



# Product Change Notification

Current Date: 02-Mar-2021

## TE Connectivity

**Product Change Notification:** P-21-020533

**PCN Date:** 01-MAR-21

**Customer:** TTI, Inc. ( 1305175 )

**Location:** Maisach-gernlinden

**Agreement:** Agreement Unknown

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:**  
Solder PCN Group 2 - Base Material CuSn (pretinned) + 4-10 m Sn + Plating Line 507 / Lead PN A2C52005837

**Description of Changes**  
Dear Customer, we hereby inform you about the transfer of existing serial production parts at TE Connectivity Dinkelsbuehl from our old plating shop to the new one so called Greenfield Plating Dinkelsbuehl. A TE-internal release test based on the relevant part specifications will be executed prior serial deliveries. PPAP will be provided according customer requirements and the mutually agreed qualification matrix (Contact Persons Continental: Mrs. Corina Stocker, Mr. Eugen Toderel) for one specified lead part number per PCN group, all other PNs follow the TE Connectivity internal release procedure with a dimensional report towards the customer. This PCN should be addressed towards Mr. Christian Schuster.  
**Other attachments:**  
[Transfers Continental Plating TE Dinkelsbuehl\\_05.02.2021](#)  
[Qualification Matrix Transfers Continental\\_05.02.2021](#)

**Reason for Changes:**  
The transfer of serial production from TE Dinkelsbuehl Plating Old to TE Dinkelsbuehl Plating Greenfield follows a strict procedure, which fully maintains quality, ability to supply and form-fit-function of the concerned products. As a result of continuous improvement and following the latest production standards of the Automotive industry, the products are moved to new plating lines without changing the key process parameters. Therefore, please also find attached a detailed presentation as an explanation for the changes.

**Estimated Dates:**

<b>Last Order Date</b> (Obsolete Parts Only):	<b>First Date To Ship</b> (Changed Parts Only):
	01-OCT-2021
<b>Last Ship Date</b> (Obsolete Parts Only):	<b>Last Date for Mixed Shipments:</b> (Changed Parts Only):
	No Mixed Shipments

**Part Number(s) being Modified:**

Part Number	Part Discontinued per PCN	Customer Drawing	Customer Part Number	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
<a href="#">9-966140-2</a>	NO						
<a href="#">9-966140-3</a>	NO						
<a href="#">9-966140-4</a>	NO						
<a href="#">9-966140-5</a>	NO						



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**Location:** Maisach-gernlinden

**Agreement:** Agreement Unknown

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<a href="#">9-966140-2</a>	NO		TYC9-966140-2				
<a href="#">9-966140-3</a>	NO		TYC9-966140-3				
<a href="#">9-966140-4</a>	NO		TYC9-966140-4				
<a href="#">9-966140-5</a>	NO		TYC9-966140-5				

# Proposal Transfers Conti

Old Plating to New Plating Dinkelsbuehl

EVERY CONNECTION COUNTS



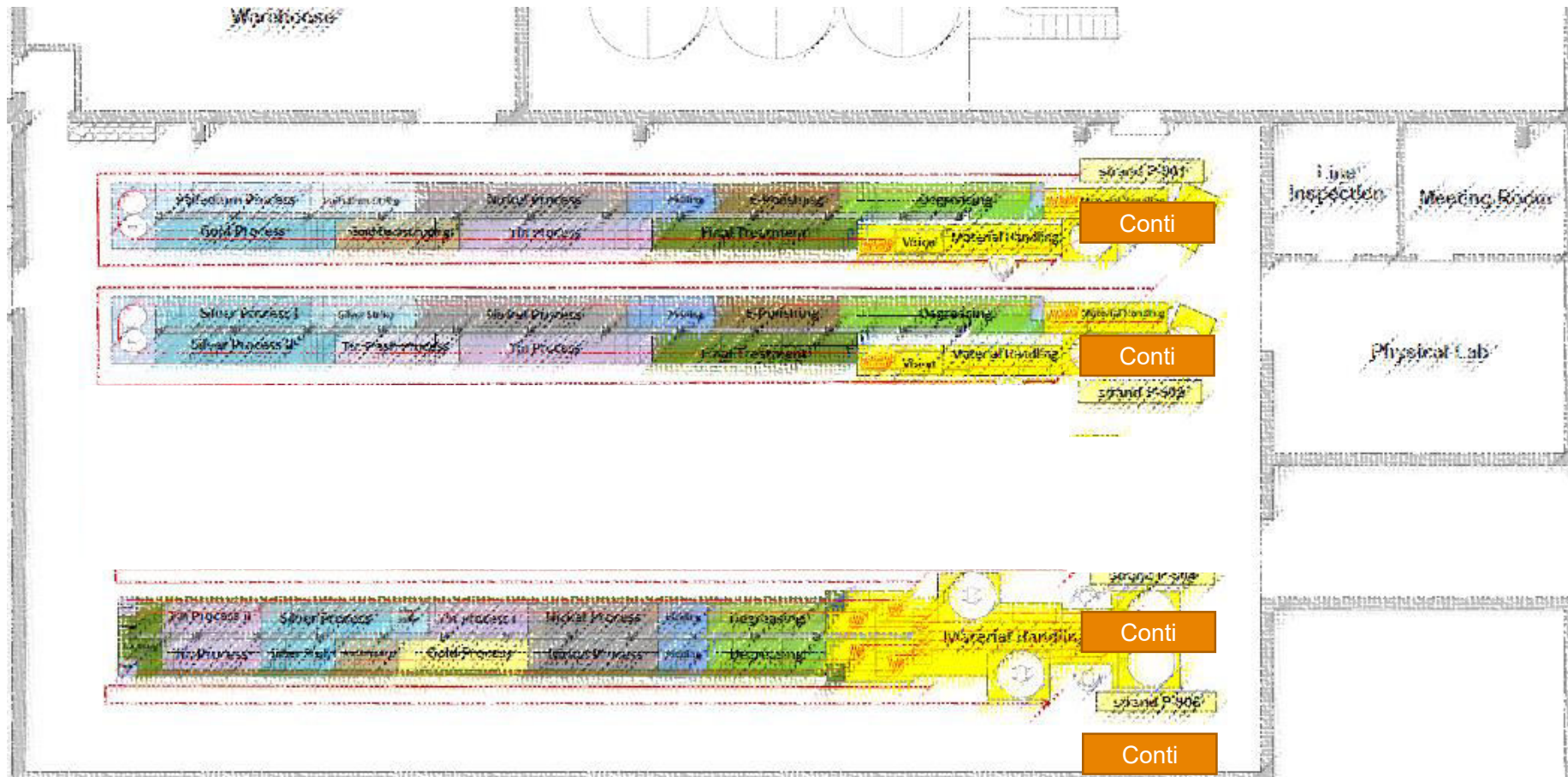
# Overview Old Plating – New Plating

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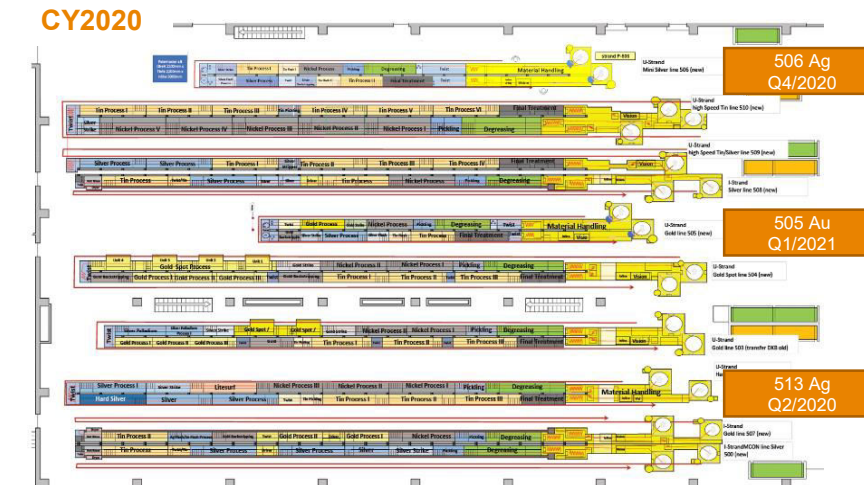
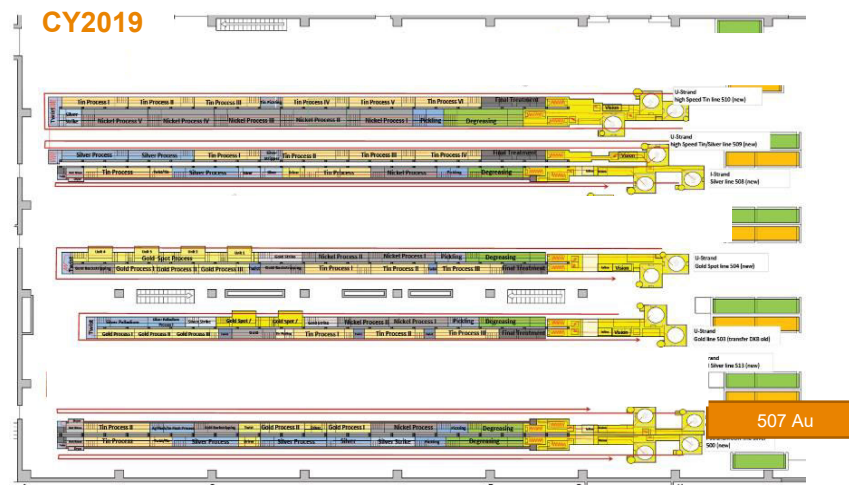
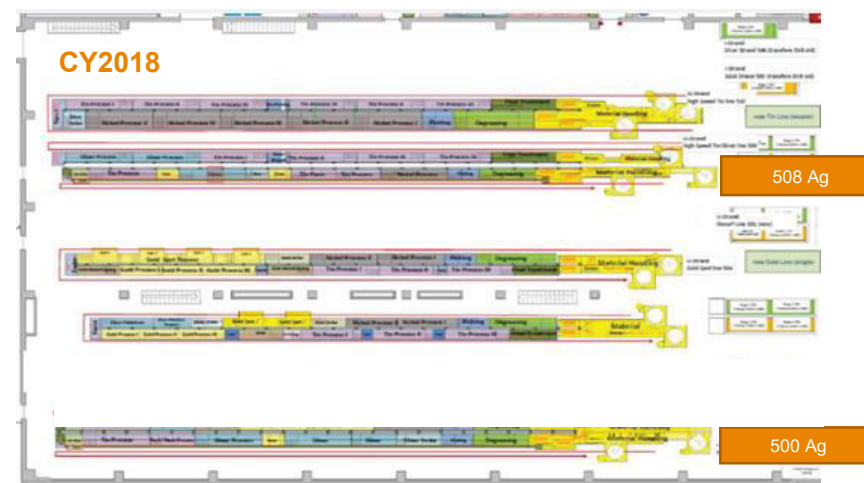
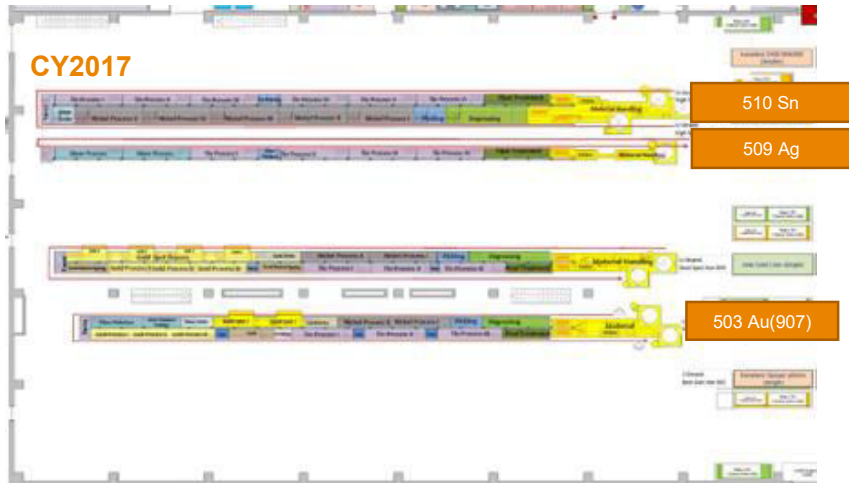
Layout, Risk Evaluation, Improvements, TE Internal release process

**EVERY CONNECTION COUNTS**

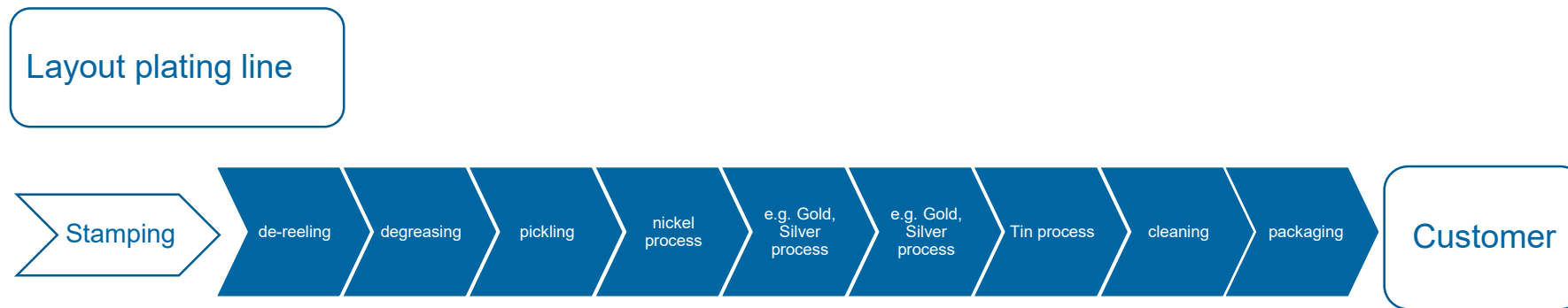
# Current State „Old Shop“, September 2020



# Line Ramp up Greenfield

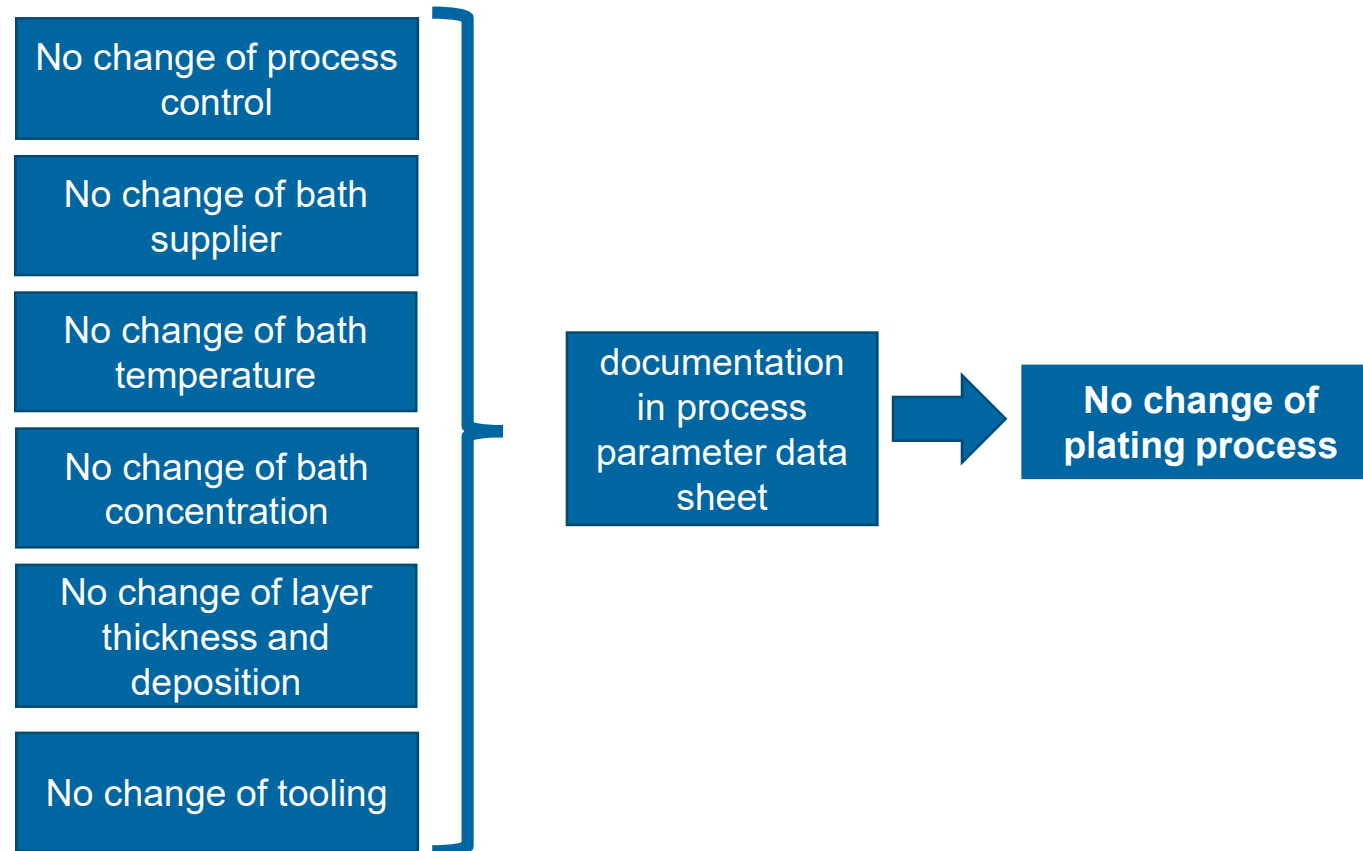


# Standard Line Concept



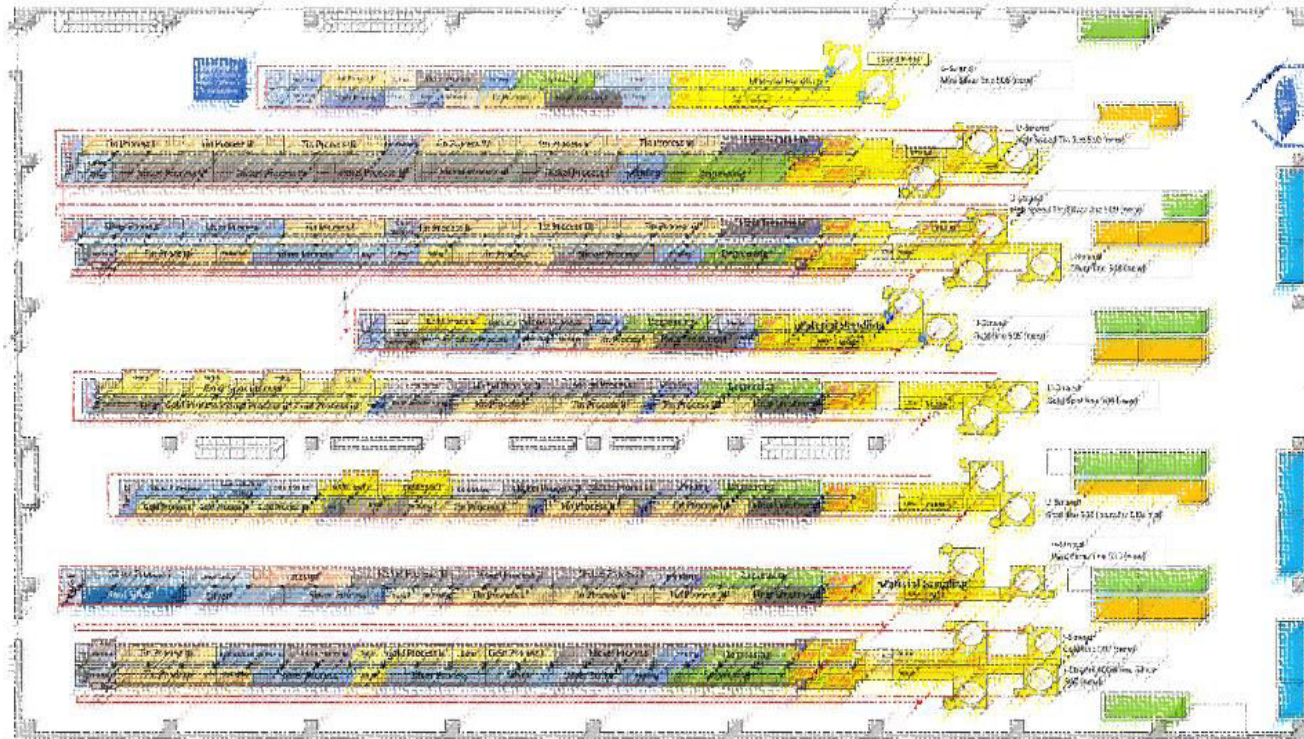
- All lines are the same (both old and new plating shop)
- Same chemistry in use
- Same tooling in use

# TE risk assessment and evaluation





# Improvements on new lines



- ⇒ Latest process control hardware and software
- ⇒ Production without wastewater
- ⇒ Rectifiers updated for better process control accuracy
- ⇒ Improved safety (closed area for material handling, etc.)
- ⇒ Vision System (camera inspection)
- ⇒ Implementation of Lessons Learned regarding layout etc.

# TE release process

1. Capability investigations
2. Layer Thickness Measurements
3. Optical Investigations, SEM Analysis
4. Dimensional Inspections
5. Adhesion Tests
6. Internal Process/ Line Release
7. Internal Product Release
8. Insertion Force Measurements Pressfit Pins

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**CONNECT  
LIKE THE WORLD  
DEPENDS ON IT.  
BECAUSE IT DOES.**

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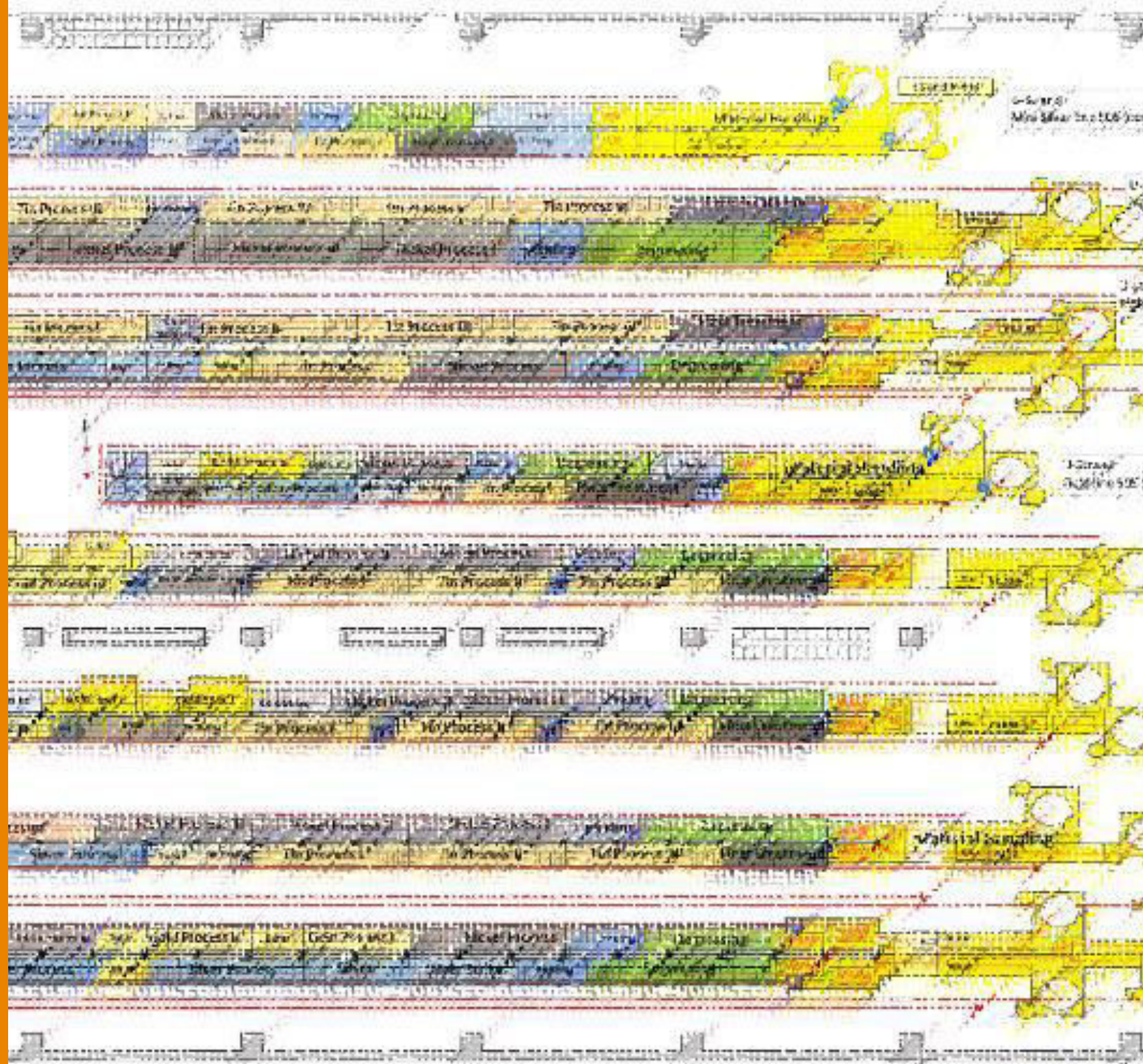
EVERY CONNECTION COUNTS



# Qualification Matrix Transfers Continental

Prioritization and Time Schedule for  
transfers from Old Plating to New Plating  
Greenfield TE Dinkelsbuehl  
February 2021

EVERY CONNECTION COUNTS



# Qualification Matrix

Solder Parts														
Base material	Underplating	Plating thickness Sn [µm]	Underplating thickness Ni [µm]	Plating line	Plating PN	Part number TE sold (reference)	Conti Part Number	Necessary tests	PCN group	Prio	Planned Sampling Dates (+/- 3 Weeks)			
CuSn	x	3-10	min.0,5	506	1-1452848-2	1-1452845-8	A2C53349554	Whisker 1000h + Solder Tests acc. CQR without Solder Heat Resistance Test	1	1	Sampling CW10/2021			
	x	3-10	min.0,5		2-1452848-2						Sampling CW10/2021			
	x	3-10	min.0,5		3-1452848-2						Sampling CW10/2021			
CuSn	pretinned	4-10	0,8-1,5	507	3-964158-5	9-1355890-1	A2C52005837		Whisker 1000h + Solder Tests acc. CQR without Solder Heat Resistance Test	2	2	Sampling CW13/2021		
	pretinned	4-10	0,8-1,5		3-964159-5							Sampling CW13/2021		
	pretinned	4-10	0,8-1,5		3-964160-5							Sampling CW13/2021		
CuSn	pretinned	3-5	2-4	507	4-1393471-5	2133708-1	A2C38111100			Whisker 1000h + Solder Tests acc. CQR without Solder Heat Resistance Test	3	3	Sampling CW15/2021	
	pretinned	3-5	2-4		4-1393471-7								Sampling CW15/2021	
	pretinned	3-5	2-4		5-1393471-3								Sampling CW15/2021	
CuFe	x	min. 3,5	1,3-2,2	505, 506	1534688-2	967618-3	A2C53237017				Whisker 1000h + Solder Tests acc. CQR without Solder Heat Resistance Test	4	4	Sampling CW16/2021
CuMg	x	6-10	min. 1,27	507	6-1703001-8	5-967224-9	000292731A100					5	5	Sampling CW16/2021
CuNiZn	x	3-6	0,5-2	505	1719270-1	1719544-1	A2C73367400					6	9	Sampling CW28/2021
CuNiSi	x	3-5	1,3-2,2	507	968429-2	968429-2	A2C00016838	7				7	Sampling CW18/2021	
CuZn	x	min. 3	min. 1	507	1379425-1	1801235-1	A2C53181639	Whisker 1000h + Solder Tests acc. CQR without Solder Heat Resistance Test				8	6	Sampling CW18/2021
	x	min. 3	min. 1	507	1379426-1									Sampling CW18/2021
	x	min. 3	min. 1	507	1379654-1				Sampling CW18/2021					
CuSn0,1	x	3-5	1,3-2,2	508	1718185-2	1718183-1	6599217602B		Whisker 1000h + Solder Tests acc. CQR without Solder Heat Resistance Test			9	8	Sampling CW22/2021
	x	3-5	1,3-2,2		1718185-4									Sampling CW22/2021
Pressfit														
Base material	Mating Side	Plating thickness Sn [µm]	Underplating thickness Ni [µm]	Plating line	Plating PN	Part number TE sold (reference)				Necessary tests		PCN group	Prio	Planned Sampling Dates (+/- 3 Weeks)
CuNiSi	Sn 1-3µm	0,8-1,8	1,27-2,54	507	1-929278-2	1-929278-2	00287356A2			U01-04, A01, A02,		1	1	Sampling CW10/2021
CuSn4	Sn 2-4µm	1,27-2,54	1,27-2,54	505	969174-5	969174-5	2840229501100			A05, A06 acc. CQR	2	2	Sampling CW28/2021	