

Customer Information

V20.06

Reliability of iC-Haus ASICs and ASSPs

As a fabless manufacturer of semiconductors iC-Haus GmbH carries out wafer diffusion on the qualified production lines of well-known and established semiconductor manufacturers (Si Foundries). In the development and layout of its integrated circuits iC-Haus considers compatibility with the standard processes of these foundries. The prime iC-Haus criterion for acceptance of correctly processed wafers is based on parameter tests on standard structures throughout each wafer.

Because of the process compatibility the reliability values stipulated by semiconductor manufacturers for their large-series products are applicable to comparable iC-Haus products. Actual FIT values for our ASICs and ASSPs are provided on request taking into account mission profiles of applications.

Additionally, iC-Haus carries out life tests and burn-in according to JEDEC and AEC standards. Lifetimes are tested during product qualification; with the aid of burn-in tests batches are qualified and products monitored for entire series of devices.

Due to the specialized range of use of devices, particularly customized iC-Haus products, the FIT values calculated as a result of these tests are – theoretically – confined to the lower end of the scale with higher FIT-rates just by the limited number of components and batches. When calculating the reliability of a system the derived smaller FIT values are applicable for series products.

Please contact us for further questions.

iC-Haus GmbH

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