Aeroflex Mixed-Signal Products Overview

BUSINESS
Develop advanced, high-quality captive and open market semiconductor solutions and subsystems utilizing our recognized expertise in mixed-signal design (especially high dynamic range, high density data conversion) and systems integration.

HISTORY
Formed in 2000 by Aeroflex. Current supplier to several Fortune 500 companies in the x-ray imaging (medical and security), POS, and magnetic card reader markets.

TEAM
Aeroflex Colorado Springs, now a Cobham Company, Mixed-Signal Team has 30+ employees with 3 design centers (located at Colorado Springs, CO, Aliso Viejo and Grass Valley, CA)

CAPABILITIES & INTELLECTUAL PROPERTY
High Density (>256 channels), High Performance (~17ENOB) Σ–Δ ADCs
High Speed Flash & Pipelined ADCs
Switched Capacitor Signal Processing
Clock Generation – PLLs, Oscillators (RC & XTAL)
Voltage References & Regulators – Bandgap, LDO & Switching
Custom (Dedicated) DSP
True Mixed-Signal System on Chip Integration (µC+memory+analog+digital)
Interface Circuitry – RS232/RS485/USB/SPI/2Wire
Non-volatile memory – EEPROM, High-Speed FLASH, Proprietary Metal OTP
Third Party Digital IP – controllers, interface, SRAM, standard logic
Low Power/Portable Design Experts
Bi-Polar Power Supply Expertise (e.g. +5V/-5V/GND)
RadHard Mixed-Signal Expertise
Custom Package Development
QML-Q/QML-V/AS9000/ISO-9001 Certified
Fully Equipped FA & Reliability Labs On-Site

DESIGN EXAMPLES
256 Channel Medical Imaging Device – Concurrent data conversion on all channels. 20 bit output, 17ENOB, Data Filtering, Regulation, Custom Package Development

Universal Interface Device – System on Chip supporting RS232, RS485, USB1.1, OCIA, and Keyboard Wedge which integrated an embedded 8051 processor, 2 FLASH blocks, 2 RAM blocks, clock multiplier PLL, RC oscillator (+/-1% over all conditions), bandgap reference, and voltage regulators

Magnetic Card Reader ASIC - 3 channel magnetic head reader to amplify, filter, qualify, and digitize ISO7811magnetic card data. Low noise automatic gain control amplifiers, data converters, digital logic, precision oscillator. Low power sleep and shutdown modes.

CONTACT: Info-ams@aeroflex.com or www.aeroflex.com/mixedsignal