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PPAP Package for:

Newark Electronics

12H0572
(TE Connectivity Part Number: 184396-1)
10/Dec/2018

Nondisclosure Agreement

If a nondisclosure agreement has been reached with your company, it will be included on the following page(s). Please review the terms of this agreement to ensure that further actions associated with information contained within this PPAP package do not violate these terms.

If a nondisclosure agreement HAS NOT been reached, certain documents deemed confidential by TE Connectivity will not be included in this PPAP package. These documents include but are not limited to the Design FMEA, the Process Flow Diagram, the Process FMEA and the Control Plan. These documents can be reviewed by you company but cannot be retained.

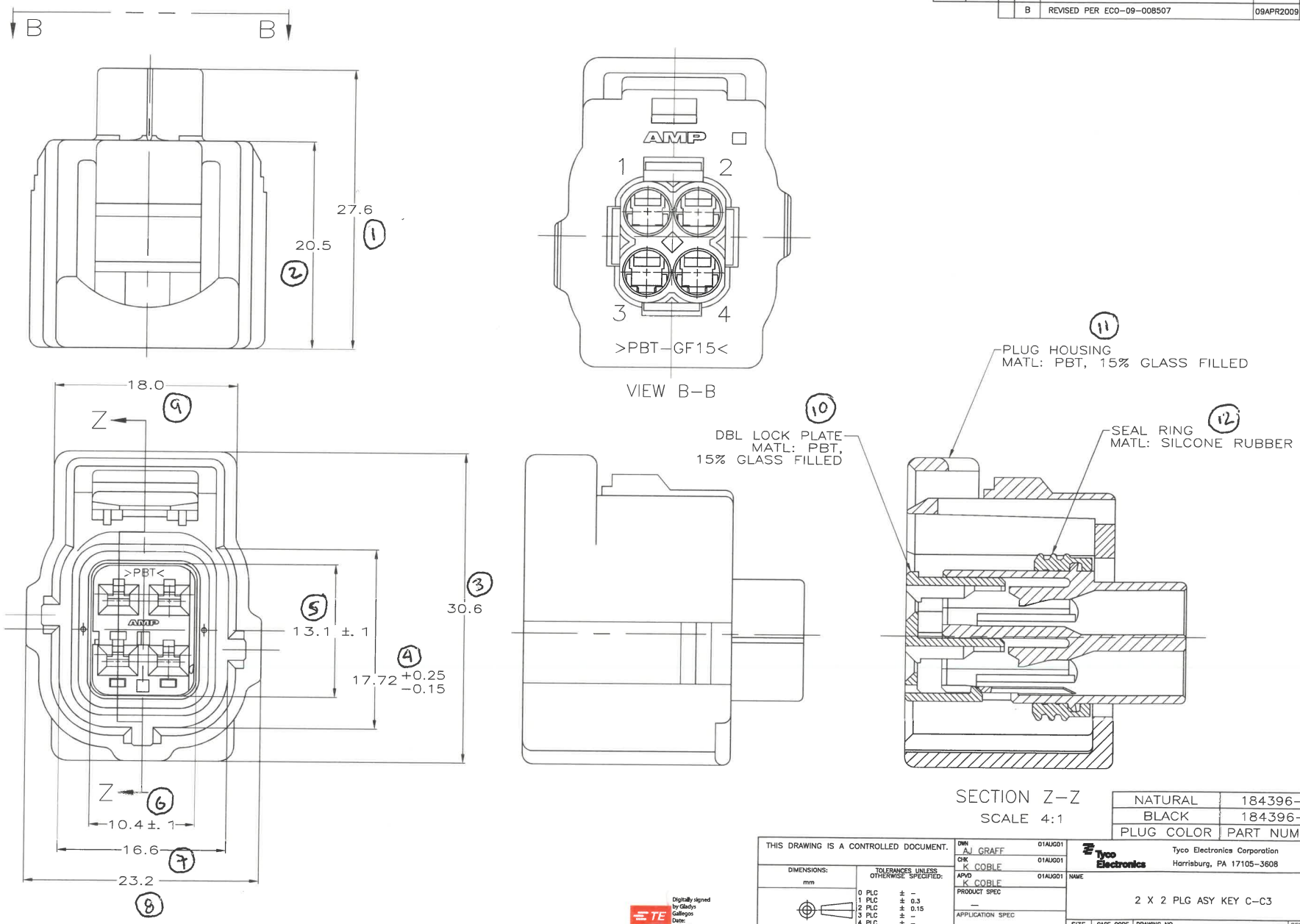
Section 1

Design Records

LOC	DIST
GE	19

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	B	REVISED PER ECO-09-008507	09APR2009	DD	MB



SECTION Z-Z
SCALE 4:1

PLUG COLOR	PART NUMBER
NATURAL	184396-2
BLACK	184396-1

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± –
1 PLC ± 0.3
2 PLC ± 0.15
3 PLC ± –
4 PLC ± –
ANGLES ± –

MATERIAL –
FINISH –

DWN AJ GRAFF 01AUG01
CHK K COBLE 01AUG01
APVD K COBLE 01AUG01
PRODUCT SPEC –
APPLICATION SPEC –
WEIGHT –

Tyco Electronics Corporation
Harrisburg, PA 17105-3608

NAME 2 X 2 PLG ASY KEY C-C3

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A2	00779	C-184396	–

CUSTOMER DRAWING | SCALE 4:1 | SHEET 1 OF 1 | REV B

Digitally signed by Gladys Gallegos
Date: 2018.12.03 16:44:01 -07'00'

184396

1471-9 (1/08)

Section 2

Engineering Change Documents

Product Change Notification

Current Date: 19-Jul-2018

TE Connectivity

Product Change Notification: P-18-016097 **PCN Date:** 17-JUL-18

TE would like to inform you of the following change(s) to the listed TE Connectivity Product. In case of any further questions about this change(s), please contact your TE Connectivity Sales Engineer. Affected part, drawing and/or specification numbers are listed on the attached sheet(s).

General Product Description:
One Roof - Connectors stage

Description of Changes
Dear Customer, TE Connectivity Automotive Business Unit is in the fourth phase of a process Consolidation Project in the Empalme Campus, the objective is to consolidate Plant 1 (Molding & Mechatronics) and Plant 4 (Assembly) into a single building, in the same industrial park. The fourth phase involves migration of TE4 Connector Assembly processes to TE2 One Roof Building, As part of our ongoing activities to provide our customers the highest quality products, this will drive to a Vertical Integration, Safety Systems improvements, Warehouse optimization, and excellent customer experience. The building is being prepare to start moving in September 2018 through December 2018. **Other attachments:** TE Empalme Consolidation

Reason for Changes:	
Dear Customer, we hereby inform you about a transfer of tools and/or processes. The transfer follows a strict procedure, which fully maintains quality, ability to supply and form-fit-function of the concerned products. The new manufacturing location operates under a certified quality management system in accordance with standard automotive requirements. A TE-internal release test based on the relevant part specifications will be executed before delivery. Upon request, a PPAP Level 2 will be available if it concerns a transfer of a tool which produces a finished TE-product. A PPAP Level 1 will be available if it concerns a component of a TE-product, where the production location of the finished TE-product remains unchanged. If you require such a PPAP, please notify the responsible TE Sales Contact within 14 calendar days after receipt of this PCN	
Estimated Dates:	
Last Order Date (Obsolete Parts Only):	**First Date To Ship** (Changed Parts Only):
	02-NOV-2018
Last Ship Date (Obsolete Parts Only):	**Last Date for Mixed Shipments:** (Changed Parts Only):
	No Mixed Shipments

Part Number(s) being Modified:

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-1326132-0	NO					
1-1326327-1	NO					
1-1326328-2	NO					
1-1326727-9	NO					
1-1411001-0	NO					
1-1437855-9	NO		"108525A"			
1-1438454-1	NO					
1-1438726-6	NO					
1-1438726-7	NO					
1-1456315-1	NO					
1-1456315-2	NO					
1-1456315-5	NO					
1-1456426-1	NO					
1-1456426-2	NO					
1-1456426-5	NO					
1-1456426-6	NO					
1-1587041-4	NO					
1-1924067-2	NO					
1-1924067-3	NO					
1-1924067-4	NO					
1-1924067-5	NO					
1-1924067-6	NO					
1-1924067-9	NO					
1-1924337-3	NO					
1-1924939-6	NO					
1-1924940-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-1924940-3	NO					
1-1924940-7	NO					
1-1924940-8	NO					
1-1924941-0	NO					
1-1924941-2	NO					
1-1924941-3	NO					
1-1924941-4	NO					
1-1924941-5	NO					
1-1924941-8	NO					
1-1924943-7	NO					
1-1924943-8	NO					
1-1924944-1	NO					
1-1924944-5	NO					
1-1924944-7	NO					
1-2035363-0	NO					
1-2098067-3	NO					
1-2098067-4	NO					
1-2098067-5	NO					
1-2098067-6	NO					
1-2098923-0	NO					
1-2098923-4	NO					
1-2138685-5	NO					
1-2203515-1	NO					
1-2203529-2	NO					
1-2203529-5	NO					
1-2203654-2	NO					
1-2203654-7	NO					
1-2203773-2	NO					
1-2208018-3	NO					
1-2208018-4	NO					
1-2208021-1	NO					
1-2208021-2	NO					
1-2208408-2	NO					
1-2272975-1	NO					
1-2296697-1	NO					
1-2296697-2	NO					
1-2300499-1	NO					
1-2300499-2	NO					
1-2309436-1	NO					
1-638514-0	NO					
1-638514-2	NO					
1-638514-3	NO					
1-638514-4	NO					
1-638514-5	NO					
1-638514-6	NO					
1-776905-1	NO					
1-776905-2	NO					
1-776905-3	NO					
1274412-1	NO					
1326055-3	NO					
1326110-1	NO					
1326122-1	NO					
1326122-3	NO					
1326132-1	NO					
1326132-2	NO					
1326132-4	NO					
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1326136-1	NO					
1326136-2	NO					
1326140-1	NO					
1326140-3	NO					
1326226-1	NO					
1326226-2	NO					
1326226-3	NO					
1326328-5	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1326339-1	NO					
1326339-6	NO					
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1326339-8	NO					
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1326353-3	NO					
1326362-1	NO					
1326362-3	NO					
1326362-7	NO					
1326509-1	NO					
1326729-1	NO					
1326942-3	NO					
1326964-1	NO					
1411001-1	NO		"V23542-G1508-A115"			
1411001-6	NO					
1411001-7	NO					
1411001-8	NO					
1411001-9	NO					
1411169-1	NO					
1411169-3	NO					
1411169-4	NO					
1411367-1	NO					
1432654-1	NO		"VATS-0022"			
1437882-8	NO		"109640A", "X109640A"			
1438031-1	NO		"V23542-G1516-A101"			
1438082-1	NO					
1438083-1	NO					
1438122-1	NO					
1438156-1	NO					
1438156-3	NO					
1438399-1	NO					
1438426-1	NO					
1438426-3	NO					
1438454-1	NO					
1438521-1	NO					
1438545-1	NO					
1438726-2	NO					
1438759-1	NO					
1438761-6	NO					
1438766-1	NO					
1438794-1	NO					
1438794-2	NO					
1438810-1	NO					
1438841-1	NO					
1438841-2	NO					
1438848-1	NO					
1438975-2	NO					
1443966-1	NO					
1452187-1	NO					
1456016-1	NO		"130025602403"			
1456016-2	NO		"130025602404"			
1456016-3	NO		"130025602405"			
1456016-4	NO		"130025602406"			
1456078-1	NO		"1X2078701"			
1456078-2	NO		"1X2078702"			
1456315-1	NO					
1456315-2	NO					
1456315-3	NO					
1456315-5	NO					
1456315-6	NO					
1456315-9	NO					
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1456471-2	NO					
1456471-4	NO					
1456471-5	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1456471-6	NO					
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1456602-2	NO					
1456867-3	NO					
1456950-2	NO					
1456987-1	NO					
1456987-3	NO					
1456987-4	NO					
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1456989-1	NO					
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1456989-3	NO					
1456989-4	NO					
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1488573-1	NO					
1488750-1	NO					
1488846-4	NO					
1488846-6	NO					
1488903-1	NO					
1557052-1	NO					
1557636-1	NO					
1557667-1	NO					
1587041-1	NO					
1587255-1	NO					
1587268-4	NO					
1587270-5	NO					
1587392-7	NO					
1587392-8	NO					
1642407-5	NO					
1670118-1	NO					
1670120-1	NO					
1670120-2	NO					
1718981-1	NO					
1732120-1	NO					
1732120-2	NO					
1732510-3	NO					
174971-2	NO					
174973-2	NO					
174975-2	NO					
174979-2	NO					
179678-6	NO					
179679-6	NO					
179680-5	NO					
179681-6	NO					
184000-1	NO					
184002-1	NO					
184004-1	NO					
184006-1	NO					
184006-2	NO					
184008-1	NO					
184010-1	NO					
184012-1	NO					
184014-1	NO					
184016-1	NO					
184020-1	NO					
184022-1	NO					
184032-1	NO					
184034-1	NO					
184042-1	NO					
184042-2	NO					
184046-1	NO		"EM3604-000", "AMP-0-0184046-1"			
184050-2	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
184060-1	NO					
184097-1	NO					
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184116-1	NO					
184116-2	NO					
184124-1	NO					
184207-1	NO					
184212-1	NO					
184212-2	NO					
184214-1	NO					
184216-1	NO					
184220-1	NO					
184240-1	NO					
184246-1	NO					
184248-1	NO					
184254-1	NO					
184270-1	NO					
184292-1	NO					
184305-1	NO					
184311-1	NO					
184315-1	NO					
184322-1	NO					
184328-1	NO					
184334-1	NO					
184340-1	NO					
184341-1	NO					
184344-1	NO					
184346-1	NO					
184346-2	NO					
184349-1	NO					
184355-1	NO					
184355-2	NO					
184370-1	NO					
184375-1	NO					
184392-1	NO					
184392-2	NO					
184393-1	NO					
184393-2	NO					
184394-1	NO					
184396-1	NO					
184397-1	NO					
184398-1	NO					
184399-1	NO					
184400-1	NO					
184401-1	NO					
184406-1	NO					
184408-1	NO					
184408-2	NO					
184409-1	NO					
184435-1	NO					
184452-1	NO					
1924117-4	NO					
1924211-1	NO					
1924211-3	NO					
1924212-1	NO					
1924212-2	NO					
1924227-2	NO					
1924292-1	NO					
1924292-5	NO					
1924292-6	NO					
1924337-1	NO					
1924337-2	NO					
1924337-3	NO					
1924346-1	NO					
1924346-3	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
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1924639-2	NO					
1924779-1	NO					
1924900-1	NO					
1924900-4	NO					
1924939-1	NO					
1924940-1	NO					
1924940-5	NO					
1924940-6	NO					
1924941-1	NO					
1924941-2	NO					
1924941-4	NO					
1924941-5	NO					
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1924941-8	NO					
1924941-9	NO					
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1924942-2	NO					
1924942-3	NO					
1924942-6	NO					
1924943-1	NO					
1924944-1	NO					
1924944-2	NO					
1924944-4	NO					
1924944-6	NO					
2-1326327-8	NO					
2-1438083-1	NO					
2-1438454-1	NO					
2-1438521-4	NO					
2-1438521-5	NO					
2-1438521-7	NO					
2-1438950-1	NO					
2-1924067-0	NO					
2-1924211-1	NO					
2-1924783-9	NO					
2-1924939-2	NO					
2-1924939-4	NO					
2-1924940-3	NO					
2-1924941-0	NO					
2-1924941-1	NO					
2-2098923-0	NO					
2-2098923-1	NO					
2-2098923-2	NO					
2-2203654-3	NO					
2-2203654-9	NO					
2-638517-1	NO					
2-638518-1	NO					
2-638849-1	NO					
2-776728-5	NO					
2035024-1	NO					
2035024-2	NO					
2035037-1	NO					
2035037-2	NO					
2035239-1	NO					
2035360-1	NO					
2035360-3	NO					
2035360-5	NO					
2035363-1	NO					
2035363-2	NO					
2035363-3	NO					
2035363-4	NO					
2035363-5	NO					
2035363-6	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
2035363-7	NO					
2098067-1	NO					
2098067-2	NO					
2098067-3	NO					
2098067-4	NO					
2098067-5	NO					
2098067-6	NO					
2098067-7	NO					
2098198-5	NO					
2098256-7	NO					
2098269-1	NO					
2098269-4	NO					
2098401-2	NO					
2098407-1	NO					
2098489-1	NO					
2098491-1	NO					
2098541-1	NO					
2098541-5	NO					
2098541-6	NO					
2098557-1	NO					
2098557-4	NO					
2098557-7	NO					
2098559-5	NO					
2098559-6	NO					
2098559-7	NO					
2098559-8	NO					
2098627-1	NO					
2098627-2	NO					
2098633-1	NO					
2098641-1	NO					
2098641-2	NO					
2098641-5	NO					
2098641-6	NO					
2098681-1	NO					
2098863-1	NO					
2098863-2	NO					
2098863-6	NO					
2098863-7	NO					
2098863-8	NO					
2098865-1	NO					
2098865-2	NO					
2098866-1	NO					
2098923-1	NO					
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2098923-5	NO					
2098923-7	NO					
2098923-8	NO					
2098923-9	NO					
2098924-2	NO					
2098924-8	NO					
2098963-1	NO					
2098963-2	NO					
2098963-3	NO					
2098963-5	NO					
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2098966-1	NO					
2098966-2	NO					
2098966-3	NO					
2098966-6	NO					
2098966-7	NO					
2138045-1	NO					
2138046-3	NO					
2138046-6	NO					
2138047-3	NO					
2138144-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
2138209-1	NO					
2138250-1	NO					
2138251-1	NO					
2138252-1	NO					
2138260-1	NO					
2138274-1	NO					
2138281-2	NO					
2138314-1	NO					
2138314-5	NO					
2138314-7	NO					
2138338-5	NO					
2138338-7	NO					
2138414-1	NO					
2138731-1	NO					
2138873-4	NO					
2203111-2	NO					
2203111-6	NO					
2203111-7	NO					
2203314-1	NO					
2203314-2	NO					
2203314-3	NO					
2203318-1	NO					
2203318-2	NO					
2203321-1	NO					
2203321-2	NO					
2203321-3	NO					
2203321-6	NO					
2203321-7	NO					
2203324-2	NO					
2203516-7	NO					
2203537-1	NO					
2203541-1	NO					
2203542-1	NO					
2203654-9	NO					
2203772-1	NO					
2203781-1	NO					
2203781-2	NO					
2203918-1	NO					
2203919-1	NO					
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2203937-4	NO					
2203937-5	NO					
2208408-1	NO					
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2272010-1	NO					
2272010-2	NO					
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2272926-3	NO					
2272975-1	NO					
2272975-5	NO					
2272975-7	NO					
2272975-9	NO					
2286018-1	NO					
2287729-2	NO					
2288276-1	NO					
2288276-2	NO					
2289050-1	NO					
2289050-2	NO					
2291594-1	NO					
2296701-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
2296701-6	NO					
2297354-1	NO					
2306639-1	NO					
2306984-1	NO					
2309644-1	NO					
2309644-3	NO					
2309644-4	NO					
2311107-1	NO					
2320479-1	NO					
2324011-1	NO					
3-1326328-4	NO					
3-1326339-5	NO					
3-1326339-6	NO					
3-1326339-7	NO					
3-1326727-2	NO					
3-1326727-3	NO					
3-1326729-3	NO					
3-1437287-4	NO		"0941972R01"			
3-1437854-1	NO		"103625"			
3-1438640-2	NO					
3-1438640-5	NO					
3-1438640-7	NO					
3-1438640-9	NO					
3-1438841-8	NO					
3-1924939-1	NO					
3-1924939-4	NO					
3-1924939-5	NO					
3-2098269-1	NO					
3-2098269-2	NO					
3-2098269-3	NO					
3-2098269-6	NO					
3-2098269-7	NO					
3-2098269-8	NO					
3-2098922-3	NO					
3-2203654-2	NO					
3-2203654-4	NO					
3-2203654-5	NO					
3-638517-0	NO					
3-776729-0	NO					
4-1326339-1	NO					
4-1326339-5	NO					
4-1326339-7	NO					
4-1437287-0	NO		"0944252L01"			
4-1437287-5	NO		"130025602401"			
4-1437287-6	NO		"130025602402"			
4-1437287-7	NO		"130025603205"			
4-1437290-5	NO		"4001753201"			
4-1437290-6	NO		"4001753202"			
4-1437290-7	NO		"4001753203"			
4-1438083-3	NO					
4-1438083-4	NO					
4-1438640-5	NO					
4-1454396-1	NO		"108104D"			
4-1454396-7	NO		"X109732A"			
4-1456426-1	NO					
4-1456426-2	NO					
4-1488991-1	NO					
4-1488991-2	NO					
4-1587041-6	NO					
4-1924067-1	NO					
4-1924067-2	NO					
4-1924292-1	NO					
4-1924939-2	NO					
4-1924939-3	NO					
4-1924939-5	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
4-1924939-7	NO					
4-1924939-8	NO					
4-1924939-9	NO					
4-2098269-2	NO					
4-2098269-5	NO					
4-2098269-6	NO					
4-2098541-1	NO					
4-2098541-2	NO					
4-2098557-1	NO					
4-2098641-1	NO					
4-2098641-2	NO					
4-2138685-1	NO					
4-2203542-7	NO					
4-2203542-8	NO					
4-2203654-2	NO					
4-2203654-6	NO					
4-2203654-7	NO					
4-2203654-8	NO					
4-2203654-9	NO					
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4-2272003-5	NO					
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4-776728-2	NO					
4-776728-3	NO					
414946-1	NO					
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5-1419166-6	NO					
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5-1419168-8	NO		"V23542-G1516-D101"			
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5-1924939-0	NO					
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5-1924939-4	NO					
5-1924939-5	NO					
5-1924939-6	NO					
5-1924939-7	NO					
5-2098269-0	NO					
5-2138685-5	NO					
5-2203541-6	NO					
5-2203541-7	NO					
5-2203542-0	NO					
5-2272352-5	NO					
5-2306984-6	NO					
5-2306984-7	NO					
6-1419166-1	NO		"V23542-G1404-A107"			
6-1419166-2	NO		"V23542-G1404-A108"			
6-1419167-1	NO		"V23542-G1416-A107"			
6-1924939-5	NO					
6-1924939-9	NO					
6-2098922-6	NO					
6-2203541-3	NO					
6-2203541-5	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
6-2203541-6	NO					
6-2203542-1	NO					
6-2203542-2	NO					
6-2203542-8	NO					
6-2203542-9	NO					
6-2309433-1	NO					
6-776728-8	NO					
6-776728-9	NO					
6-776729-0	NO					
6-776729-3	NO					
6-776729-4	NO					
6-776729-5	NO					
638014-1	NO					
638079-1	NO					
638082-1	NO					
638097-2	NO					
638113-1	NO					
638116-1	NO					
638119-1	NO					
638137-1	NO					
638141-1	NO					
638143-1	NO					
638147-1	NO					
638151-1	NO					
638157-1	NO					
638199-2	NO					
638207-6	NO					
638207-8	NO					
638245-1	NO					
638245-2	NO					
638286-2	NO					
638392-1	NO					
638392-2	NO					
638392-3	NO					
638393-1	NO					
638393-3	NO					
638393-5	NO					
638393-7	NO					
638394-1	NO					
638394-4	NO					
638394-5	NO					
638397-1	NO					
638444-9	NO					
638514-1	NO					
638514-8	NO					
638517-5	NO					
638518-5	NO					
638518-8	NO					
638817-3	NO					
638817-4	NO					
638817-8	NO					
638817-9	NO					
638818-2	NO					
638832-3	NO		"1000012806-0001"			
638849-7	NO					
638939-5	NO					
7-1326728-8	NO					
7-1326728-9	NO					
7-2098922-2	NO					
7-2203541-2	NO					
7-2203541-3	NO					
7-2203541-4	NO					
7-2203541-5	NO					
7-2203542-0	NO					
7-776728-0	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
7-776728-1	NO					
7-776729-2	NO					
7-776729-4	NO					
7-776729-5	NO					
776728-1	NO					
776729-1	NO					
776793-1	NO					
776793-2	NO					
776905-1	NO					
776905-8	NO					
776932-1	NO					
776932-3	NO					
776932-4	NO					
9-1419157-6	NO		"V23542-G1410-A107"			
9-1419166-0	NO		"V23542-G1408-A101"			
9-1438082-2	NO					
9-1454396-3	NO		"X109644C"			
917981-1	NO					
917981-2	NO					
917981-6	NO					
917989-1	NO		"0-0917989-1"			
917989-2	NO					
917989-6	NO					
917992-1	NO					
917992-6	NO					

Section 3

Customer Engineering Approval

Not Applicable

Section 4

Design FMEA

See Section A for nondisclosure conditions.
The Design FMEA, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.

Section 5

Process Flow Diagram

See Section A for nondisclosure conditions.
The Process Flow Diagram, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.

Section 6

Process FMEA

See Section A for nondisclosure conditions.
The Process FMEA, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.

Section 7

Control Plan

See Section A for nondisclosure conditions.
The Control Plan, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.

Section 8

Measurement System Analysis

DATA - GRR ATRIBUTES STUDY

Empalme Site

DATE:	3-Dec-18
REQUEST:	Mario Baidon
QUALITY ENGINEER:	Mario Baidon
MANUFACTURE ENGINEER	Josue Garcia
PLANT:	Plant 2
SPC TECHNICIAN:	Moises Escarrega
Numero de Parte:	184396-1
COMMENT General:	Sistema de vision

Work Center:	8520
NUM. Gage-Fixture	48196183
OPERATOR 1	-Operador 1
OPERATOR 2	-Operador 2
OPERATOR 3	-Operador 3
Standard Record	2018-1128

Known Population				-Operador 1			Expert	-Operador 2			Expert	-Operador 3			Expert	OPER VS OPER	OPER VS SAMPLE
# ID	Num Sample	DETAILS	Standard	Try #1	Try #2	Try #3	Result	Try #1	Try #2	Try #3	Result	Try #1	Try #2	Try #3	Result	Agree	Agree
1	1	BUENA	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
2	3	CONFIGURACION INCORRECTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
3	5	LIGA DOBLE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
4	7	LIGA ALTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
5	9	TPA CERRADO	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
6	11	HOUSING CON LIGA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
7	13	TPA MAL ENSAMBLADO	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
8	2	LLAVE INCORRECTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
9	4	LIGA FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
10	6	LIGA INVERTIDA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
11	8	TPA FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
12	10	LATCH FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
13	12	PIEZA TERMINADA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
14	1	BUENA	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
15	3	CONFIGURACION INCORRECTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
16	5	LIGA DOBLE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
17	7	LIGA ALTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
18	9	TPA CERRADO	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
19	11	HOUSING CON LIGA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
20	13	TPA MAL ENSAMBLADO	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
21	2	LLAVE INCORRECTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
22	4	LIGA FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
23	6	LIGA INVERTIDA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
24	8	TPA FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
25	10	LATCH FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
26	12	PIEZA TERMINADA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
27	1	BUENA	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
28	3	CONFIGURACION INCORRECTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
29	5	LIGA DOBLE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
30	7	LIGA ALTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK

DATA - GRR ATRIBUTES STUDY

Empalme Site

DATE:	3-Dec-18
REQUEST:	Mario Baidon
QUALITY ENGINEER:	Mario Baidon
MANUFACTURE ENGINEER	Josue Garcia
PLANT:	Plant 2
SPC TECHNICIAN:	Moises Escarrega
Numero de Parte:	184396-1
COMMENT General:	Sistema de vision

Work Center:	8520
NUM. Gage-Fixture	48196183
OPERATOR 1	-Operador 1
OPERATOR 2	-Operador 2
OPERATOR 3	-Operador 3
Standard Record	2018-1128

Known Population				-Operador 1			Expert	-Operador 2			Expert	-Operador 3			Expert	OPER VS OPER	OPER VS SAMPLE
# ID	Num Sample	DETAILS	Standard	Try #1	Try #2	Try #3	Result	Try #1	Try #2	Try #3	Result	Try #1	Try #2	Try #3	Result	Agree	Agree
31	9	TPA CERRADO	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
32	11	HOUSING CON LIGA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
33	13	TPA MAL ENSAMBLADO	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
34	2	LLAVE INCORRECTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
35	4	LIGA FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
36	6	LIGA INVERTIDA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
37	8	TPA FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
38	10	LATCH FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
39	12	PIEZA TERMINADA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
40	1	BUENA	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
41	3	CONFIGURACION INCORRECTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
42	5	LIGA DOBLE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
43	7	LIGA ALTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
44	9	TPA CERRADO	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
45	11	HOUSING CON LIGA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
46	13	TPA MAL ENSAMBLADO	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
47	2	LLAVE INCORRECTA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
48	4	LIGA FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
49	6	LIGA INVERTIDA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
50	8	TPA FALTANTE	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK

Final comments of the study:

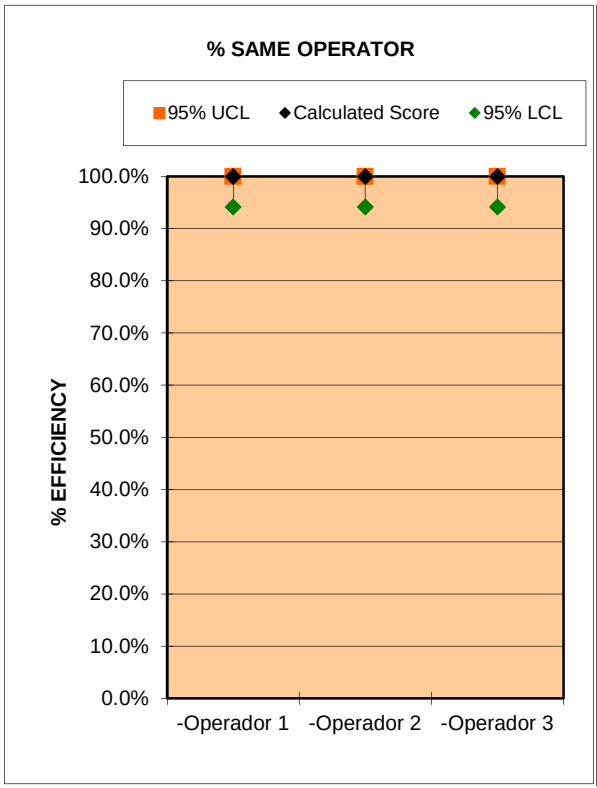
SPC Technician: Must be sent to answer to request, quality engineer and manufacture engineer.

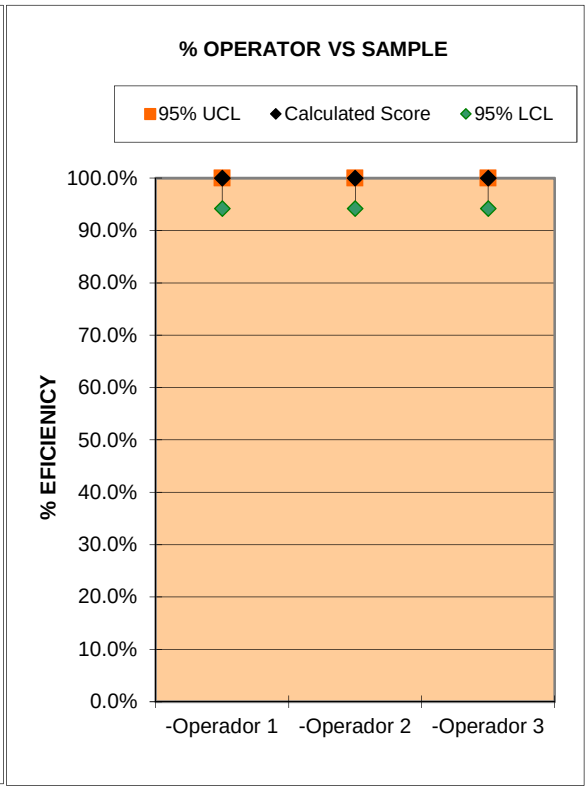
REPORT GRR ATRIBUTOS

DATE	3-Dec-18	ID - EQUIPMENT
STANDAR RECORD	*2018-1128*	48196183
Work Center:	8520	
RESULT	ACCEPTED	

	% OPER VS OPER			% OPER VS PIEZA		
Operators	-Operador 1	-Operador 2	-Operador 3	-Operador 1	-Operador 2	-Operador 3
Inspeced total	50	50	50	50	50	50
# Agreement	50	50	50	50	50	50
95% UCL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Calculated Score	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
95% LCL	94.18%	94.18%	94.18%	94.18%	94.18%	94.18%

	Screen % Effective Score	Screen % Effective Score vs Standard
Total Inspected	50	50
# coincidencias	50	50
95% UCL	100.0%	100.0%
Calculated Score	**100.0%**	**100.0%**
95% LCL	94.18%	94.18%





Section 9

Dimensional Results

Production Part Approval

DIMENSIONAL TEST RESULTS

ACT-1173

TE Connectivity-Empalme is accredited by ANSI-ASQ National Accreditation Board for ISO/IEC 17025 under a defined calibration and/or testing scope.

Organization: TE Connectivity	Part Number: 184396-X
Supplier/Vendor Code: N/A	Part Name: 2 X 2 PLG ASY KEY C - C3
INSPECTION FACILITY:	Design Record Change Level: DWG. C-184396 REV. B
TE Connectivity Empalme Metrology lab	Engineering Change Documents: N/A
	# Folio: 43967 Page ___1___ of ___1___

Item	Dim./Spec.	Spec. / Limits tol +	tol -	Units	Organization Measurement Results (Data) SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6	Ok	Not Ok	Instrument # ID
1	27.6	0.3	0.3	mm	27.54	27.57	27.53	27.58	27.54	27.51	✔		LMMC-007
2	20.5	0.3	0.3	mm	20.41	20.42	20.44	20.44	20.40	20.46	✔		LMMC-007
3	30.6	0.3	0.3	mm	30.66	30.73	30.73	30.70	30.68	30.67	✔		LMMC-007
4	17.72	0.25	0.15	mm	17.968	17.952	17.955	17.943	17.958	17.967	✔		LMMC-007
5	13.1	0.1	0.1	mm	13.04	13.08	13.04	13.03	13.04	13.11	✔		LMMC-007
6	10.4	0.1	0.1	mm	10.45	10.43	10.47	10.44	10.44	10.46	✔		LMMC-007
7	16.6	0.3	0.3	mm	16.46	16.47	16.46	16.47	16.50	16.47	✔		LMMC-007
8	23.2	0.3	0.3	mm	23.06	22.98	22.99	23.01	23.01	23.04	✔		LMMC-007
9	18.0	0.3	0.3	mm	17.92	17.95	17.94	17.96	17.94	17.93	✔		LMMC-007
10	DBL LOCK PLATE MATL: PBT, 15% GLASS FILLED				NOTED PER APQP TEAM						✔		
11	PLUG HOUSING MATL: PBT, 15% GLASS FILLED				NOTED PER APQP TEAM						✔		
12	SEAL RING MATL: SILICONE RUBBER				NOTED PER APQP TEAM						✔		

CONCLUSION:

TOTAL # OF FEATURES	54	
LESS BASIC DIMENSIONS	0	
LESS REFERENCE DIMENSIONS	0	
REPORTED DIMENSIONS		54
# DIMENSIONS IN TOLERANCE		54
# DIMENSIONS OUT OF TOLERANCE		0
% DIMENSION IN TOLERANCE		100.00 %
% DIMENSION OUT OF TOLERANCE		0.00 %

SIGNATURE	TITLE	DATE
Daniel Zazueta	Metrology Chief	December 4, 2018

Section 10

Material, Performance Test Results

Production Part Approval

MATERIAL TEST RESULTS

Organization: **TE CONNECTIVITY**

Supplier/Vendor Code: **N/A**

Material Supplier: **MATERIAL CERT**

*Customer Specified Supplier/Vendor Code: **N/A**

* If source approval is req'd, include the Supplier (Source) & Customer assigned code.

Part Number: 184396-1

Part Name: 2X2 PLUG ASSEMBLY, C KEY, CLAS

Design Record Change Level:

Engineering Change Documents: NA

Name of Laboratory: **SEE ATTACHMENT**

Material Specification		Specification Limits	Test Date	Qty. Tested	Test Results	Ok	Not Ok
184352-1	2X2 PLG HSG KEY C C3	SEE ATTACHMENT			SEE ATTACHMENT	Ok	
1924084-1	4-Position Sensor Perpheral (2X2)	SEE ATTACHMENT			SEE ATTACHMENT	Ok	
184242-1	SENSOR,4P,2X2,DBL LOCK PLATE	SEE ATTACHMENT			SEE ATTACHMENT	Ok	

March 2006 CFG-1004

Blanket statements of conformance are unacceptable for any test results.

SIGNATURE	TITLE	DATE
J ROMERO	QT	12/6/2018

BASF CORPORATION

BASF
We create chemistry

Certificate of Analysis

Customer:		Product Number	: 52498182
		Product Name	: ULTRADUR® B 4300 G3 BLACK 5110 POLYBUTYLENE TEREPHTHALATE 726KG FIBREBOARD IBC (11G)
TE CONNECTIVITY CORPORATION 8000 PIEDMONT TRIAD PKWY GREENSBORO NC 27409-9407		Vehicle	:
		Batch/Lot	: WF8194061
		Manuf.Date	: Jul-13-2018
Attention:		Shipped Date	:
FAX:		Shipped Quantity	: 11,203.892 LB
Cust Prod:	704734-1	Delivery Date	: Aug-01-2018
Cust Prod Name:	ULD.B4300G3 BK5110 726KG 11G	Order Number	: 116233512 000010
Cust P.O.:	2705238044		
Cust P.O. Line:	1	Delivery Note	: 129332666 900001

Inspection Certificate 3.1 according to EN 10204

Characteristic	Result	UOM	-----Specification----- Minimum	Maximum	Test Method
Ash / Filler Content	15.0	%	13.0	17.0	ASTM5630/ISO3451
Moisture Content	0.02	%	0.01	0.04	ASTM D6869 / ISO 15512B
Viscosity Number for PBT, PSU and PES	114	ml/g	98	118	ISO1628 (Phenol/Dichlorb.

Comments :

Results shown are the means of individual test values determined on samples taken during production of the lot specified.

This product is approved to the following specifications:

MS-DB400 CPN 3685
GMP.PBT.006
GMW16733
TC

2179339 43

WACKER

Certificate of Analysis

TE North Carolina DC Componets
8000 Piedmont Triad Pkwy
Greensboro NC 27409

Date of delivery
03/08/2018

Delivery note
26044443

Requisition No.
2703329059 /

Date of requisition
01/02/2018

Order No.
10340917 / 000002 / 01/02/2018

Customer No. Fax
90128462

Customer material
1573529-5 A

ELASTOSIL® LR 3088/40 NM A US

date of issue: 03/08/2018

Material	Batch	NET	Date of manufacture	Best use before end
60064190	**368539**	**190.000 kg** (418.878 LBS)	**02/26/2018**	**08/25/2018**

Technical data	Test method/Inspection condition	Unit	Measured value	Lower limit	Upper limit
DUROMETER A/B-BLEND NPB	1110	nounit	43	35	45
TENSILE A/B-BLEND NPB PSI	1160	psi	1265	871	-
ELONGATION A/B-BLEND NPB	1160	%	531	400	-
TEAR-B A/B-BLEND NPB PPI	1160	lb/in	145	100	-
SPECIFIC GRAVITY	1154	nounit	1.13	1.10	1.16
CURE INITIATION TEMPERATURE	1359	℃	117.9	114.0	124.0
COMPRESSION SET 22/350 A/B NPB	1114	%	8	0	35

Wacker Chemical Corporation, Adrian/MI
Quality Management, John Poelstra
Telefax +1 (517) 266-8012

This certificate was issued by machine and is valid without a signature.

BASF CORPORATION

BASF
We create chemistry

Certificate of Analysis

Customer:		Product Number	: 52736788
		Product Name	: ULTRADUR® B 4300 G3 UNCOLORED POLYBUTYLENE TEREPHTHALATE 726KG FIBREBOARD IBC (11G)
TE CONNECTIVITY CORPORATION 8000 PIEDMONT TRIAD PKWY GREENSBORO NC 27409-9407		Vehicle	:
		Batch/Lot	: WF8208061
		Manuf.Date	: Jul-27-2018
Attention:		Shipped Date	:
FAX:		Shipped Quantity	: 12,804.448 LB
Cust Prod:	704734-4	Delivery Date	: Oct-08-2018
Cust Prod Name:	ULD.B4300G3 UN 726KG 11G	Order Number	: 116381224 000010
Cust P.O.:	2705874958		
Cust P.O. Line:	1	Delivery Note	: 129562599 900001

Inspection Certificate 3.1 according to EN 10204

Characteristic	Result	UOM	-----Specification----- Minimum	Maximum	Test Method
Ash / Filler Content	15.0	%	13.0	17.0	ASTM5630/ISO3451
Moisture Content	0.02	%	0.01	0.04	ASTM D6869 / ISO 15512B
Viscosity Number for PBT, PSU and PES	116	ml/g	98	118	ISO1628 (Phenol/Dichlorb.

Comments :

The data shown are the results of tests performed on the lot specified.

This product is approved to the following specifications:

GMP.PBTP.006
GMW16733

Section 11

Initial Process Studies

Section 12

Qualified Laboratory Documentation

CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board
500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

TE Connectivity - Empalme
Carretera Internacional Km. 1969 Guad-Nog. Km.2
Sonora, C.P. 85340, Mexico

has been assessed by ANAB
and meets the requirements of international standard

ISO/IEC 17025:2005

while demonstrating technical competence in the fields of

CALIBRATION & TESTING

Refer to the accompanying Scope of Accreditation for information regarding the types of calibrations / tests to which this accreditation applies.

ACT-1173
Certificate Number

ANAB Approval

Certificate Valid: 04/24/2018-05/03/2019
Version No. 004 Issued: 04/24/2018

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

TE Connectivity - Empalme

Carretera Internacional Km.1969 Guad-Nog. Km.2,
Sonora, C.P. 85340, Mexico
Daniel Zazueta 011-622-225-1174

CALIBRATION & TESTING

Valid to: **May 3, 2019** Certificate Number: **ACT-1173**

Mechanical Testing

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Force (0 to 200) lbf	Equipment Manual	Wiring Harnesses, Plastic and Metal Automotive Components	Force Gage
Mass (0 to 4) kg	Equipment Manual	Plastic and Metal Automotive Components	Scales
Moisture Content 45 g (50 to 200) ºC	Work Instruction AEW021T-LB, Equipment Manual	Plastic Automotive Components	Ohaus MB 45 Moisture Analyzer
Melt Flow Rate	Work Instruction AEW022T-LB based on ASTM D1238, Equipment Manual	Plastic Automotive Components	Extrusion Plastometer Oven

Dimensional Measurement/Testing

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Dimensions 210 mm (X) 215 mm (Y) 100 mm (Z)	ASME Y14.5M, Engineering Drawing, Equipment Manual	Plastic and Metal Automotive Components	Vision Systems
Dimensions Up to 50 mm	ASME Y14.5M, Engineering Drawing, Equipment Manual	Plastic and Metal Automotive Components	Digital Height Indicator

Dimensional Measurement/Testing

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Dimensions Up to 0.8 mm	ASME Y14.5M, Engineering Drawing, Equipment Manual	Plastic and Metal Automotive Components	Dial Test Indicator
Dimensions Up to 200 mm	ASME Y14.5M, Engineering Drawing, Equipment Manual	Plastic and Metal Automotive Components	Calipers
Dimensions Up to 25.4 mm	ASME Y14.5M, Engineering Drawing, Equipment Manual	Plastic and Metal Automotive Components	Micrometers
Dimensions 609 mm (X) 609 mm (Y) 457 mm (Z)	ASME Y14.5M, Engineering Drawing, Equipment Manual	Plastic and Metal Automotive Components	CMM
Dimensions Up to 8 m	ASME Y14.5M, Engineering Drawing.	Wiring Harnesses Automotive Components	Steel Measuring Tapes
Dimensions Up to 1 220 mm	ASME Y14.5M, Engineering Drawing.	Wiring Harnesses Automotive Components	Steel Rule

Length – Dimensional Metrology

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)[1]	Reference Standard, Method and/or Equipment
Steel Measuring Tapes	Up to 8 m	0.32 mm / 50 cm	Digital Scale Work Instruction AEW001T-LB Tyco Spec 117-95 Calibration Steel Measuring Tapes. JIS B 7512 (1993)
Steel Rules	Up to 1 220 mm	0.060 mm / 50 cm	Master Height Gage Digital Scale Work Instruction AEW001T-LB Tyco Spec. 117-94 Calibration Steel Rules, JIS B 7516 (1987)
Granite Surfaces Plates Repeatability Resolution 0.00001 in	(12 x 18) in to (40 x 60) in	36 µin	Mahr Repeatometer Precision Dial Indicator Work Instruction AEW002T-LB, JIS B 7513 (1992),GGG-P-463c-1973
Dial Test Indicator (lever-type)	Up to 1 mm	0.012 mm	Height Master Work Instruction AEW004T-LB, JIS B 7533 (1990), Tyco Spec 117-14 Dial Indicator, Electronic and

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)[1]	Reference Standard, Method and/or Equipment
Calipers	Up to 200 mm	0.023 mm	Gage Blocks Ring Gages Work Instruction AEW005T-LB, JIS B 7507 (1993), Tyco Spec 117-9 Caliper, Vernier, Dial and Digital
Micrometer	Up to 25.4 mm	0.0016 mm	Gage Blocks Grade 2 Work Instruction AEW006T-LB, JIS B 7502 (1994), Tyco Spec 117-5 Micrometer, Inch/Metric, Outside, Blade and Flange
Optical Comparator	Up to 300 mm (X,Y)	0.0046 mm	Glass Scale Work Instruction AEW007T-LB, JIS B 7184:1999, Tyco Spec 117-19 Optical Comparators
Video Comparator	Up to 300 mm (X,Y,Z)	0.0052 mm	Glass Scale Gage Blocks Work Instruction AEW007T-LB. JIS B 7184:1999
Digital Height Indicator (Travel-Type)	Up to 50 mm	0.0021 mm	Gage Blocks Work Instruction AEW008T-LB, Tyco Spec. 117-14 Dial Indicator Electronic and Mechanical

Mass

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)[1]	Reference Standard, Method and/or Equipment
Force Gage	Up to 200 lb·f	0.12 lb·f	Master Weights Work Instruction AEW003T-LB, Tyco Spec 117-70 Force Gages
Scales (0.01 g Resolution)	(0 to 4) kg	0.45 g	Master Weights Class OIML M3 & ASTM 6 Work Instruction AEW013T-LB, NOM-010-SCFI-1994

Notes:

1. Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (k=2), corresponding to a confidence level of approximately 95%.

2. L in uncertainties represents length in inches.
3. The uncertainty associated when calibrating a balance/scale is dependent on local conditions, such as the resolution of the unit being calibrated and the environment in which the balance/scale is operating. The uncertainty listed in the scope here represents the best uncertainty for a balance/scale which the organization typically calibrates in its lab. Since field (on-site) conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected in the field (on-site) than what is reported on the accredited scope.
4. This scope is formatted as part of a single document including the Certificate of Accreditation No. ACT-1173.

bsi.

By Royal Charter

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - IATF 16949:2016

This is to certify that:

TE Connectivity
Global Automotive Division
Americas North
Carretera Internacional, KM 1969
Guadalajara-Nogales Km 2
Empalme
Sonora
85340
Mexico

operates a Quality Management System which complies with the requirements of IATF 16949:2016 for the following scope:

Design and manufacture of electrical interconnecting devices.

For and on behalf of BSI:

Carlos Pitanga, Chief Operating Officer Assurance – Americas

BSI Certificate Number: 514458-003
IATF Number: 0315420

...making excellence a habit.™

Certification Date: 2018-07-11 Latest Issue: 2018-07-11 Expiry Date: 2021-07-10

Location	Registered Activities
TE Connectivity Global Automotive Division Americas North Carretera Internacional, KM 1969 Guadalajara-Nogales Km 2 Empalme Sonora 85340 Mexico	Manufacture of interconnecting devices. Including the following remote support functions: TE Connectivity Global Automotive Division Americas North 900 Wilshire Boulevard Suite 150 Troy, MI 48084 Design and Development. TE Connectivity Global Automotive Division Americas North Fulling Mill Road Middletown, PA 17057 Design and Development, Product Testing and Customer Service. TE Connectivity Global Automotive Division Americas North 3800 Reidsville Road Winston-Salem, NC 27102 Design and Development, Product Testing and Calibration, Business Office (Quote Process) and Purchasing. TE Connectivity Global Automotive Division Americas North 20 Esna Park Drive Markham, Ontario L3R 1E1 Canada Design and Development and product testing (optics lab) TE Connectivity Global Automotive Division Americas North 2100 Paxton Street Harrisburg, PA 17111 Provision of Product Testing to TE Connectivity Manufacturing Sites. TE Connectivity North Carolina Distribution Center 8000 Piedmont Triad Parkway Greensboro, North Carolina 27409 Receiving Inspection, Storage / Inventory.

BSI Certificate Number: 514458-003

IATF Number: 0315420

Certification Date: 2018-07-11 Latest Issue: 2018-07-11 Expiry Date: 2021-07-10

Section 13

Appearance Approval Report

Not Applicable

Section 14

Sample Product

Sent in separate package
(if required)

Section 15

Master Sample

Retained at manufacturing location

Section 16

Checking Aids

Not Applicable

Section 17

Records of Compliance with Customer-Specific Requirements

MDS Report
Substances of assemblies and materials

1. Company and Product Name

1.1 Supplier Data

Name ID	**Tyco Electronics GAD [913]**
DUNS Number:	**-**
Street/Postal Code:	**Amperestr. 12-14**
Nat./ZipCode/City:	**DE 64625 Bensheim**
Supplier Code:	**-**
Contact Person:	**IMDS Team (India) Engineering Services**
- Phone:	**-**
- Fa No.:	**-**
- E-Mail Address:	**imds@te.com**

1.2 Product Identification

Part/Item No.:	**0-0184396-1**
Description:	**Plug Assy, 4 Posn-2X2 w/o Slot, C Key**
Report No.:	**-**
Date of Report:	**-**
Purchase Order No.:	**-**
Bill of Delivery No.:	**-**
Preliminary MDS:	**No**
IMDS ID / Version:	**2287018 / 5**
Node ID:	**492359404**
MDS Status (Change Date):	**Internally released (07/11/2014)**

MDS Report

Substances of assemblies and materials

Materials which are subject to legal prohibitions must not be included!
Dangerous substances formed or released during use must also be declared
Please note: GADSL list for substances that require declaration

2. Characteri□ation of the Component

Part/Item No.:	**0-0184396-1**	Report No.:	**-**
Description:	**Plug Assy, 4 Posn-2X2 w/o Slot, C Key**	IMDS ID / Version:	**2287018 / 5**
		Node ID:	**492359404**

Tree Level	Description Article Name Name Substance name	Part/Item No. Item- /Mat.-No. Material-No. CAS No.	IMDS ID / Version	Quantity	Weight [g]	Portion [%]	Portion (from - to) [%]	Classif. GADSL, SVHC	Parts Marking Recyclate (Indust./Consumer) Application [ID]
1	Plug Assy, 4 Posn-2□2 w/o Slot, C Key	0-0184396-1	2287018 / 5		7.7913				
├2	Plug Hsg, Sensor, 4 Posn, 2□2 w/o Slot, □C□Key-Black	0-0184352-1	2171494 / 3	1	6.9355				Yes
├3	PBT GF15	704734-	14697980 / 1		6.9355			5.1.a	No
├4	GF-Fibre	-				15			

Tree Level	Description Article Name Name Substance name	Part/Item No. Item- /Mat.-No. Material-No. CAS No.	IMDS ID / Version	Quantity	Weight [g]	Portion [%]	Portion (from - to) [%]	Classif. GADSL, SVHC	Parts Marking Recyclate (Indust./Consumer) Application [ID]
4	Carbon black	1333-86-4				0.5			
4	Further Additives, not to declare	system				1.5			
4	PBT	-				83			
2	DBL Lock Plate, 4 Posn-2□2 Sensor - Yellow	0-0184242-1	2171561 / 11	1	0.4104				Yes
3	PBT-GF15	1-704734-9	82335759 / 3		0.4104			5.1.a	No
4	GF-Fibre	-				15			
4	Further Additives, not to declare	system				1			
4	PBT	-				83			
4	Pigment portion, not to	system				1			
2	2□2 Plug, Seal Ring -	0-0184241-1	2171559 / 10	1	0.4454				Not Applicable
3	VM□	TEC-100-1167	54383203 / 5		0.4454			5.3	No
4	Pigment portion, not to	system				1	0 - 2		
4	VM□	-				99			

This is an uncontrolled copy of a document created by IMDS. End of the report.

Section 18

Part Submission Warrant

Part Submission Warrant

Part Name: 2X2 PLUG ASSEMBLY, C KEY, CLAS
Cust. Part Number: 12H0572
Shown on Drawing No.: C-184396
Org. Part Number: 184396-1
Engineering Change Level: B
Dated: Apr 09, 2009
Additional Engineering Changes: N / A
Dated: N / A
Safety and/or Government Regulation: ☐ Yes ☑ No
Purchase Order No.: N / A
Weight (kg): 0.0077
Checking Aid Number: N / A
Checking Aid Engineering Change Level: N / A
Dated: N / A

ORGANIZATION MANUFACTURING INFORMATION

TE Connectivity /588115092
Supplier Name & Supplier/Vendor Code

Carretera Int. Km. 1969 Guadalajara-Nogales Km. 2
Street Address

Empalme | Sonora | 85340 | México
City | Region | Postal Code | Country

CUSTOMER SUBMITTAL INFORMATION

Newark Electronics
Customer Name/Division

Not provided
Buyer/Buyer Code

Various
Application

MATERIALS REPORTING

Reporting of all materials, not just Substances of Concern, may be required by certain OEMs or other customers.
Has customer-required Substances of Concern information been reported? ☑ Yes ☐ No
Submitted by IMDS or other customer format: 2287018 / 5

Are polymeric parts identified with appropriate ISO marking codes? ☑ Yes ☐ No ☐ N/A

REASON FOR SUBMISSION

- ☐ Initial submission
- ☐ Engineering Change(s)
- ☑ Tooling: Transfer, Replacement, Refurbishment, or additional
- ☐ Correction of Discrepancy
- ☐ Tooling Inactive >than 1 year
- ☐ Change to Optional Construction or Material
- ☐ Sub-Supplier or Material Source Change
- ☐ Change in Part Processing
- ☐ Parts produced at Additional Location
- ☐ Other - please specify

REQUESTED SUBMISSION LEVEL (Check one)

- ☐ Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
- ☐ Level 2 - Warrant with product samples and limited supporting data submitted to customer.
- ☐ Level 3 - Warrant with product samples and complete supporting data submitted to customer.
- ☑ Level 4 - Warrant and other requirements as defined by customer.
- ☐ Level 5 - Warrant with product samples and complete supporting data reviewed at supplier's manufacturing location.

SUBMISSION RESULTS

The results for ☑ dimensional measurements ☑ material and functional tests ☐ appearance criteria ☐ statistical process package
These results meet all design record requirements: ☑ YES ☐ NO (If NO""C-Explanation Required)
Mold / Cavity / Production Process: Assembly Process

DECLARATION

I affirm that the samples represented by this warrant are representative or our parts, which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm the these samples were produced at a production rate of TE Property /24 hours.
I also certify that the documented evidence of such compliance is on file and available for review. I have noted any deviation from the declaration below.

EXPLANATION/COMMENTS: P-18-016097. Rate is TE Property.

Is each Customer Tool properly tagged and numbered ☐ Yes ☐ No ☑ N/A

Organization Authorized Signature: Julia Avilés
Date: 10-Dec-2018

Print Name: Julia Avilés
Phone No.: +52 (662) 500 36 80
Fax No.: N/A

Title: PPAP Technician
E-mail: julia.avilez@te.com

FOR CUSTOMER USE ONLY (IF APPLICABLE)

Part warrant Disposition: ☐ Approved ☐ Rejected ☐ Other

Customer Signature
Date

Print Name
Customer Tracking Number (optional)

Section 18a

Bulk Material Requirements

Not Applicable