

TO

SPECIFICATION FOR APPROVAL

DESCRIPTION: Pitch 1.25mm Wafer Connector DIP V/T Type

CUSTOMER PROD.NO/DWG.NO:

E&T PROD.NO: 4300K-XXXX-0XX

APPROVAL SHEET NO:

E&T DWG. NO./DOCUMENT: 4300K-XXXX-0XX

REV: A1

PLEASE RETURN TO US ONE COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVED SIGNATURES.

APPROVED SIGNATURES			



**ENTERY INDUSTRIAL CO., LTD.
E&T ELECTRONICS (DONG GUAN) CO., LTD.
E&T ELECTRONICS (SU ZHOU) CO., LTD.**

ENTERY INDUSTRIAL CO., LTD.

Title : Pitch 1.25mm Wafer Connector DIP V/T
Type

Revised Max Lee		Title: Pitch 1.25mm Wafer Connector DIP V/T Type	
A1	10,18,2011'	This Document Contains Information That Is Proprietary To E&T And Should Not Be Used Without Written Permission	
Rev	Description		
Document No.		Prepared By: Jimmy Hsu	Date: 09,27,2010
4300K-XXXX-0XX		Checked By: <i>JAH</i>	Date: <i>11,29,2011'</i>
		Approved By: <i>Joh</i>	Date:

ENTERY INDUSTRIAL CO., LTD.

PROUDCT SPECIFICATION

1. SCOPE :

This specification covers the 1.25 mm Wafer DIP connector series.

2. PRODUCT NAME AND PART NUMBER :

Product Name	E&T Part Number
1.25 Wafer DIP V/T TYPE	4300K-XXXX-0XX

3. RATINGS :

Item	Standard	
Rated Voltage (MAX.)	250V	(AC(rms/DC))
Rated Current (MAX.)	1A	
Ambient Temperature Range	-45 ⁰ C ~ +85 ⁰ C	

*1. Including terminal temperature rise.

4. PERFORMANCE :

4-1 Electrical Performance

Item		Test Condition	Requirement
4-1-1	Contact Resistance	Mate applicable PIN header and measure by dry circuit , 20mV MAX., (EIA-364-06B)	20 mΩMAX.
4-1-2	Insulation Resistance	Mate applicable PIN header and apply 500V DC between adjacent terminal or ground. (EIA-364-21C)	100MΩMIN.
4-1-3	Dielectric Strength	Mate applicable PIN header and apply 650V AC (rms) for 1 minute between adjacent terminal or ground. (EIA-364-20B)	No Breakdown

ENTERY INDUSTRIAL CO., LTD.

4-2 Mechanical Performance

Item		Test Condition	Requirement
4-2-1	Actuator Insertion/ Withdrawal Force	Mate applicable PIN header and Insert and Withdraw actuator at the speed rate of 25 ± 3 mm / minute. (EIA-364-13B)	Refer to paragraph 5
4-2-2	Terminal/Housing Retention Force	Apply axial pull out force at the speed Rate of 25 ± 3 mm / minute on the terminal Assembled in the housing.	454gf MIN.
4-2-3	Durability	The contacts of connector shall be subject to 30 cycles of mating and unmating. (EIA-364-09C)	Contact Resistance
			Initial Value ≤ 20 m Ω
			Final Value ≤ 40 m Ω

4-3 Environmental Performance and Others

Item		Test Condition	Requirement
4-3-1	Heat Resistance	$85\pm 2^{\circ}\text{C}$, 96 hours	Appearance : No Damage
			Contact Resistance : 40m Ω MAX
4-3-2	Temperature Cycling	5 cycles of : a) $- 25 \pm 3^{\circ}\text{C}$ 30 minutes b) $+ 25 \pm 3^{\circ}\text{C}$ 30 minutes b) $+ 85 \pm 3^{\circ}\text{C}$ 30 minutes (EIA-364-31B)	Appearance : No Damage.
			Contact Resistance : 40 m Ω MAX.
4-3-3	Humidity	Temperature : $40\pm 2^{\circ}\text{C}$ Relative Humidity : 90~95% Duration : 96 hours (EIA-364-31B)	Appearance : No Damage.
			Contact Resistance : 40 m Ω MAX.
			Dielectric Strength : Must meet 4-1-3
			Insulation Resistance : 100M Ω MIN.
4-3-4	Cold Resistance	$-45\pm 2^{\circ}\text{C}$, 96 hours	Appearance : No Damage.
			Contact Resistance: 40 m Ω MAX.
4-3-5	Salt Spray	48 hours exposure to a salt spray from the $5\pm 1\%$ solution at $35\pm 2^{\circ}\text{C}$. (EIA-364-26B)	Appearance : No Damage.
			Contact Resistance : 40 m Ω max.
4-3-6	Solder ability	Soldering Time : 3 ± 0.5 sec. Solder Temperature : $245\pm 5^{\circ}\text{C}$ (EIA-364-52)	Solder Wetting : 95% of immersed area must show no voids, pin holes
4-3-7	Resistance to Soldering Heat	Soldering Time : 10 ± 0.5 sec. Solder Temperature : $260\pm 5^{\circ}\text{C}$ MAX (EIA-364-56C)	Appearance : No Damage

ENTERY INDUSTRIAL CO., LTD.

Item		Test Condition	Requirement	
4-3-8	Vibration	Amplitude : 1.5 mm Frequency range: 10~55~10 Hz in 1 minute Duration: 2 hours in each X.Y.Z axes Current: 100mA. Test Method: EIA-364-28D	Appearance	No Damage
			Contact Resistance	$\leq 40 \text{ m}\Omega$
			Discontinuity	1 μ sec
4-3-9	Steam Aging	Steam Aging Temperature : 98 \pm 2 $^{\circ}$ C Duration: 8 hours Solder Temperature : 245 \pm 5 $^{\circ}$ C Soldering Time : 3 \pm 0.5 sec Test Method: EIA-364-17B	Appearance	No Damage
			Solder Wetting	95% Of Immersed Area Must Show No Voids, Pin Holes

ENTERY INDUSTRIAL CO., LTD.

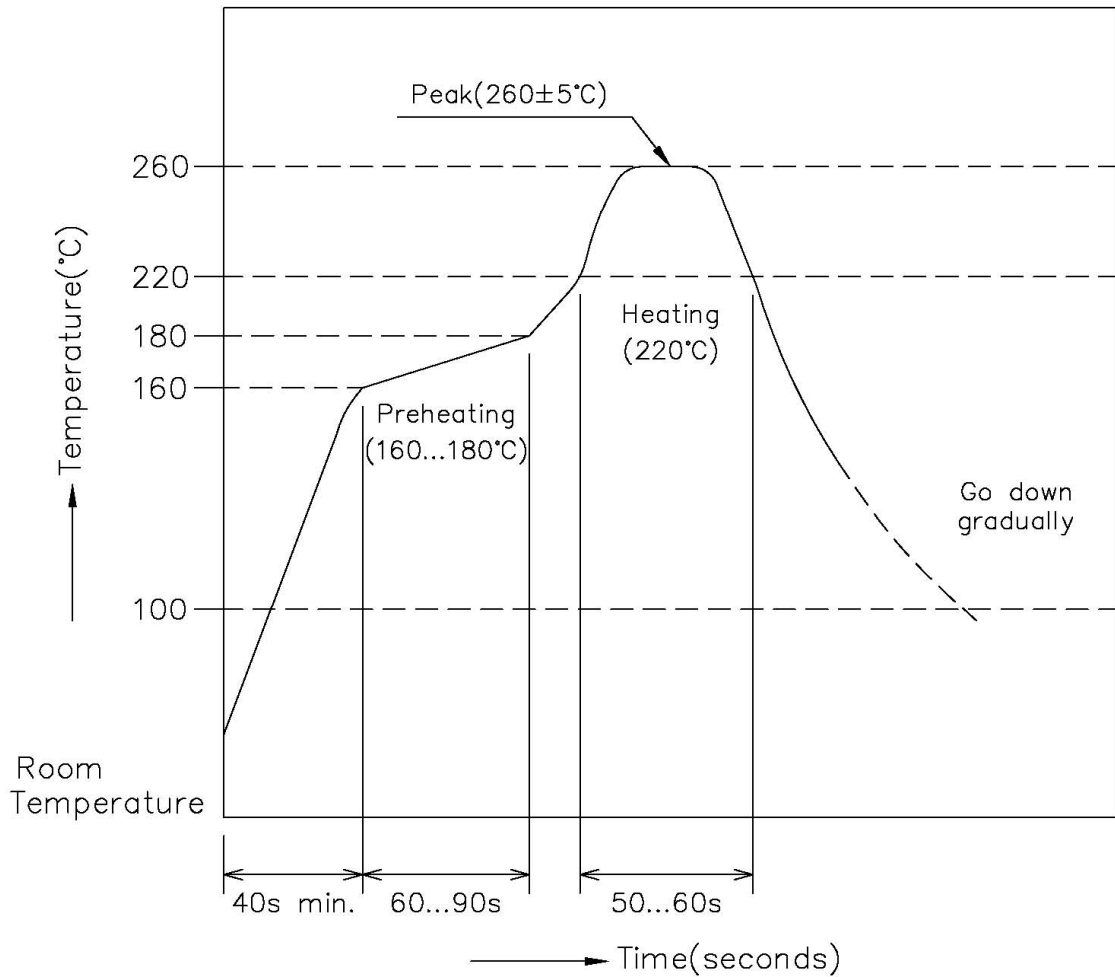
5.Insertion/ Withdrawal Force

No. of CKT	UNIT	Insertion Force(MAX.)			Withdrawal Force(MIN.)		
		1st	6th	30th	1st	6th	30th
2	N	27.4	25.4	23.4	2.9	2.5	2.2
	Kg f	{ 2.80 }	{ 2.59 }	{ 2.93 }	{ 0.30 }	{ 0.26 }	{ 0.22 }
3	N	30.4	28.4	25.4	3.5	2.8	2.5
	Kg f	{ 3.10 }	{ 2.90 }	{ 2.59 }	{ 0.36 }	{ 0.29 }	{ 0.26 }
4	N	33.4	31.4	28.4	4.1	3.1	2.8
	Kg f	{ 3.41 }	{ 3.20 }	{ 2.90 }	{ 0.42 }	{ 0.32 }	{ 0.29 }
5	N	36.4	34.4	31.4	4.7	3.4	3.1
	Kg f	{ 3.71 }	{ 3.51 }	{ 3.20 }	{ 0.48 }	{ 0.35 }	{ 0.32 }
6	N	49.4	37.4	34.4	5.3	3.7	3.4
	Kg f	{ 5.04 }	{ 3.82 }	{ 3.51 }	{ 0.54 }	{ 0.38 }	{ 0.35 }
7	N	42.4	40.4	37.4	5.9	4	3.7
	Kg f	{ 4.33 }	{ 4.12 }	{ 3.82 }	{ 0.60 }	{ 0.41 }	{ 0.38 }
8	N	45.4	43.4	40.4	6.5	4.3	4
	Kg f	{ 4.63 }	{ 4.43 }	{ 4.12 }	{ 0.66 }	{ 0.44 }	{ 0.41 }
9	N	48.4	46.4	43.4	7.1	4.6	4.3
	Kg f	{ 4.94 }	{ 4.73 }	{ 4.43 }	{ 0.73 }	{ 0.47 }	{ 0.44 }
10	N	51.4	49.4	46.4	7.7	4.9	4.6
	Kg f	{ 5.24 }	{ 5.04 }	{ 4.73 }	{ 0.79 }	{ 0.50 }	{ 0.47 }
11	N	54.4	52.4	49.4	8.3	5.2	4.9
	Kg f	{ 5.55 }	{ 5.35 }	{ 5.04 }	{ 0.85 }	{ 0.53 }	{ 0.50 }
12	N	57.4	55.4	52.4	8.9	5.5	5.2
	Kg f	{ 5.86 }	{ 5.65 }	{ 5.35 }	{ 0.91 }	{ 0.56 }	{ 0.53 }
13	N	60.4	58.4	55.4	9.5	5.8	5.5
	Kg f	{ 6.16 }	{ 5.96 }	{ 5.65 }	{ 0.97 }	{ 0.59 }	{ 0.56 }
14	N	63.4	61.4	58.4	10.1	6.1	5.8
	Kg f	{ 6.47 }	{ 6.27 }	{ 5.96 }	{ 1.03 }	{ 0.62 }	{ 0.59 }
15	N	66.4	64.4	61.4	10.7	6.4	6.1
	Kg f	{ 6.78 }	{ 6.57 }	{ 6.27 }	{ 1.09 }	{ 0.65 }	{ 0.62 }

ENTERY INDUSTRIAL CO., LTD.

6. INFRARED REFLOW CONDITION

- 1) Ascending time to preheating temperature 170°C shall be 40 seconds minimum.
- 2) Preheating shall be fixed at 160...180°C for 60...90 seconds.
- 3) Heating shall be fixed at 220°C for 50...60 seconds.
- 4) At 260±5°C peak shall be 10 seconds maximum.



Wire To Board Handling Precautions

This manual is to describe basic precautions. When there are doubtful points in use of, please contact E&T.

1. Common Handling Precautions

- Do not expose E&T's wire to board connector, processing process product and processing product to corrosive substance, corrosive gas, high temperature and high humidity and direct sunshine. It causes corrosion of contact and deterioration of insulation performance of housing, etc., so that it causes motion defect of appliances.
- Do not apply external load to E&T's wire to board connector, processing process product and processing product. Deformation and breakage, etc. occur, and it causes performance defect of.
- There may be slight differences in the housing coloring, but there will be no influence on the product's performance.
- Please do not conduct any "washing process" on the connector because it may damage the product's function.
- E&T's wire to board connector is not designed for the mating and unmating of the connectors to be performed under the condition of an active electrical circuit. It may cause a spark and product defect if the connectors are mated and unmated in this way.

2. PC Board Precautions

- Exercise caution when handling boards with the connectors installed. Do not apply any forces affecting soldered joints. (see figure 1).
- The mounting specification for coplanarity does not include the influence of warpage of the printed circuit board. (see figure 1).
- Changing recommended pattern causes problems.

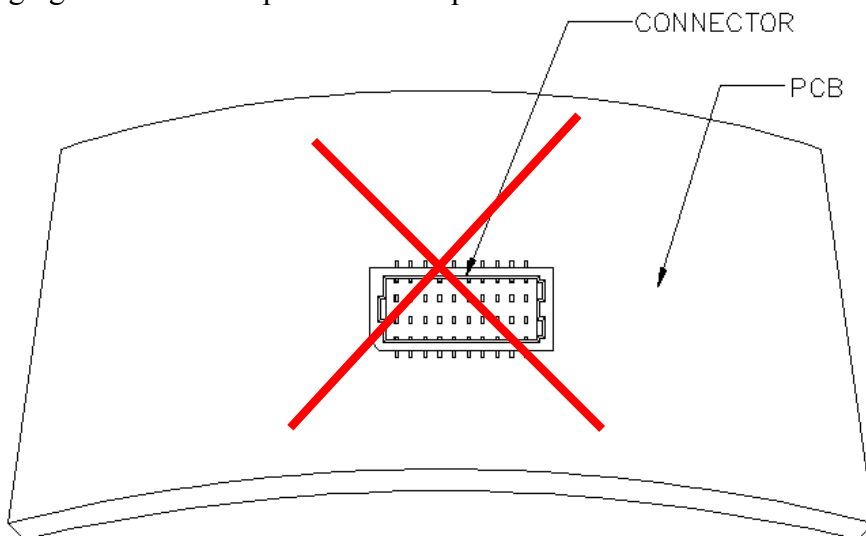


Figure 1.

3. Precautions Crimped Terminal Insertion

- Terminal must be inserted horizontally oriented (see figure 2).
- Do not attempt to insert crimped terminal in any other direction. (see figure 2).

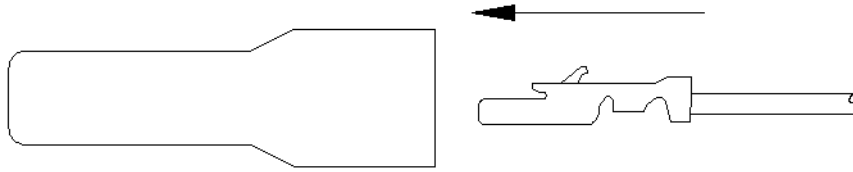


Figure 2.

4. Precautions When Inserting or Withdrawal Wire To Board

- Do not insert and remove at an angle of 25° or greater. Doing so will cause contact deformation or case damage. (see figure 3).
- Push the wire side connector until firmly closed. At this time, confirm that the wire side connector is mated securely.
- When mounting of connectors, its slant or aberration shall be 3° max.
- Do not insert and remove the connectors when the board side connector is not mounted on the PC board.
- Used Lock type, when removed to connectors, please released positive locks.

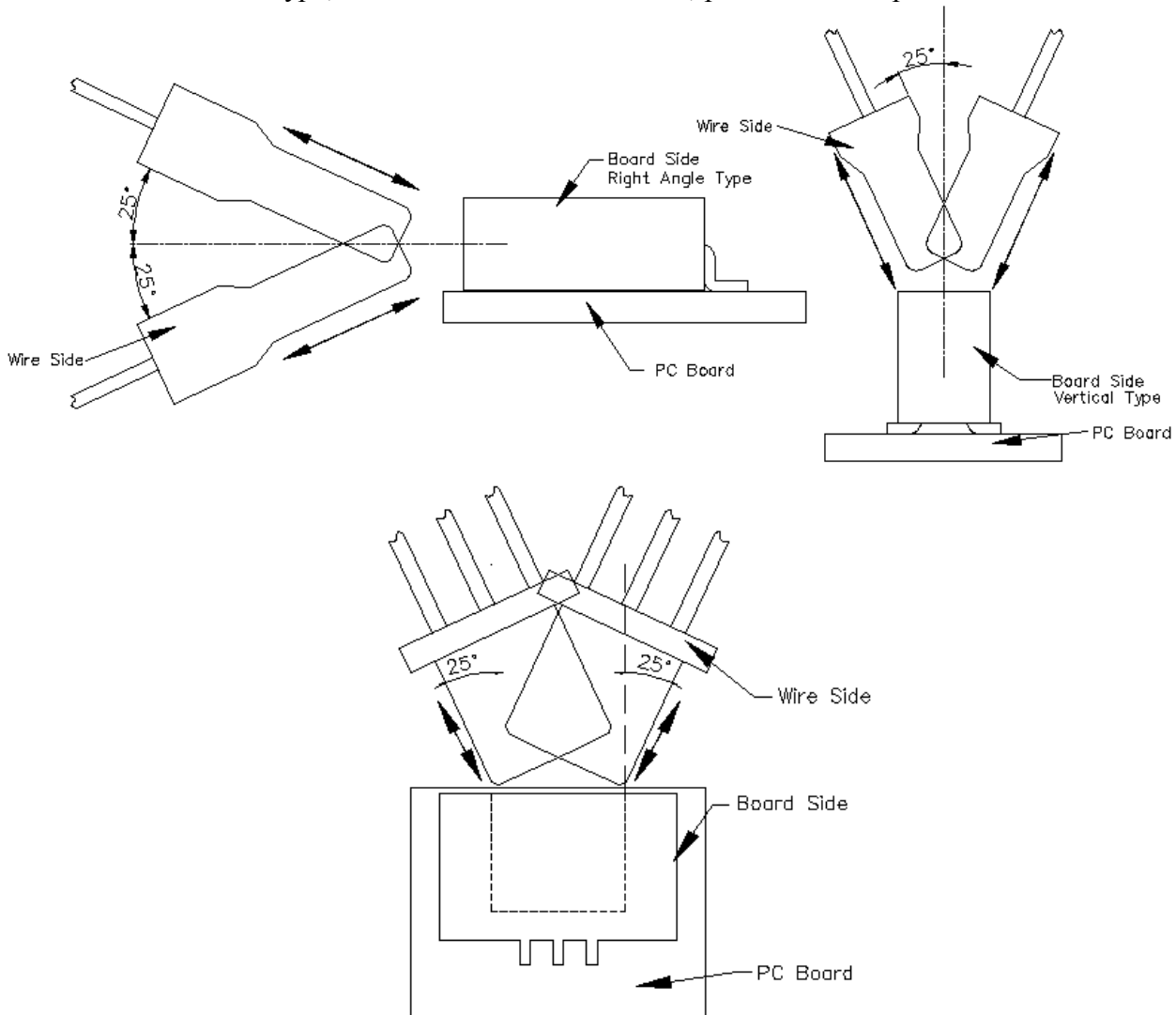


Figure 3.

5. Precautions Cable Assembly

- The cable assembly should not have a constant stress or pulling force applied on it when it is in the mated condition. Therefore, when designing the wire positioning, please ensure that there is enough length of wire to avoid stress on the connector. (see figure 4).

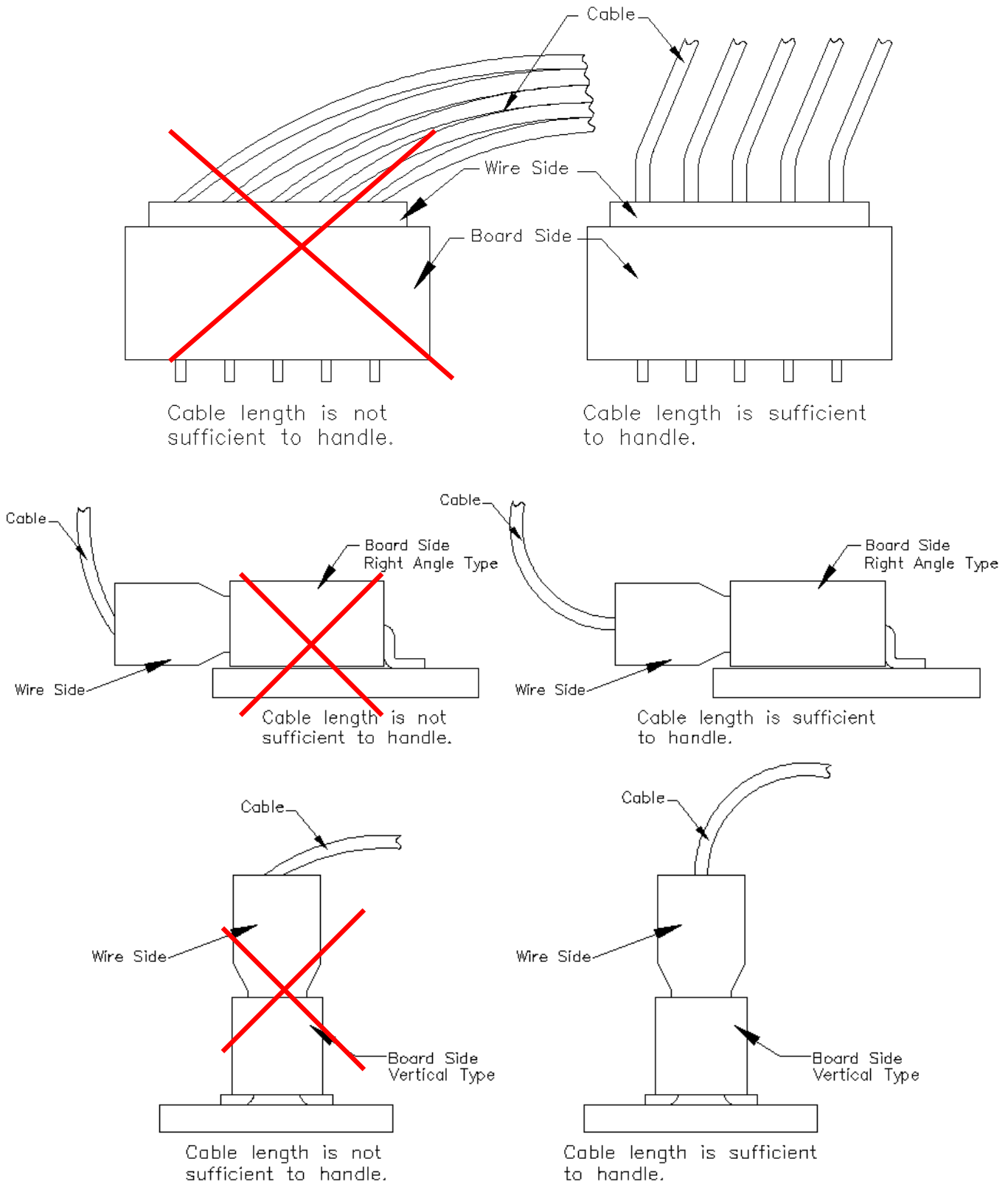


Figure 4.

ENTERY INDUSTRIAL CO., LTD.

RELEASE HISTORY

Rev.	Revisions	Date	Executor	Description
A1	RE201110012 RE20111014 RE20111028	Oct-18-2011	Max	Add Handing Precautions LCP 6130LX Change LCP E130I Cancel Packaging Spec