TLSI

Telephonics Large Scale Integration

TLSI possesses extensive experience and expertise in the design and manufacture of digital and mixed-signal, custom Application Specific Integrated Circuits (ASICs) and has been successfully relied upon by customers in the automotive, industrial, defense/avionics and smart energy markets for over 30 years.

Meeting Stringent Requirements

From initial specification and throughout the entire ASIC development process, including definition, qualification and volume production, TLSI's engineers and knowledgeable supply-chain partners work in lockstep with customers to meet even the most stringent program requirements.

ASIC Development Success

As a leading-edge, fabless semiconductor company, TLSI has designed and delivered nearly 400 mixed-signal custom ASICs with a proven history of 90% first-time silicon success. Our cost-effective design optimization reduces size, weight and power while increasing system reliability and securely protecting IP. TLSI's form, fit and function, pin-for-pin and identical replacement devices, as well as our 20-year production guarantee mitigate customer risk and provides peace of mind. We also possess expertise in high-temperature and rugged/harsh-environment solutions.

World-Class ASIC Design Team, Expertise and Know-How

- High-performance analog and mixed-signal ASICs
- PMICs and isolation IP
- Mixed-signal System-on-Chip (SoC)
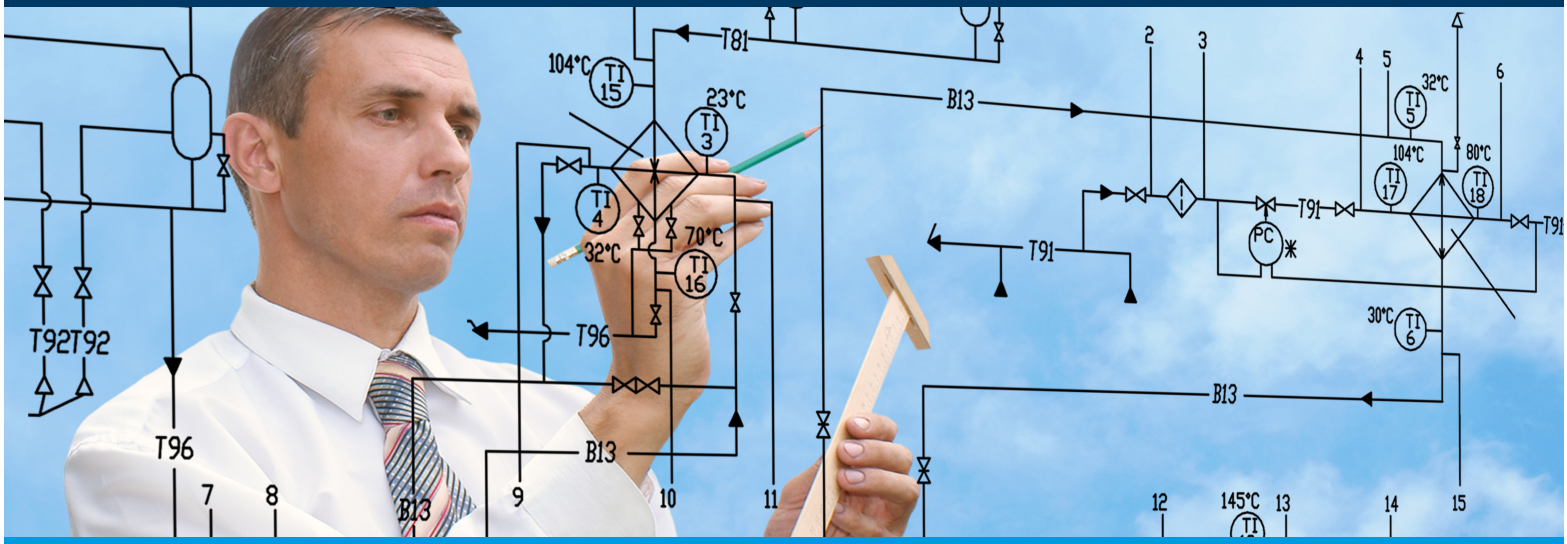- True second sourcing and End-of-Life (EOL)/DMSMS IC replacement

Certifications and Production Flows

- High-volume production and logistics
- AEC-Q100 automotive standards
- DO-254 avionics standards
- Full Mil and ITAR compliance

38 Years of Success with Global Tier-1 OEMs

- Complete design and manufacturing with >97% on time delivery
- Over 90% first-time silicon success with nearly 400 ASICs
- 20-Year production guarantee and buffer stock inventory

CMMIDEV/3℠
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Advanced Capabilities

High Performance Analog

Working in advanced CMOS, BiCMOS and Bipolar processes, TLSI develops system architectures to solve tough commercial, high-voltage, high-temperature and harsh-environment challenges.

Mixed-Signal SoC

Specializing in complex digital, high-performance analog and high-speed I/O integration, TLSI's SoC solutions can be optimized to meet critical program requirements such as low-cost, low-power and high-voltage.

Sub 1 V to 200 V Monolithic Silicon
- Advanced CMOS and Bipolar processes

200 V Switch Isolation Technology
- Integrated proprietary isolation IP

Data Converters
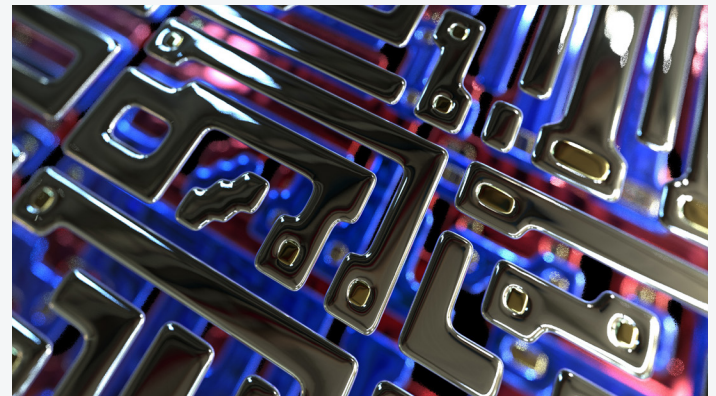- SAR, Delta Sigma, Pipeline ADCs

Inductive Drive
- Complex switched coil loads

Sensor Interface
- Temperature, pressure and vibration

Automotive Bus Interface
- LIN, CAN

Microprocessors
- Low power 8- and 16-bit

System Timing
- PLL and clock distribution

Power Management ICs
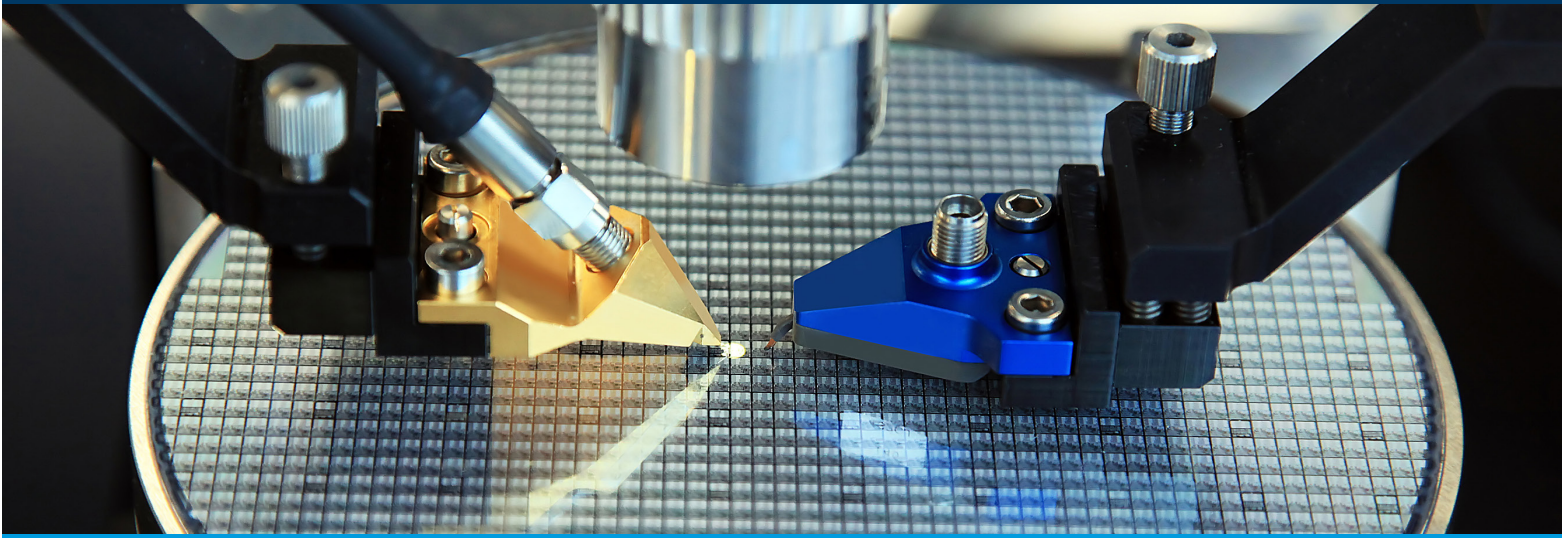- Power ramp timing and control

High Performance Amplifiers
- Precision audio to GHz communication

Advanced Packaging

- Chip on Film (COF)
- Multi-chip modules
- Known Good Die (KGD)
- Enhanced thermal performance

TLSI ® **Silicon Driven**
Telephonics Large Scale Integration

Industrial Applications

- Two-wire transmitter
- ACD ASIC, ECP ASIC
- Communications IC
- Detector, interface ASIC
- Enhanced communications IC
- Low-voltage encoder

- Multi-plexer ASIC
- Speech playback
- PIR detector
- Print head driver
- Security tag
- RF encoder

- Rate of rise temperature detector
- Smoke detector
- Sounder ASIC
- System timer ASIC

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Automotive Applications

- Rear windshield wiper
- Rear window defogger
- Microprocessor buffers
- Dual battery control
- Fuel injection control
- Engine and ignition control
- Fuel, oil and coolant level sensors
- RFID tags and keyless entry
- Radar detectors
- Dashboard indicators
- Electronic horn
- Pressure sensor
- Chime and light control
- Steering wheel, torque converter
- Air conditioning
- Air bag control
- One-touch window controller
- Transmission SoC

Defense/Avionics Applications

- Munitions fuses
- Smart munitions
- Vision systems
- Cockpit flight systems
- Navigation systems
- Fire control systems
- Instrumentation
- Lighting control
- Displays
- Battery management
- Test equipment
- Radiation tolerant environs
- Obsolete IC replication
  - Standard products to ASIC
  - ASIC to ASIC
  - FPGA to ASIC
  - System integration

For additional information, contact TLSI at 631.470.8851 or visit www.telephonics.com/tlsihome.php

TLSI® Silicon Driven
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