



## Trend analysis

Our society is in a state of constant change. New challenges and requirements emerge, changing our markets. We always keep an eye on these developments. Together with our customers we determine what products are needed to meet future challenges and to be successful in the market.

## Definition

Then we define the requirements a new product has to fulfill. The decisive factor here is the system in which our customer will use a chip from Infineon. For example, applications in a car call for properties quite different from those needed in an industrial environment. Our design engineers then translate these requirements into a chip layout. This step already takes subsequent manufacturing techniques into account. Risk assessment is an inherent part of the definition and all following phases.



## Implementation

Now questions with a decisive bearing on realization are answered: What technology is best suited? How can we guarantee the necessary reliability of the product? Which of our sites are candidates for manufacturing? When this phase is over we have turned the theoretical concept into initial chip prototypes and have produced samples in small quantities.

## Verification and validation

In the next step we verify that the product fulfills all the defined requirements. We provide our customers with samples so that they can test the product in the intended applications. At the same time the manufacturing technology is refined and a manufacturing plan is formulated so that the product can then be produced in larger quantities.



## Ramp-up & volume production

The unit quantity of the new product is now continuously increased. Here we consider the entire value chain, from the supplier all the way to the customer. Stable processes are crucial in order to smoothly integrate the product in ongoing manufacturing activities. We use optical, electrical and statistical testing procedures to constantly guarantee the committed product quality.

## Ramp-down

Once a product has reached "end-of-life", we remove it from production in a process planned on a long-term basis. We inform our customers with sufficient lead time and continue to supply the agreed level of quality. Often we have already developed a functionally improved successor product.

**We continue to meet all our commitments – from the first chip to the very last.**

