
The Evaluation Model quality level

Introduction

STMicroelectronics manufactures aerospace products at its dedicated European facility in Rennes (France), certified by the ESA-ESCC, DLA QML-V and DLA JANS systems.

In addition to the qualified products, commonly referred to as flight models (FM), and the engineering model (EM) quality level, to support developments and prototyping, ST now proposes on selected products an Evaluation Model (EvM) quality level primarily intended to support product evaluation and early development stages. The present document describes the manufacturing and screening flow of this quality level.

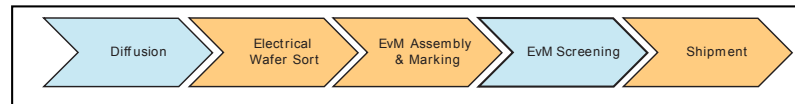
1 Eligible products

Selected ST aerospace qualified product are proposed with an Evaluation Model versions. When available, the EvM is included in the ordering information of the data sheet and in the "sample & buy" tab of the product page on the web site.

2 Production flow

2.1 Manufacturing flow

Figure 1. Simplified production flow



The generic EvM specification is provided below. EvM:

- Use the same design and same technology as EMs
- Are provided without any guarantee neither on the mask set nor diffusion line
- Go through the same 25 °C electrical wafer sort as EMs
- Are not submitted to any wafer lot qualification test
- Are assembled using the simplified process flowchart and control plan summarized below, excluding the stabilization bake and hermeticity test
 - Die-attach
 - Wire bonding
 - Sealing
 - Marking
 - Electrical test go/no-go at 25 °C
 - Packing
- Use generally a footprint compatible package, as described in the datasheet
- Are neither internally nor externally optically sorted
- Have the same functionality and characteristics at 25 °C as EMs
- Are not guaranteed at high and low temperatures
- Are provided without any radiation hardness guarantee
- Do not undergo any package testing (PIND test, thermal cycles, etc.)
- Have no reliability guarantee
- Are provided with a specific marking, without agency logo, described in each product datasheet
- Are delivered with gold-plated terminals only
- Are provided without Certificate of Conformance
- Are only traceable through their part numbers and date codes
- Have a date code less than 5 year old

2.2 Product identification

The part numbers of EvM can be found, when available, in the product datasheet and on the ST website. EvMs are denoted by a suffix "X" as shown in the examples below:

- RH-AD128KX
- RH-PMICL1AKX

Revision history

Table 1. Document revision history

Date	Version	Changes
19-Mar-2020	1	Initial release.

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, please refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2020 STMicroelectronics – All rights reserved