♦MICRONAS

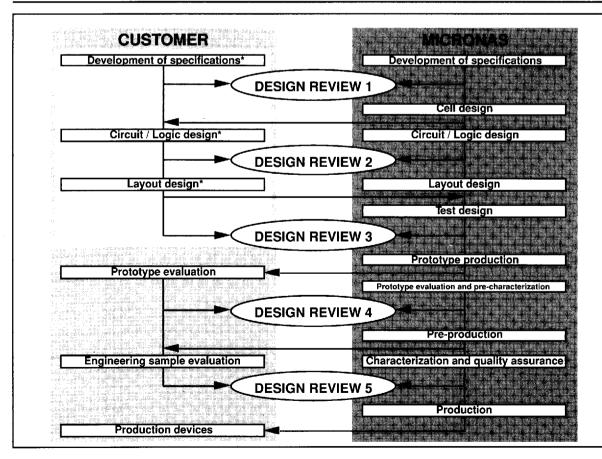
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ASIC SERVICES

- ♦ Our competent design team (over 20 designers) is available for your ASIC development starting from the specification phase. The experience of our designers comes from the development of many mixed signal ASIC solutions to customers in the Nokia Group and other Scandinavian companies. Examples of our specialties are high resolution DA—converters and accurate, low noise switched capacitor filters.
- ♦ Of special value is our ability to solve your possible needs for a secured second source. Micronas has close cooperation with such well known IC manufactures as SGS—Thomson, Epson (Seiko) and Nippon Precision Circuits. Implementations may range from gate arrays to full custom, and technologies from CMOS to bipolar and BiCMOS.
- ♦ Interfacing with our ASIC development is flexible as shown below. Five design reviews are included to guarantee design quality and the fulfillment of customers requirements.

- Our comprehensive CAE system utilizes the most efficient tools for switched capacitor filter synthesis, analog and digital simulation, full custom, symbolic and automatic layout as well as test generation. A special switched capacitor synthesis tool "MASFIL" is also available to our customers.
- Our libraries include characterized and documented analog and digital cells and blocks. To optimize your design our ASIC services include fast development of new fully verified cells.
- Our own wafer fabrication facility together with in-house assembly guarantees fast prototypes production.
- Our in-house test system consists of state of the art mixed signal testers equipped with automatic wafer probers and component handlers. Automatic test pattern generation and translation to tester format make development time short. DSP based techniques in analog testing provide high speed, accuracy and repeatability.

DEVELOPMENT FLOW FOR FULL CUSTOM ASICS



* Optional