



austriamicrosystems 0.35 μm CMOS (C35)

Description

austriamicrosystems' 0.35 μm CMOS process family is fully compatible to the 0.35 μm mixed signal base process licensed from TSMC. The high density CMOS standard cell library optimized for synthesis and 3- and 4-layer routing guarantees highest gate densities. Peripheral cell libraries are available for 3.3 V and 5 V with high driving capabilities and excellent ESD performance. Qualified digital macro blocks (RAM, diffusion programmable ROM and DPRAM) are available on request. A variety of high performance analog-to-digital and digital-to-analog converters can be provided for integration on the same ASIC. Digital, Analog and Mixed Signal Systems.

Applications

Digital, Analog and Mixed Signal Systems

Key Features

- 0.35 μm CMOS polycide-gate process
- Four unrestricted layers of metal
- Second layer of poly for linear capacitors and linear resistors
- Peripheral cells with high driving capability
- High performance digital and mixed signal capabilities

Key Specifications

- C35B3C3 2P/3M 3.3V CMOS 3 Metal, Mixed Signal, PIP, high-res poly, 5V periphery
- C35B4C3 2P/4M 3.3V CMOS 4 Metal, Mixed Signal, PIP, high-res poly, 5V periphery

General Characteristics

- p substrate
- Pseudo twin-well CMOS
- stacked contact, via, via2, via3
- Minimum Feature Size: 0.35 μm gates
- Supply Voltage: CMOS 3.3 V; periphery up to 5.5 V
- Gate Delay: 0.10 ns (NAND2 typical)

Standard Cell Libraries Digital Library

- Core cells optimized for synthesis
- Qualified digital macro blocks (RAM, diffusion programmable ROM and DPRAM)
- Delay NAND2 - 0.1 ns
- I/O cells with 3.3 V and 5 V
- Maximum Junction temperature 125 deg C

- SYNOPSIS:
Digital standard cell libraries

- CADENCE:
Digital and mixed-signal HIT-Kit for Analog Artist
Build Gates synthesis libraries

- VERILOG Simulation Models
Digital standard cell libraries for SoC Encounter
Spectre simulation parameters
Device layout generators (pcells)
RAM, ROM, DPRAM compilers in qualification

- Simulation Parameters for:
 - ELDO, HSPICE, PSPICE, SABER, SMASH, SPECTRE, ADS
 - Characterised at 3.3 V operation

Analog Macro Library

Not available through EUROPRACTICE. Available directly from austriamicrosystems.
EUROPRACTICE can provide the contact address.