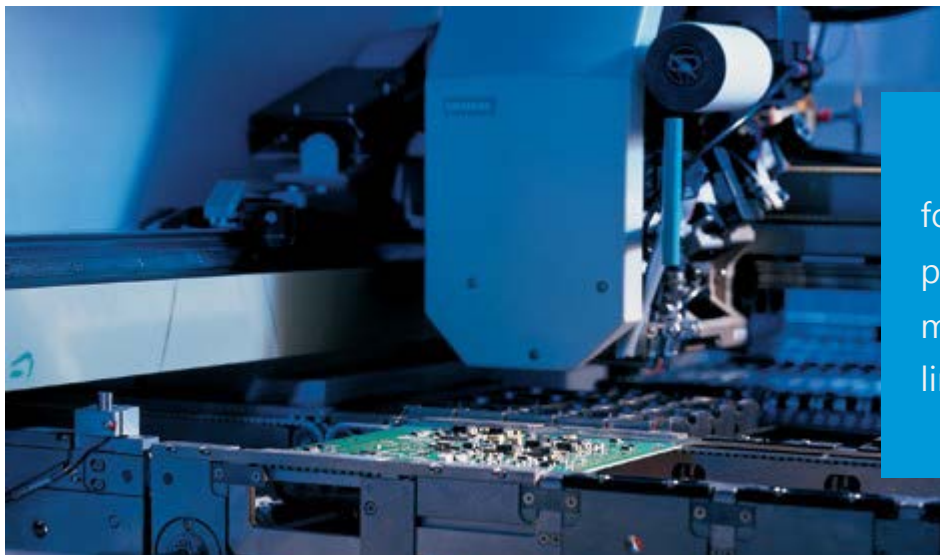
0.80 mm Board to Board connector

PROCESSION AND MATERIALS —

FEMALE END MATERIAL



FULLY AUTOMATIC ASSEMBLY AND REFLOW SOLDERING



for efficient
processing on
modern assembly
lines

0.80 mm Board to Board connector

PART NUMBER MATRIX —

08 XX X A-XXX-T-X-00

FE = Female
MA = Male

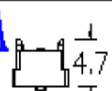
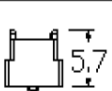
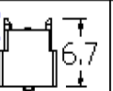
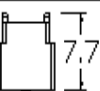
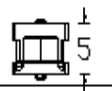
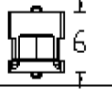



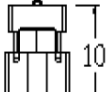

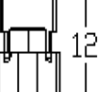
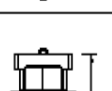

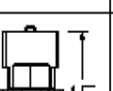
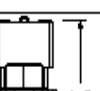




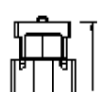
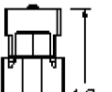
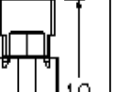
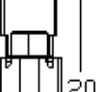
Tape&Reel with metal caps

Number of Pins
030,040,050,060,080,100,120,140

Platin code:

Functions area: Plating Au (see code)
Termination: Plating matte Sn 100µ " min.

Flash gold = K
5µ " = M
10µ " = N (Standard)
15µ " = P
30µ " = U

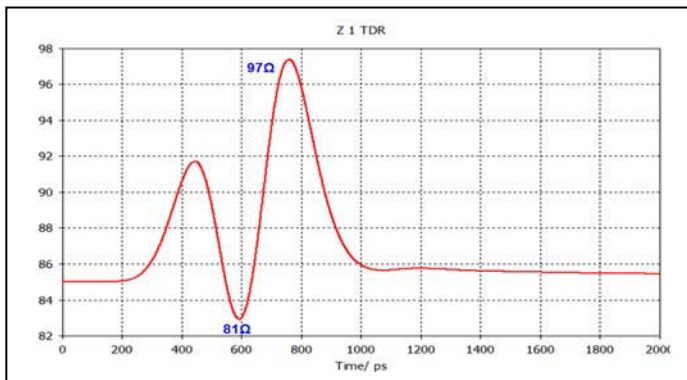
	A	B	C	D
A				
B				
C				
D				
				
				

0.80 mm Board to Board connector HIGH FREQUENCY CHARACTERISTICS

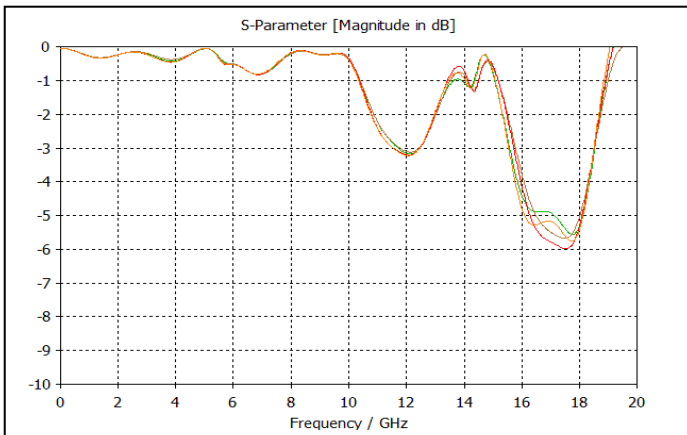
FEATURES

- Housing and terminal profile guarantees support of up to 12Gb/s
- Compatible with PCIe Gen 2/3 and SAS 3.0 high speed performance on selected stack heights

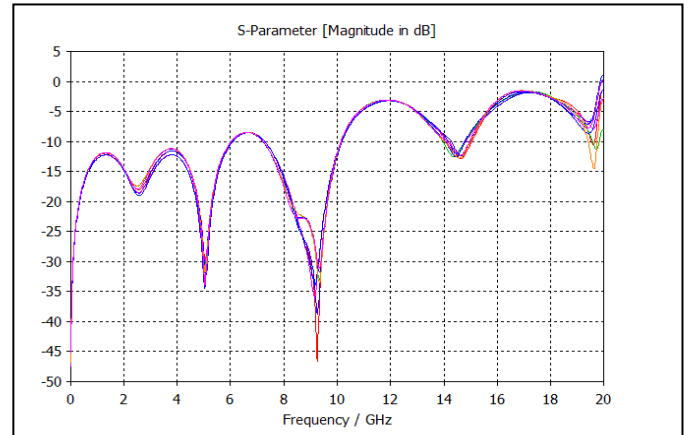
DIFFERENTIAL IMPEDANCE



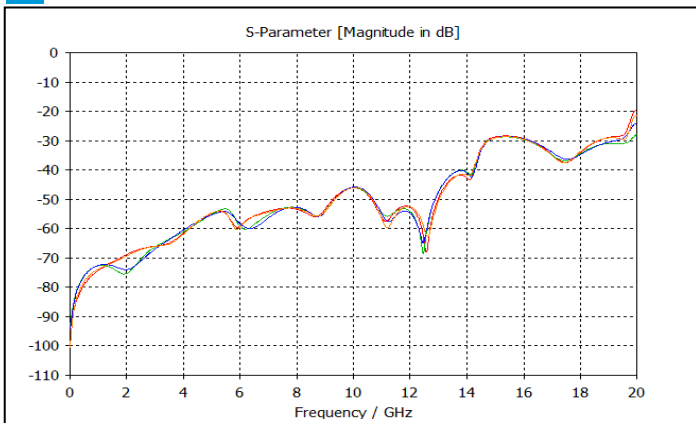
Insertions Loss



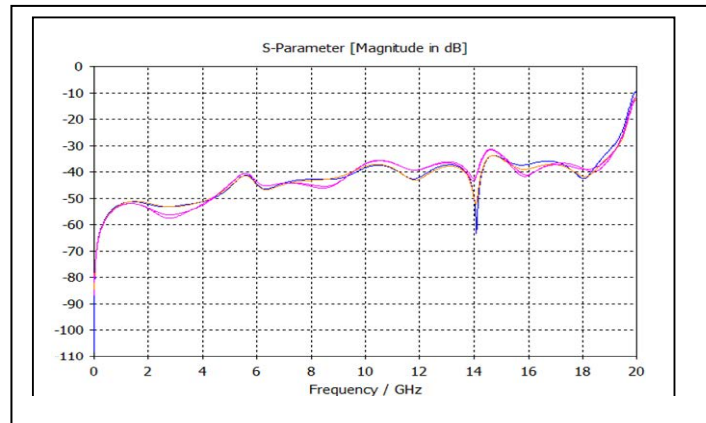
Return Loss



Near End Crosstalk (NEXT)



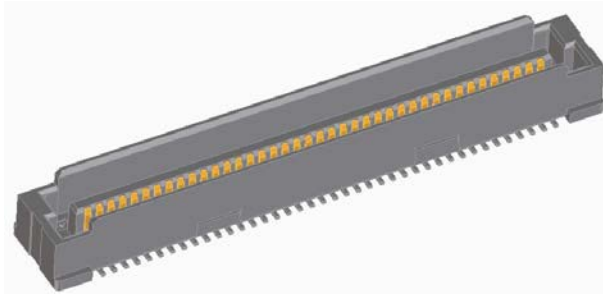
Far End Crosstalk



0.8mm Board to Board connector

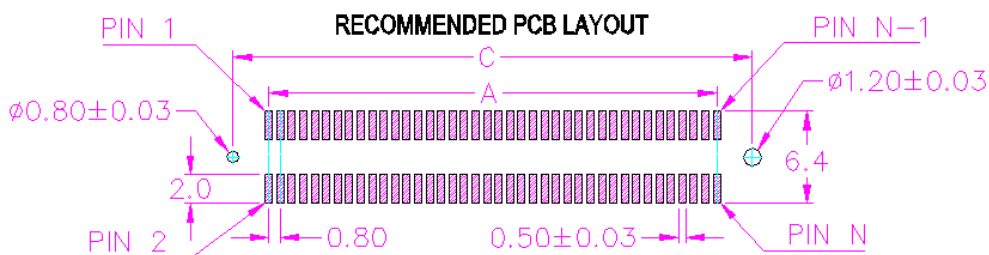
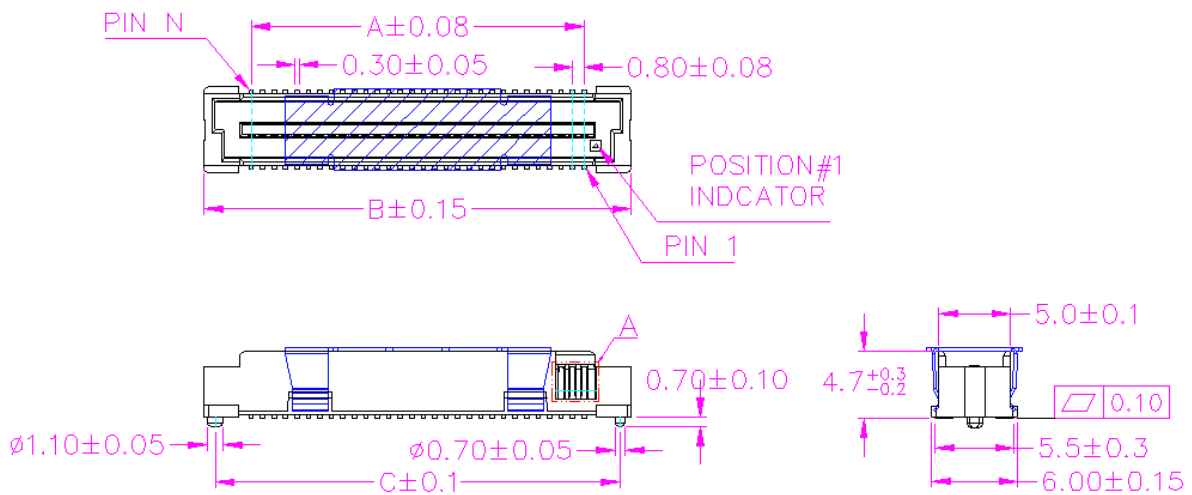
4.7mm Height Male —

PRODUCT SPECIFICATIONS



- SMT termination
- dual row connector
- data rates up to 12 Gbit/s
- location pegs for exact board placement
- fully automated board assembly

DIMENSIONAL DRAWINGS



CIRCUITS	DIM.A	DIM.B	DIM.C
30	11.20	17.80	16.20
40	15.20	21.80	20.20
50	19.20	25.80	24.20
60	23.20	29.80	28.20
80	31.20	37.80	36.20
100	39.20	45.80	44.20
120	47.20	53.80	52.20
140	55.20	61.80	60.20

0.8 mm Board to Board connector

4.7mm Height Male —

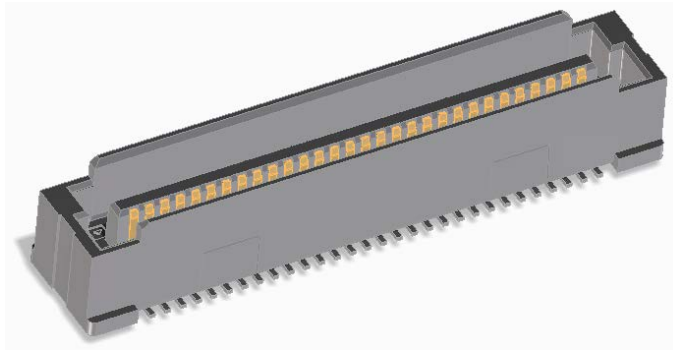
ORDERING INFORMATION

No. of Pins	Packaging	Part Number
30	Tape and reel	08MAAA030TN00
40	Tape and reel	08MAAA040TN00
50	Tape and reel	08MAAA050TN00
60	Tape and reel	08MAAA060TN00
80	Tape and reel	08MAAA080TN00
100	Tape and reel	08MAAA100TN00
120	Tape and reel	08MAAA120TN00
140	Tape and reel	08MAAA140TN00

0.80 mm Board to Board connector

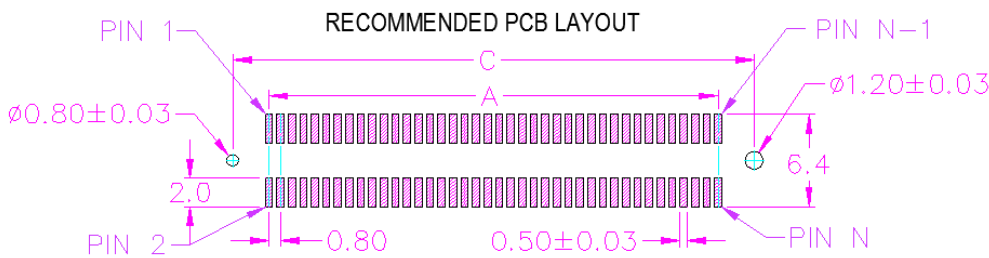
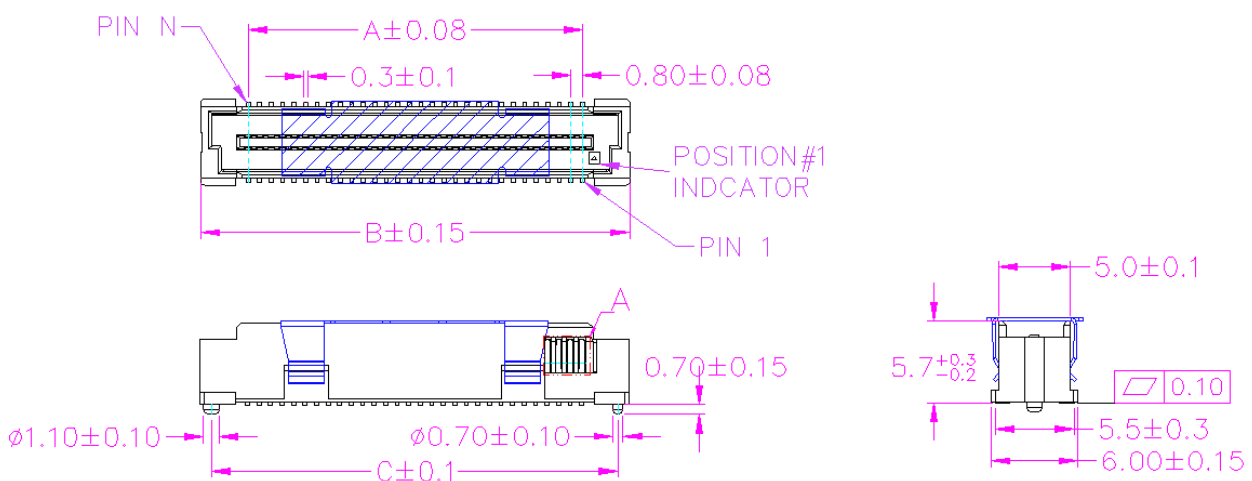
5.7mm Height Male —

PRODUCT SPECIFICATIONS



- SMT termination
- dual row connector
- data rates up to 12 Gbit/s
- location pegs for exact board placement
- fully automated board assembly

DIMENSIONAL DRAWINGS



CIRCUITS	DIM.A	DIM.B	DIM.C
30	11.20	17.80	16.20
40	15.20	21.80	20.20
50	19.20	25.80	24.20
60	23.20	29.80	28.20
80	31.20	37.80	36.20
100	39.20	45.80	44.20
120	47.20	53.80	52.20
140	55.20	61.80	60.20

0.80 mm Board to Board connector

5.7mm Height Male —



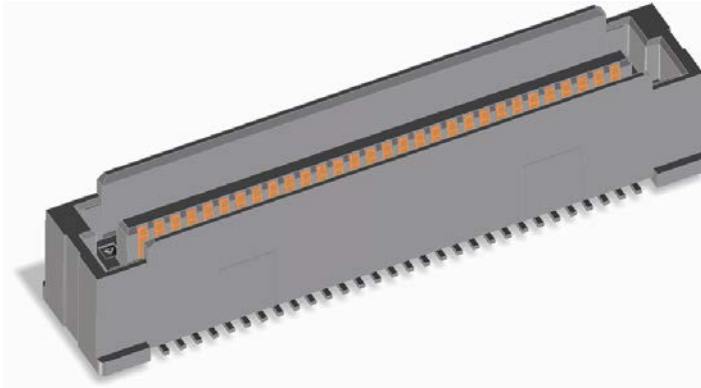
ORDERING INFORMATION

No. of Pins	Packaging	Part Number
30	Tape and reel	08MABA030TN00
40	Tape and reel	08MABA040TN00
50	Tape and reel	08MABA050TN00
60	Tape and reel	08MABA060TN00
80	Tape and reel	08MABA080TN00
100	Tape and reel	08MABA100TN00
120	Tape and reel	08MABA120TN00
140	Tape and reel	08MABA140TN00

0.80 mm Board to Board connector

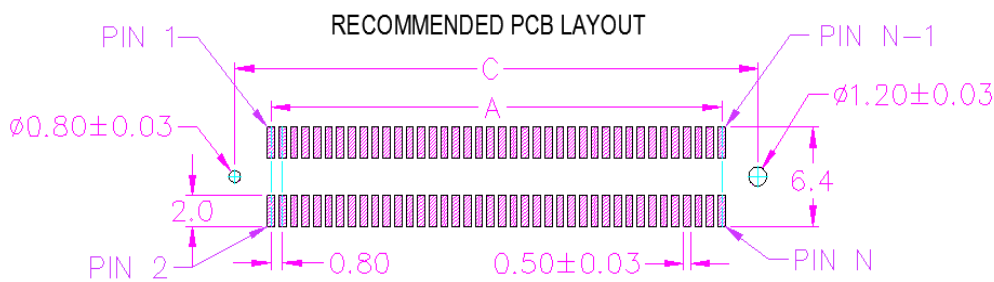
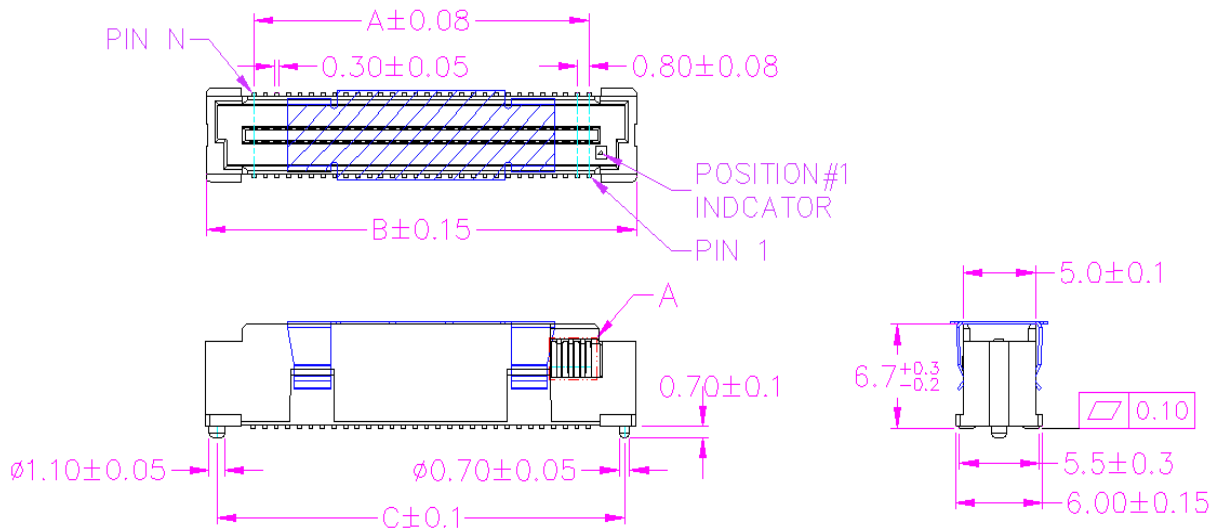
6.7mm Height Male —

PRODUCT SPECIFICATIONS



- SMT termination
- dual row connector
- data rates up to 12 Gbit/s
- location pegs for exact board placement
- fully automated board assembly

DIMENSIONAL DRAWINGS



CIRCUITS	DIM.A	DIM.B	DIM.C
30	11.20	17.80	16.20
40	15.20	21.80	20.20
50	19.20	25.80	24.20
60	23.20	29.80	28.20
80	31.20	37.80	36.20
100	39.20	45.80	44.20
120	47.20	53.80	52.20
140	55.20	61.80	60.20

0.80 mm Board to Board connector

6.7mm Height Male —

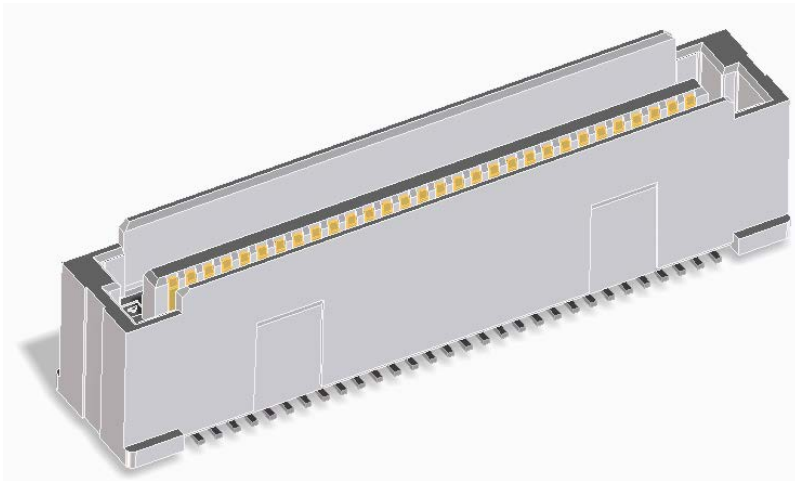
ORDERING INFORMATION

No. of Pins	Packaging	Part Number
30	Tape and reel	08MACA030TN00
40	Tape and reel	08MACA040TN00
50	Tape and reel	08MACA050TN00
60	Tape and reel	08MACA060TN00
80	Tape and reel	08MACA080TN00
100	Tape and reel	08MACA100TN00
120	Tape and reel	08MACA120TN00
140	Tape and reel	08MACA140TN00

0.80 mm Board to Board connector

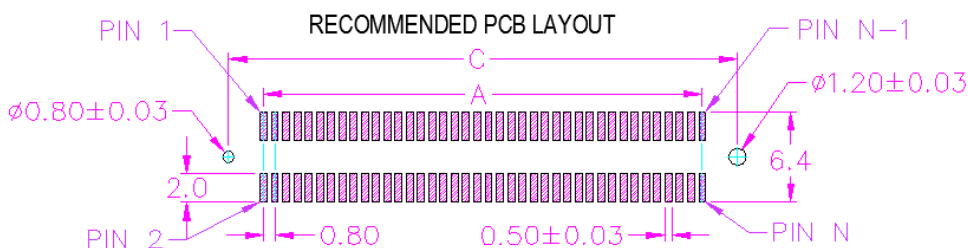
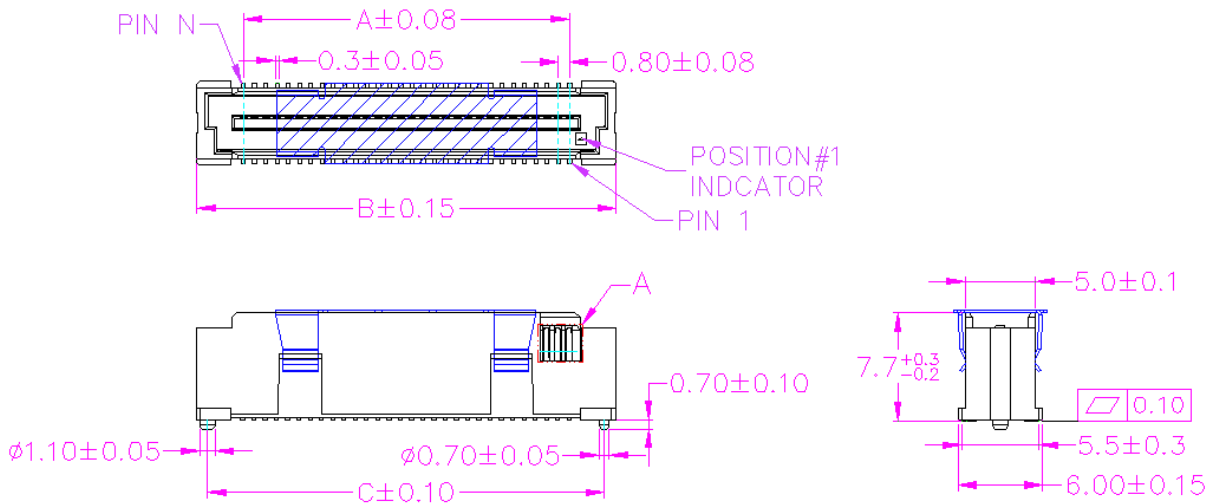
7.7mm Height Male

PRODUCT SPECIFICATIONS



- SMT termination
- dual row connector
- data rates up to 12 Gbit/s
- location pegs for exact board placement
- fully automated board assembly

DIMENSIONAL DRAWINGS



CIRCUITS	DIM.A	DIM.B	DIM.C
30	11.20	17.80	16.20
40	15.20	21.80	20.20
50	19.20	25.80	24.20
60	23.20	29.80	28.20
80	31.20	37.80	36.20
100	39.20	45.80	44.20
120	47.20	53.80	52.20
140	55.20	61.80	60.20

0.80 mm Board to Board connector

7.7mm Height Male —

■ PRODUCT SPECIFICATIONS

No. of Pins	Packaging	Part Number
30	Tape and reel	08MADA030TN00
40	Tape and reel	08MADA040TN00
50	Tape and reel	08MADA050TN00
60	Tape and reel	08MADA060TN00
80	Tape and reel	08MADA080TN00
100	Tape and reel	08MADA100TN00
120	Tape and reel	08MADA120TN00
140	Tape and reel	08MADA140TN00

0.80 mm Board to Board connector

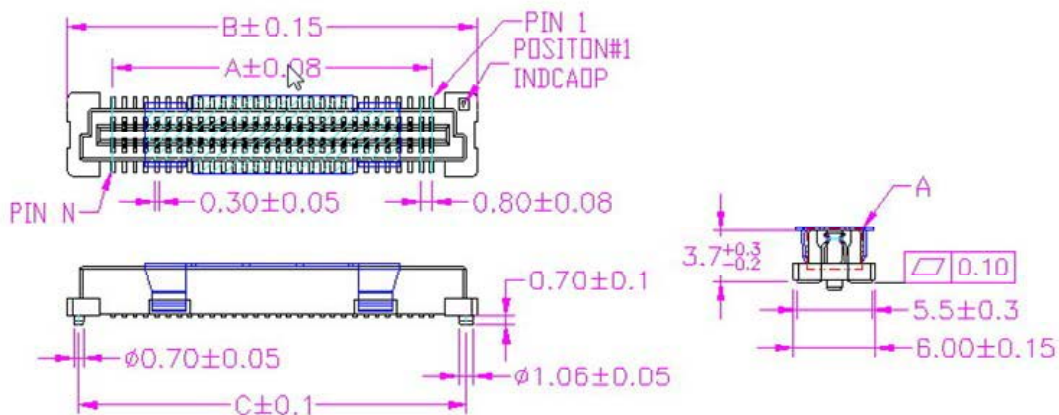
3.7mm Height Female

PRODUCT SPECIFICATIONS

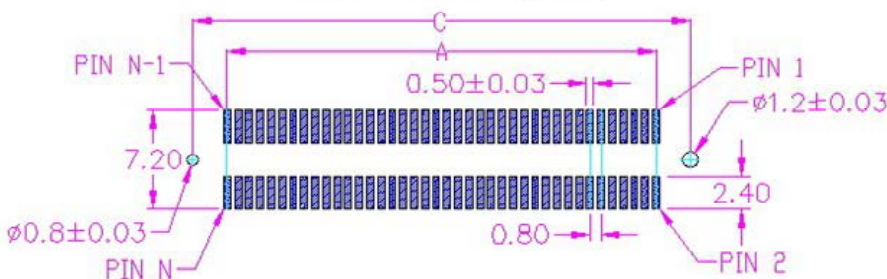


- SMT termination
- dual row connector
- data rates up to 12 Gbit/s
- location pegs for exact board placement
- fully automated board assembly

DIMENSIONAL DRAWINGS



RECOMMENDED PCB LAYOUT



CIRCUITS	DIM.A	DIM.B	DIM.C
30	11.20	17.80	16.20
40	15.20	21.80	20.20
50	19.20	25.80	24.20
60	23.20	29.80	28.20
80	31.20	37.80	36.20
100	39.20	45.80	44.20
120	47.20	53.80	52.20
140	55.20	61.80	60.20

0.80 mm Board to Board connector

3.7mm Height Female —

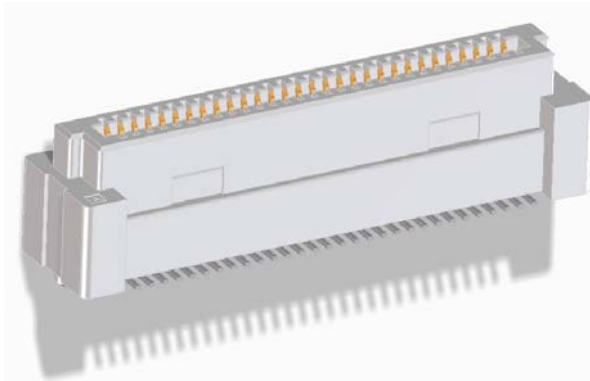
ORDERING INFORMATION

No. of Pins	Packaging	Part Number
30	Tape and reel	08FEAA030TN00
40	Tape and reel	08FEAA040TN00
50	Tape and reel	08FEAA050TN00
60	Tape and reel	08FEAA060TN00
80	Tape and reel	08FEAA080TN00
100	Tape and reel	08FEAA100TN00
120	Tape and reel	08FEAA120TN00
140	Tape and reel	08FEAA140TN00

0.80 mm Board to Board connector

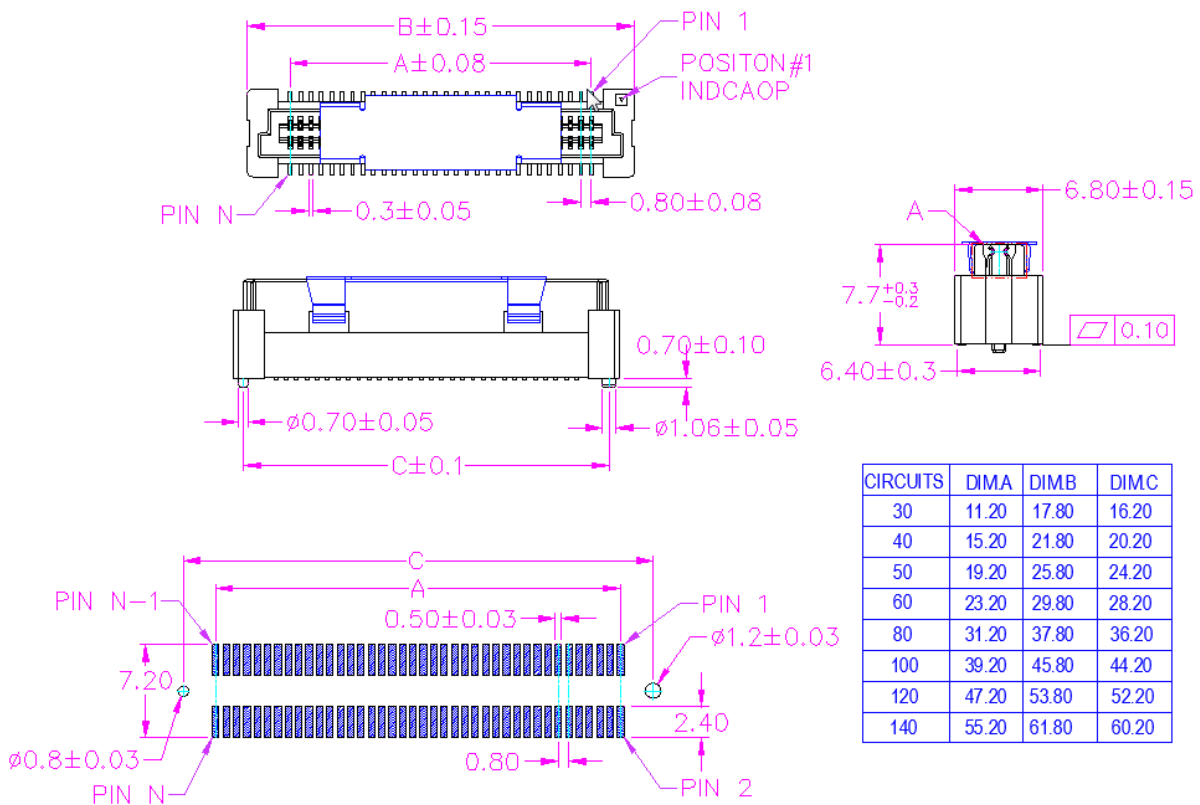
7.7mm Height Female

PRODUCT SPECIFICATIONS



- SMT termination
- dual row connector
- data rates up to 12 Gbit/s
- location pegs for exact board placement
- fully automated board assembly

DIMENSIONAL DRAWINGS



0.80 mm Board to Board connector

7.7mm Height Female

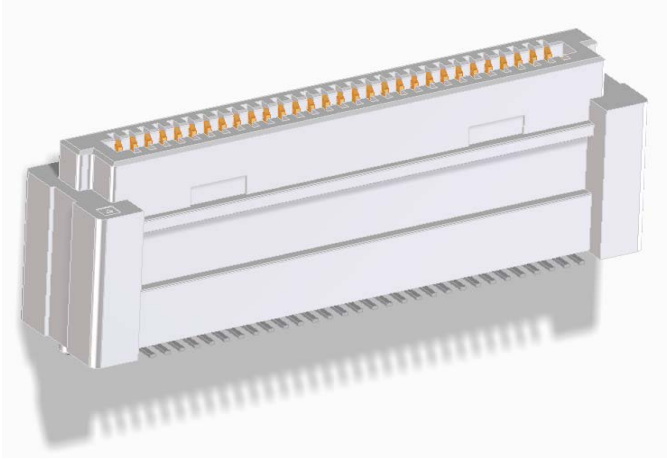
ORDERING INFORMATION

No. of Pins	Packaging	Part Number
30	Tape and reel	08FEBA030TN00
40	Tape and reel	08FEBA040TN00
50	Tape and reel	08FEBA050TN00
60	Tape and reel	08FEBA060TN00
80	Tape and reel	08FEBA080TN00
100	Tape and reel	08FEBA100TN00
120	Tape and reel	08FEBA120TN00
140	Tape and reel	08FEBA140TN00

0.80 mm Board to Board connector

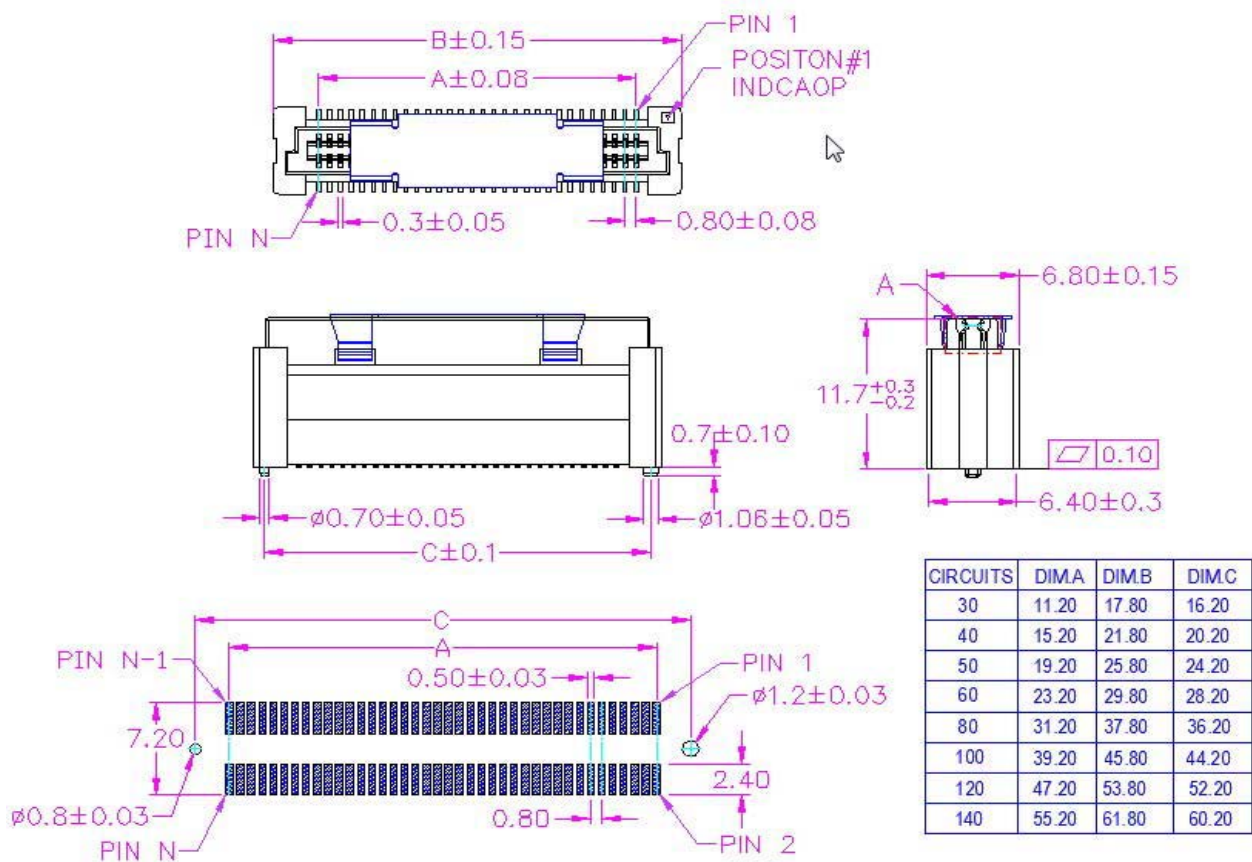
11.7mm Height Female

PRODUCT SPECIFICATIONS



- Surface mount
- dual row connector
- data rates up to 12 Gbit/s
- location pegs for exact board placement
- fully automated board assembly

DIMENSIONAL DRAWINGS



0.80 mm Board to Board connector

11.7mm Height Female —

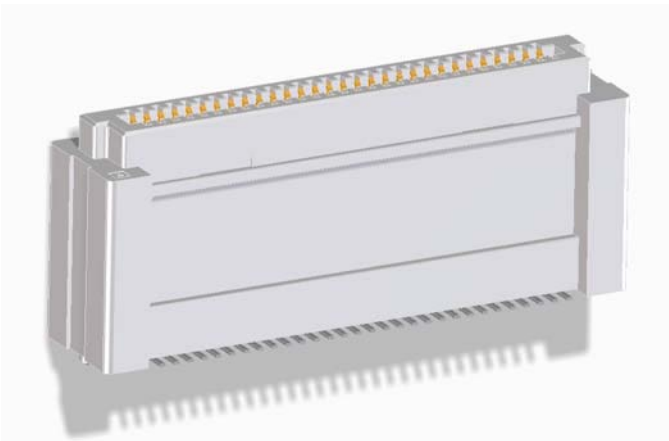
ORDERING INFORMATION

No. of Pins	No. of Pins	No. of Pins
30	Tape and reel	08FECA030TN00
40	Tape and reel	08FECA040TN00
50	Tape and reel	08FECA050TN00
60	Tape and reel	08FECA060TN00
80	Tape and reel	08FECA080TN00
100	Tape and reel	08FECA100TN00
120	Tape and reel	08FECA120TN00
140	Tape and reel	08FECA140TN00

0.80 mm Board to Board connector

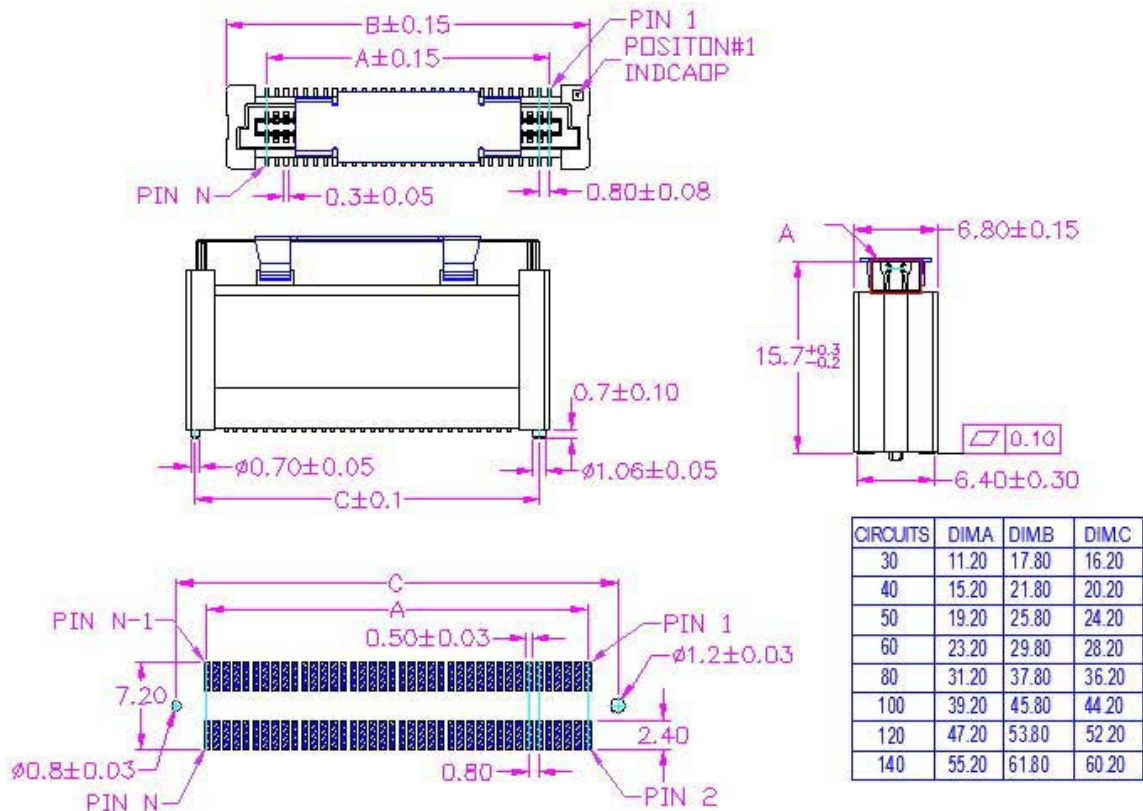
15.7mm Height Female

PRODUCT SPECIFICATIONS



- Surface mount
- dual row connector
- data rates up to 12 Gbit/s
- location pegs for exact board placement
- fully automated board assembly

DIMENSIONAL DRAWINGS



0.80 mm Board to Board connector

15.7mm Height Female —

ORDERING INFORMATION

No. of Pins	Packaging	Part Number
30	Tape and reel	08FEDA030TN00
40	Tape and reel	08FEDA040TN00
50	Tape and reel	08FEDA050TN00
60	Tape and reel	08FEDA060TN00
80	Tape and reel	08FEDA080TN00
100	Tape and reel	08FEDA100TN00
120	Tape and reel	08FEDA120TN00
140	Tape and reel	08FEDA140TN00