

Mixed-Signal Products

Mixed-Signal Design Services

Fact Sheet

December 2014



FEATURES

- ☐ Comprehensive support from design conceptualization through long-term production
- ☐ Over 150 man-years of custom mixed-signal design experience
- ☐ Full service manufacturing capabilities including in house assembly, test, environmental screening, and failure analysis
- ☐ Production proven success in all major markets
 - Commercial/Consumer
 - Industrial
 - Medical
 - Automotive
 - Communications
- ☐ Ability to leverage non-volatile memory with analog and digital circuitry for:
 - Analog circuit trimming
 - System configuration
 - IC identification codes
 - Data storage through power cycling
- ☐ Fab independent strategy provides:
 - Access to the most advanced process technologies available
 - Flexibility to utilize the process technologies to best fit the customers technical and cost requirements
- ☐ Scalable design library for mixed-signal ASIC design provides wafer fab and technology independence
- ☐ ISO-9001 and MIL-PRF-38535 certified

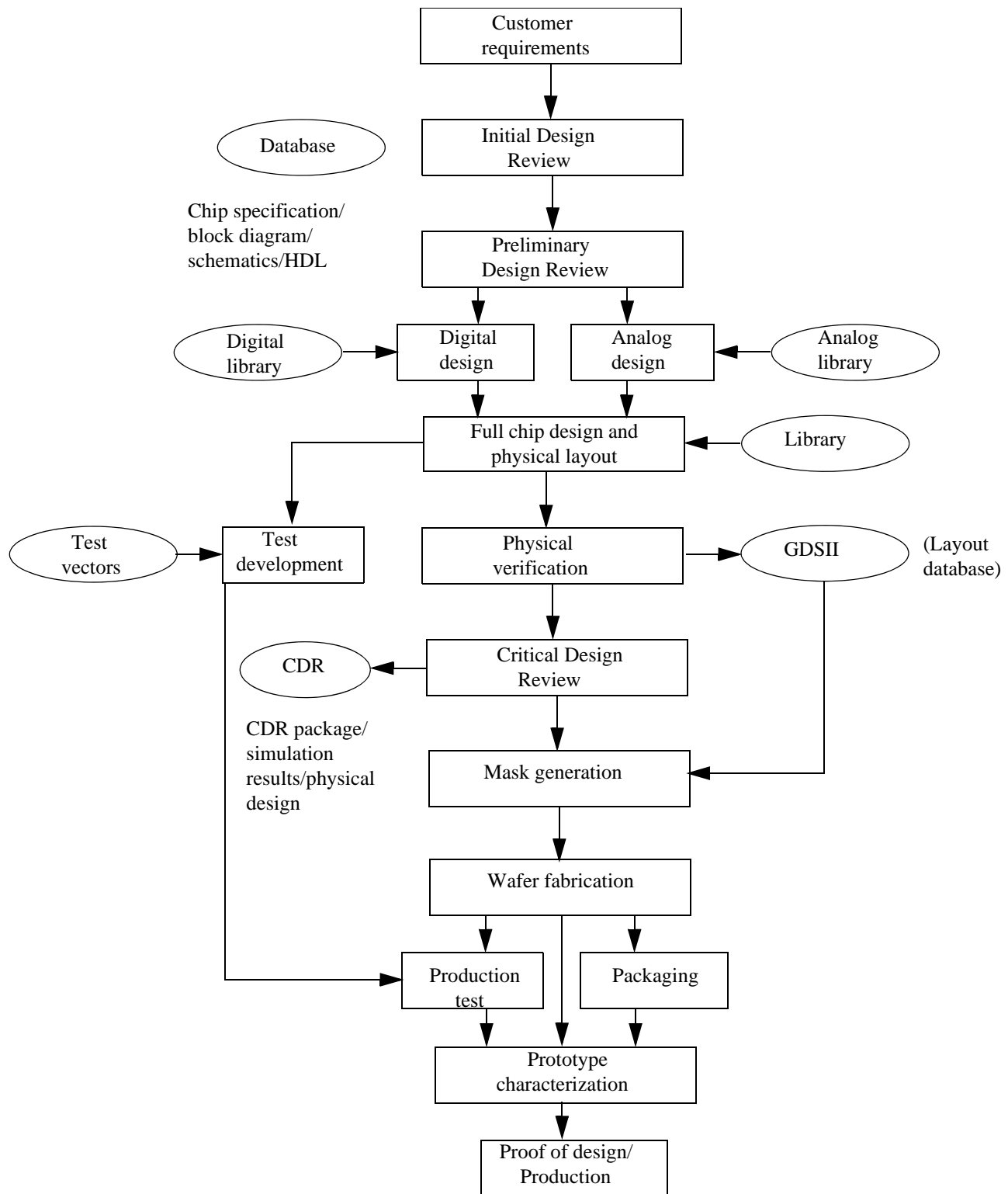
DESIGN EXAMPLES

- ☐ Spread spectrum receiver/transmitter ICs for wireless applications
- ☐ Low noise, low-level signal processors for medical diagnostic equipment
- ☐ Sensor Interfaces – Magnetoresistive, Hall effect, X-ray detectors, temperature, accelerometer
- ☐ RF Tag ICs

- ☐ Hearing Aid ICs
- ☐ Display drivers – LCD and LED
- ☐ Motor Controllers
- ☐ Data converters – A/D, D/A, C/F, V/F
- ☐ Battery charge Monitors
- ☐ Elapsed time and event monitors
- ☐ Security Devices
- ☐ Automotive gauges
- ☐ FPA Read-outs – IR, visible, magnetic

MACROCELL LIBRARY EXPERIENCE

- ☐ Band-gap references
- ☐ Switched capacitor circuits
- ☐ Data conversion
 - Sigma-delta converters
 - Flash ADCs
 - Current-to-frequency converters
 - Successive-approximation ADCs
 - Multistage amplifiers
 - Integrators
 - Charge balancers
- ☐ Voltage regulators
- ☐ Amplifiers
- ☐ Oscillators
- ☐ Power supplies
- ☐ Memory (single/dual-port RAM/ROM, nonvolatile EEPROM and latches)
- ☐ First-in/first-out (FIFO) memories
- ☐ Charge pumpers (Voltage doublers)
- ☐ Microcontrollers
- ☐ Watchdog circuits
- ☐ Bias generators
- ☐ Input/output circuitry (receivers, drivers, interfaces)
- ☐ Analog/digital phase-locked loops
- ☐ Pseudorandom noise generators
- ☐ Frequency generators
- ☐ Tone detectors
- ☐ Digital signal processors
- ☐ Self-powered circuits for tag applications



Mixed-Signal Design Flow