


# PRODUCT / PROCESS CHANGE NOTIFICATION

## 1. PCN basic data

|                      |   |
|----------------------|---|
| 1.1 Company          |  STMicroelectronics International N.V                                |
| 1.2 PCN No.          | MICROCONTROLLERS/24/14781   |
| 1.3 Title of PCN     | ST Rousset (France) Implementation of a PBO (Polybenzoxazole) protective layer over product passivation for STM8AL3x 64k (AUTOMOTIVE) listed products |
| 1.4 Product Category | STM8AL3x  |
| 1.5 Issue date       | 2024-08-27  |

## 2. PCN Team

|                           |                            |
|---------------------------|----------------------------|
| 2.1 Contact supplier      |                            |
| 2.1.1 Name                | PIKE EMMA                  |
| 2.1.2 Phone               | +44 1628896111             |
| 2.1.3 Email               | emma.pike@st.com           |
| 2.2 Change responsibility |                            |
| 2.2.1 Product Manager     | Ricardo Antonio DE SA EARP |
| 2.1.2 Marketing Manager   | Veronique BARLATIER        |
| 2.1.3 Quality Manager     | Pascal NARCHE              |

## 3. Change

|                     |   |                            |
|---------------------|---|----------------------------|
| 3.1 Category        | 3.2 Type of change  | 3.3 Manufacturing Location |
| Wafer Fab (Process) | Any change in step sequence or removed step or new step introduction with potential impact on product reliability | ST Rousset (France)        |

## 4. Description of change

|   |   |   |
|---|---|---|
|   | Old   | New   |
| 4.1 Description   | The wafer passivation layer has no protective layer.  | Implementation of a PBO (Polybenzoxazole) protective layer on top of the wafer passivation layer is proposed to customer. |
| 4.2 Anticipated Impact on form,fit, function, quality, reliability or processability? | Reliability will be improved - PBO is a stress relief coating used as a protective layer for passivation layer. |   |

## 5. Reason / motivation for change

|                      |  |
|----------------------|--|
| 5.1 Motivation       | Customer request for automotive F79K product to lower the risk of passivation scratch and have better reliability.<br>PBO on top of die is a protection against external impact. |
| 5.2 Customer Benefit | SERVICE IMPROVEMENT  |

## 6. Marking of parts / traceability of change

|                 |   |
|-----------------|---|
| 6.1 Description | traceability ensured by ST internal tools |
|-----------------|---|

## 7. Timing / schedule

|                                     |              |
|-------------------------------------|--------------|
| 7.1 Date of qualification results   | 2025-01-31   |
| 7.2 Intended start of delivery      | 2025-02-28   |
| 7.3 Qualification sample available? | Upon Request |

## 8. Qualification / Validation

|  |  |            |            |
|--|--|------------|------------|
| 8.1 Description                                    | 14781 PCN14781 MDRF-GPM-RER2411 - PBO 79K - rel plan.pdf |            |            |
| 8.2 Qualification report and qualification results | Available (see attachment)                               | Issue Date | 2024-08-27 |

| 9. Attachments (additional documentations)   |                         |                          |
|--|-------------------------|--------------------------|
| 14781 Public product.pdf<br>14781 PCN14781 MDRF-GPM-RER2411 - PBO 79K - rel plan.pdf<br>14781 PCN14781 - MRDF-GPM PBO_Implementation_context.pdf |                         |                          |
| 10. Affected parts   |                         |                          |
| 10. 1 Current  |                         | 10.2 New (if applicable) |
| 10.1.1 Customer Part No  | 10.1.2 Supplier Part No | 10.1.2 Supplier Part No  |
| 2518173  | STM8AL3188TCX           |                          |

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