## BMI, Halogen-free and IDT/Solder option in **Milli-Grid Connector System**

#### SCOPE 1.0

This document contains information pertaining to application requirements of the BMI, Halogen-free and IDT/Solder options in Milli Grid Connector System.

#### PRODUCT DESCRIPTION 2.0

DATE: 2019 / 12 / 06

0503940002-AS

DOCUMENT NUMBER:

BMI RECEPTACLE		BMI PCB HEADERS		
HALOGEN-FREE SHROUDED RI	ECEPTACLE	HALOGEN-FREE SHROUDED HEA	DERS	
HALOGEN-FREE SHROUDED HEADERS  HALOGEN-FREE SHROUDED HEADERS				
REVISION:         ECR/ECN INFORMATION:         T           EC No:         628700		ATION SPECIFICATION FOR HALOGEN-FREE AND IDT	SHEET No.	
A DATE: 2019 / 12 / 06		CPID CONNECTOR SYSTEM	1 of 14	

CREATED / REVISED BY:

Akhil

MILLI-GRID CONNECTOR SYSTEM

CHECKED BY:

Manohar

APPROVED BY:

Manohar

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IDT RECEPTCLE CONNCETROS	PCB SHROUDED HEADER

#### SEE APPROPRIATE SALES DRAWINGS AND PRODUCT SPECIFICATIONS FOR INFORMATION ON SPECIFIC PART NUMBERS.

### 3.0 GENERAL NOTES

Appearance: Parts confirm to class "B" requirements of the cosmetic specification PS-45499-002. Refer notes in sales drawing.

REVISION:	ECR/ECN INFORMATION: EC No: <b>628700</b>	APPLICATION DATE IN A L			SHEET No.	
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0503940002-AS		Akhil	Manohar	Manohar		
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### **APPLICATION SPECIFICATION**

#### 1. ASSEMBLY INSTRUCTIONS

### Contact/terminal insertion into BMI Receptacle housing

Use only *female* terminals with receptacle housing. Align the terminal to the receptacle housing cavity axis Continue inserting until it stops and locks up. Orientation needed to insert terminal in housing as shown in the fig 1. Terminal will lock's up as shown in the **Detail A** view. Pull the terminal back gently to ensure terminal is seated properly.

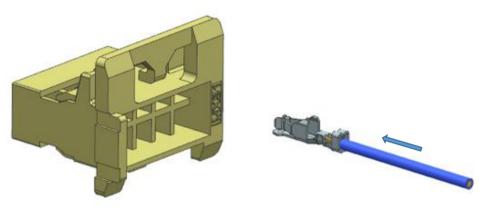
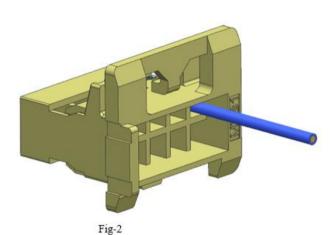
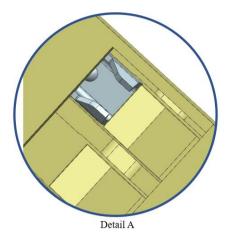


Fig-1



<u>REVISION:</u>	ECR/ECN INFORMATION:	TITLE: APPLICATION	ON SPECIFICATION	ON FOR	SHEET No.
<b>A</b>	EC No: 628700	BMI, HAL	<b>OGEN-FREE AND</b>	) IDT	3 of 14
A	DATE: 2019 / 12 / 06	MILLI-GRII	CONNECTOR S	YSTEM	<b>3</b> 01 <b>14</b>
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPR(	OVED BY:
0503940002-AS		Akhil	Manohar	Manohar Manohar	
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Insert the terminals into all circuits and complete the insertion as shown in Fig 3 and Carry out the visual inspection of the terminal

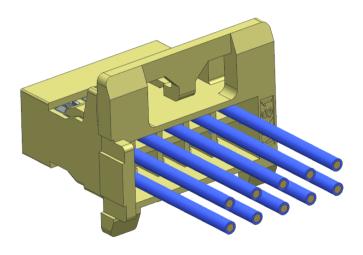


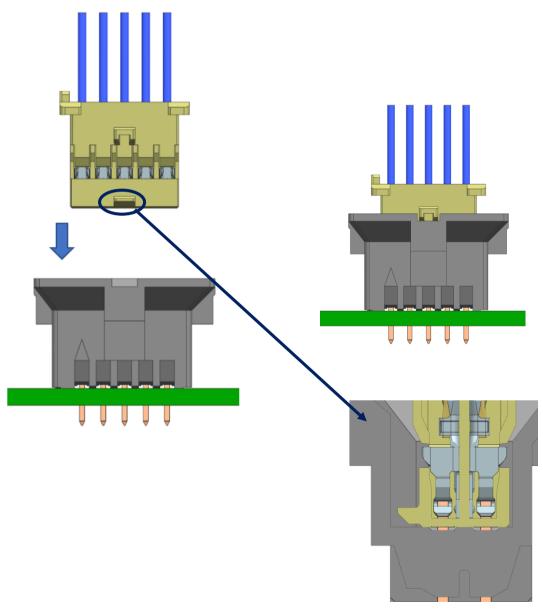
Fig-3 No Servicing Tool available for terminal extraction.

			<b>4</b> of <b>14</b>
MILLI-GRII	CONNECTOR SY	YSTEM	<b>4</b> 01 <b>14</b>
CREATED / REVISED BY:	CHECKED BY:	APPRO	OVED BY:
Akhil	Manohar	Ma	nohar
	CREATED / REVISED BY:	CREATED / REVISED BY: CHECKED BY:	

# **molex** APPLICATION SPECIFICATION

### **Connector mating (BMI Receptacle with BMI Headers)**

Align connector system polarization and begin the mating process along the same axis, slide the connector assemblies into each other until the bottom of the header as shown below. The alignment of polarization is shown with sectional view in **Detail A** 



Detail A

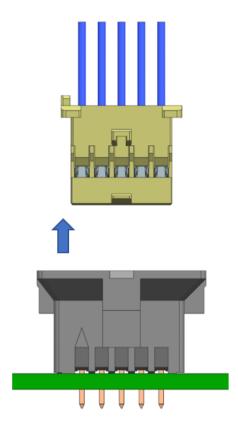
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0503940002-AS		Akhil	Manohar	Manohar	
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## **APPLICATION SPECIFICATION**

### **Connector unmating (BMI Receptacle with BMI Header)**

To unmate the connectors, just pull back each other until they separate from each other.



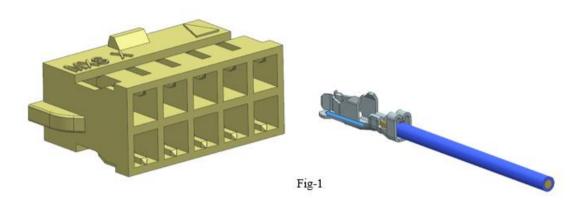
**NOTE:** Mating and Unmating mechanism remains same irrespective of the termination style of the header.

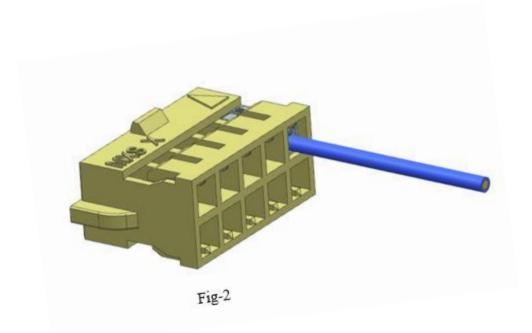
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A	EC No: <b>628700</b>	BMI, HAL	<b>OGEN-FREE AND</b>	) IDT	<b>6</b> of <b>14</b>	
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### **APPLICATION SPECIFICATION**

### Contact/terminal insertion into Halogen-Free Shrouded Receptacle housing

Use only *female* terminals with receptacle housing. Align the terminal to the receptacle housing cavity axis Continue inserting until it stops and locks up. Orientation needed to insert terminal in housing as shown in the fig 1. Terminal will lock's up as shown in the **Detail A** view. Pull the terminal back gently to ensure terminal is seated properly.





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0503940002-AS		Akhil	Manohar	Manohar	
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## **APPLICATION SPECIFICATION**

Insert the terminals into all circuits and complete the insertion as shown in in Fig 3 and Carry out the visual inspection of the terminal

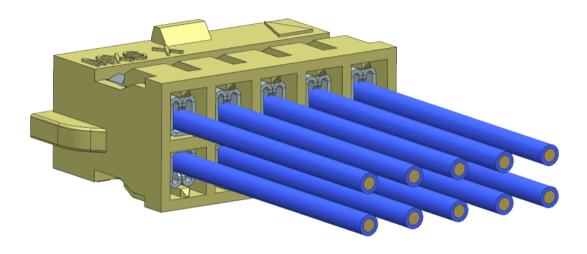
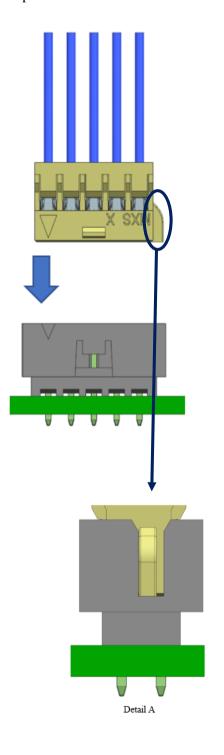


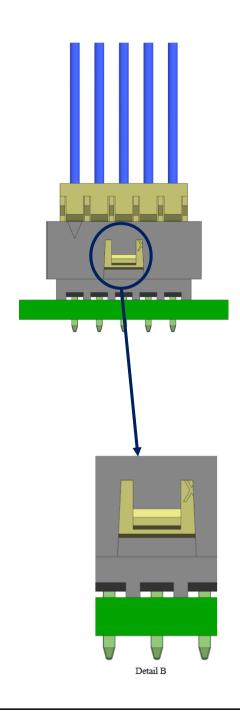
Fig-3 No Servicing Tool available for terminal extraction.

<u>REVISION:</u>	ECR/ECN INFORMATION:	TITLE: APPLICATION	ON SPECIFICATION	ON FOR	SHEET No.	
A	EC No: <b>628700</b>	BMI, HAL	<b>OGEN-FREE AND</b>	) IDT	<b>8</b> of <b>14</b>	
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### **Connector mating (Halogen free Shrouded header with receptacle)**

Align the receptacle to the header by arranging the side polarization mechanism in axis and slide the connector assemblies into each other until the bottom and they lock up by center lock mechanism. The polarization feature is shown in **Detail A** and Center lock feature is shown in **Detail B**.



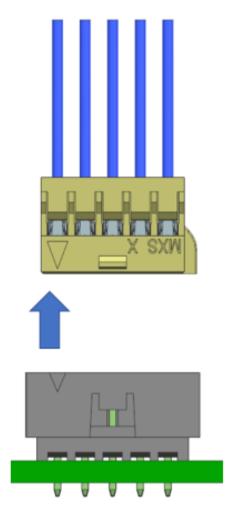


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### **Connector unmating (Halogen free Shrouded header with receptacle)**

To unmate the connectors, just pull back each other until they separate from each other.



**NOTE:** Mating and unmating of the above combination remains same irrespective of their termination style.

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<b>A</b>	EC No: <b>628700</b>	BMI, HAL	<b>OGEN-FREE AND</b>	) IDT	<b>10</b> of <b>14</b>
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### **APPLICATION SPECIFICATION**

#### CONTACT/TERMINAL INSERTION INTO IDT RECEPTACLE HOUSING

Use only standard flat ribbon cable AWG #26 or 28, hold the housing as shown the **Fig 1** below and align the cable in between IDT featured terminal as in **Fig 2** and move the cable towards the terminal tip as indicated in **Fig 3** until the insulation peel off and the conductor makes a contact with terminal as shown in **Detail A.** insert wire cable into all IDT terminals and move the housing Ramp upward as shown in **Fig 4.** Strain relief is available as optional can be combined with the part as shown In **Fig 6**.

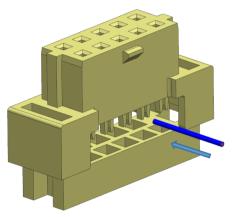


Fig 1

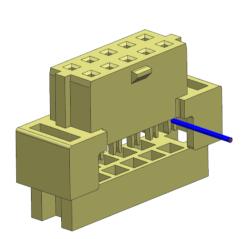


Fig 3

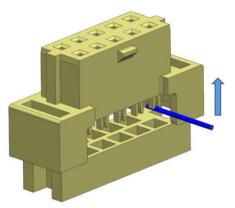
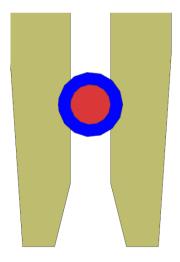


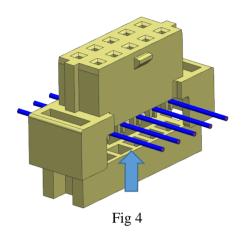
Fig 2



Detail A

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<b>A</b>	EC No: 628700	BMI, HAL	<b>OGEN-FREE AND</b>	) IDT	<b>11</b> of <b>14</b>
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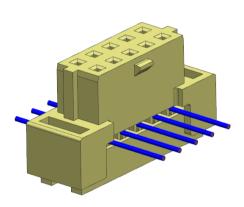
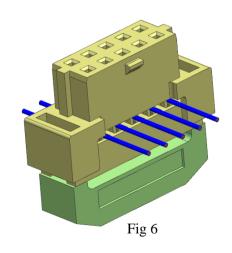


Fig 5



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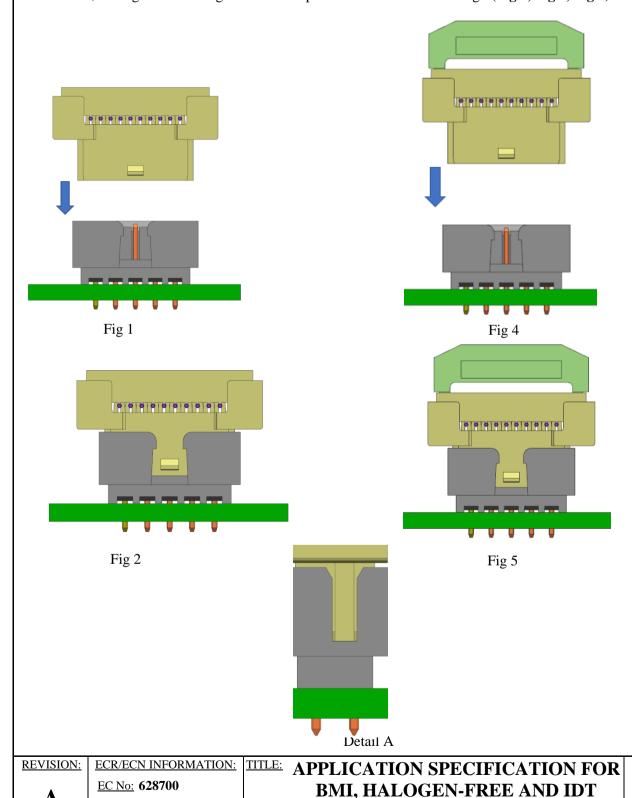
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### **APPLICATION SPECIFICATION**

### **Connector mating (IDT Receptacle with vertical PCB Header)**

Align the receptacle to the header by arranging the side polarization mechanism in axis and slide the connector assemblies into each other until the bottom the polarization feature is shown in **Detail A** on both sides, mating and unmating shown with optional Strain relief on the right(**Fig 4, Fig 5, Fig 6**)



CREATED / REVISED BY:

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MILLI-GRID CONNECTOR SYSTEM

CHECKED BY:

Manohar

SHEET No.

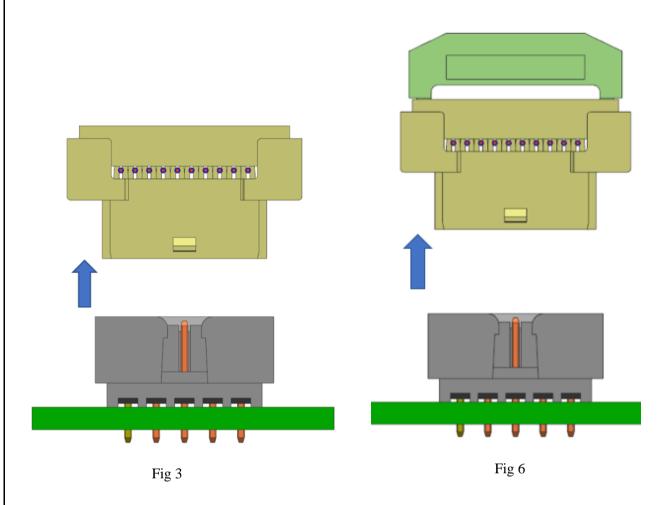
**13** of **14** 

APPROVED BY:

Manohar

### **Connector unmating (IDT Receptacle with vertical PCB Header)**

To unmate the connectors, just pull back each other until they separate from each other.



**NOTE:** Mating and unmating of the above combination remains same irrespective of their termination style.

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<b>A</b>	EC No: 628700	BMI, HAL	<b>14</b> of <b>14</b>			
A	DATE: 2019 / 12 / 06	MILLI-GRII	CONNECTOR S	YSTEM	14 01 14	
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