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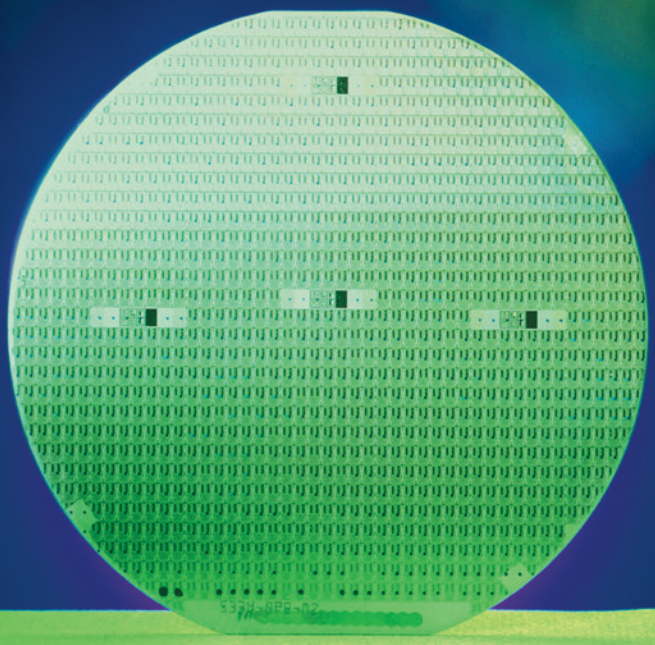
ON Semiconductor®

Energy Efficient Innovations

Custom Design & Manufacturing Services



An extensive offering of custom products, processes, and services from ON Semiconductor.

www.onsemi.com

Optimize Your Board Design and Cost Using

Benefits to Customers

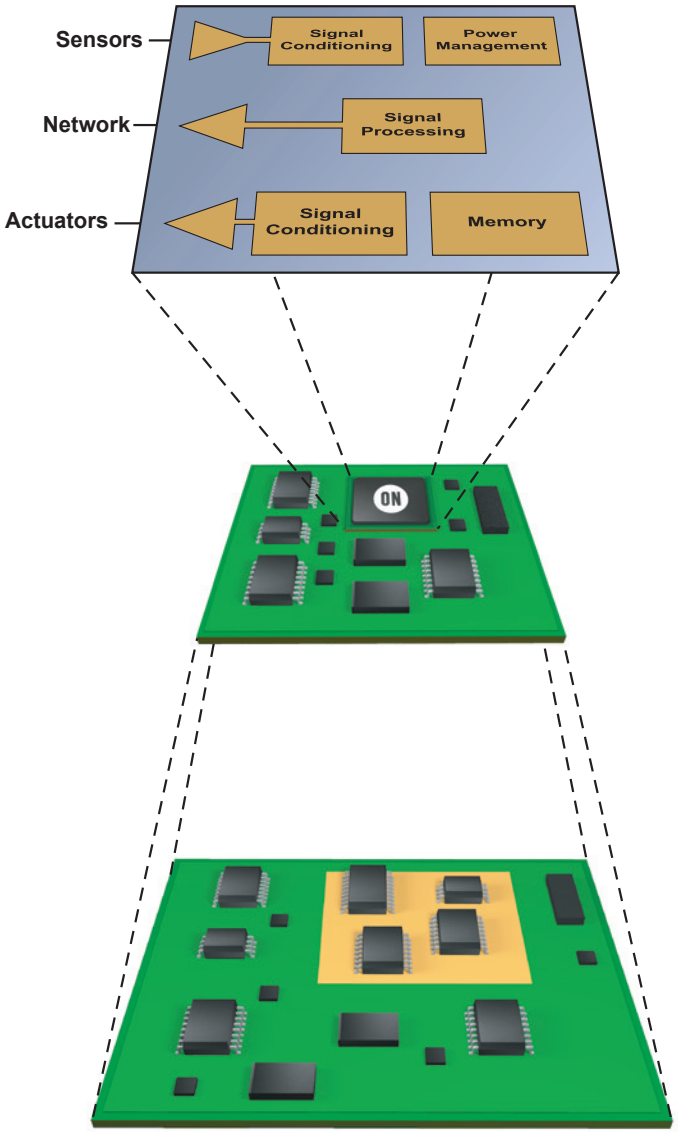
- ON Semiconductor coordinates specification, design, manufacturing, packaging, testing, and delivery of production ASICs
- Enhance product differentiation with features unavailable in standard solutions
- Save energy with efficiencies gained through integration and design optimization
- Save board space by miniaturizing product size through integration and advanced packaging options
- Protect IP investment through hardware embedding
- Reduce cost in overall application
- Improve reliability by reducing the number of components and interconnections
- Reduce noise by eliminating inter-package connections

Trusted Supply Chain

- DMEA accredited Trusted Foundry and Trusted Broker
- Directly owned and operated fabs
- In-house test facilities
- Flexible packaging options from unsorted wafer sales to assembled, final-tested units
- Long-term supply chain security reduces exposure to obsolescence
- World-class customer service
- Supply chain services (buffer stocking, VMI, die banks, distribution)

Quality & Reliability

- Fab technologies built to strenuous quality & reliability standards for automotive, implantable medical, and military customer requirements
- Internally owned, managed, and controlled fabs
- Best-practice Q&R methods, tools, systems, and engineers used for quality improvement
- In-house failure analysis and EMC/EMI labs



Customized Solutions from ON Semiconductor

Custom Product Capabilities

- Application Specific Integrated Circuits (ASIC)
  - » Mixed-Signal ASICs for Automotive, Industrial, Medical and other markets
  - » Digital ASICs for Mil/Aero, Industrial, Communications and other markets
  - » FPGA-to-ASIC and ASIC-to-ASIC conversions
- Integrated Passive Devices for portable, wireless and RF applications
- Electro-optical products
  - » CMOS image sensors for machine vision, medical, 2D barcode, military, and space applications, with broad IP portfolio
  - » Light sensors for consumer and industrial applications
  - » Scanner modules for banking, gaming, and data processing applications
- Virtually any device in our expansive portfolio of power management and discrete components can be customized
- Customized packaging

Tools and Processes

- Fully certified and robust custom development process
- Wide range of CMOS and BCDMOS process technologies, from mature to leading edge geometries
- AEC-Q100 qualified smart power technologies up to 100 V
- High reliability and extreme temperature ranges
- Certified, directly owned, 6” and 8” wafer fabs
- Process longevity supports extended product life-cycles
- ESD protection up to 8 kV in-system
- EMC/EMI lab
- Reliability and Failure Analysis lab

Expertise

- More than 40 years of custom silicon experience
- Over 5,500 successful designs
- World-class rankings
  - » #1 FPGA-to-ASIC Conversion Supplier
  - » #1 in Industrial & Other Analog ASIC[1]
  - » #1 in Ultra-High-Speed CMOS Image Sensors
  - » #1 in Radiation Tolerant, Space Qualified CMOS Image Sensors
  - » #2 in Overall Analog ASIC[1]
  - » #3 Mil/Aerospace Digital ASIC Supplier
  - » #3 Automotive Mixed-Signal ASIC Supplier
- Thousands of custom products in production
- Extensive system knowledge in focus application fields
- Hundreds of proven, IP block ‘starting points’ are available

People

- System architects review your product concept and architecture and provide feedback
- Team of highly skilled, experienced silicon, packaging and test engineers craft your product
- Dedicated program managers track and report development progress

Certifications

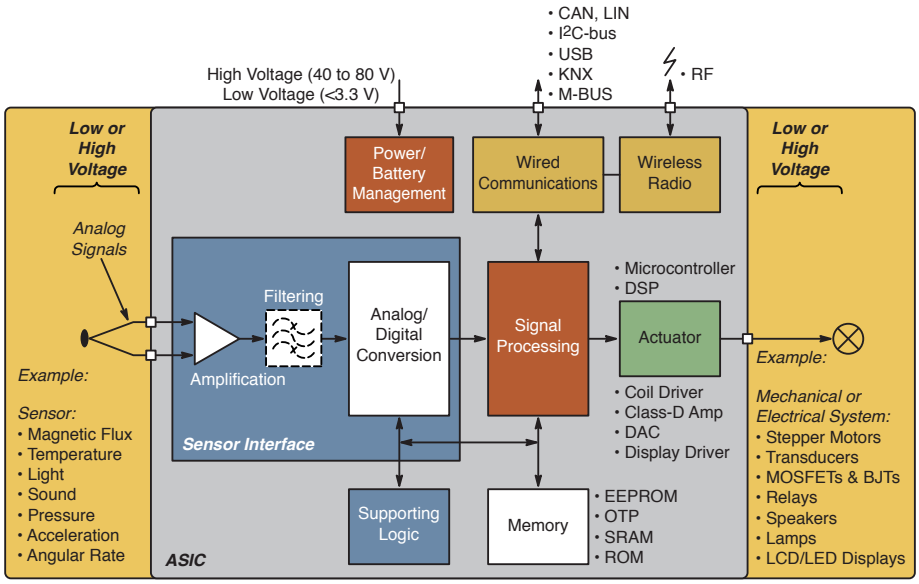
- ISO/TS 16949:2009
- AS 9100 Rev. B
- MIL-PRF-38535, MIL-PRF-19500
- Trusted Foundry Accreditation
- ISO 9001:2008
- ISO 14001:2004
- QML, CTPAT, STACK

1. iSuppli, Competitive Landscaping Tool (3Q10 Update)

Mixed-Signal Custom Solutions

Value Proposition

- Experienced resources and assets to bring customers' design objectives successfully to market
- Ability to integrate customers' IP into single-chip solution, thereby protecting the IP
- Flexible cost models to reduce customers' total cost



Design Engineering

- Approximately 200 expert mixed-signal designers with extensive SoC and SiP experience
- Robust custom development process
- Dedicated project managers track & report development progress
- Flexible customer development engagement – from full turnkey to subcontractor production services
- Design expertise in:
  - » Sensor interface
  - » Wireless systems
  - » Medical imaging
  - » Energy management
  - » Building & home control

IP & Fab Processes

- ≥55 nm, analog-focused CMOS/BCDMOS process technologies utilizing internal fabs and external foundry partners
- Low, medium, high voltages – ≤1 V to 90 V
- Low current optimization – active & standby
- Low noise design – "count the electrons"
- High temperature – ≤200°C (profile, for selected technologies)
- Integrated low power wireless
- Non-Volatile Memory (EEPROM, OTP), RAM & ROM
- Embedded digital IP
- Robust ESD protection
- Extensive building block 'starting points' consisting of amplifiers, references, DACs, ADCs, linear & switching regulators, power management, etc.

Category	Mixed Signal Intellectual Property (IP)
Serial Interfaces	USB 3.0/2.0/1.1, HDMI, MIPI, I2C, SPI, CAN, UART
Microprocessors	ARM, RCore DSP, R8051, AMBA/AHB/APB Peripherals
Memory	SRAM, DPRAM, ROM, EEPROM, OTP, FLASH
Clocking	Oscillators, PLLs, DLLs
Communication	Wireless (Proprietary & Standards), Wired (KNX, PLC and others)
Encryption	ECC, AES, 3-DES, DES, RSA
Data Converters	DAC, ADC (8 - 20 bits, 1 KSPS – 120 MSPS)
Wireless IP	PGA, LNA, PLLs, Correlators, DSP
Power Management	Efficient Switching Regulators, LDOs, Charge Pumps, Thermal Protection
References	Precision Bandgaps, Current References, Temperature Sensors
Analog and High Voltage Interfaces	High-Voltage Drivers, Display and LCD Drivers, Class D Amplifiers
Signal Conditioning	PGA, Instrumentation Amps, Digital and Analog Filters

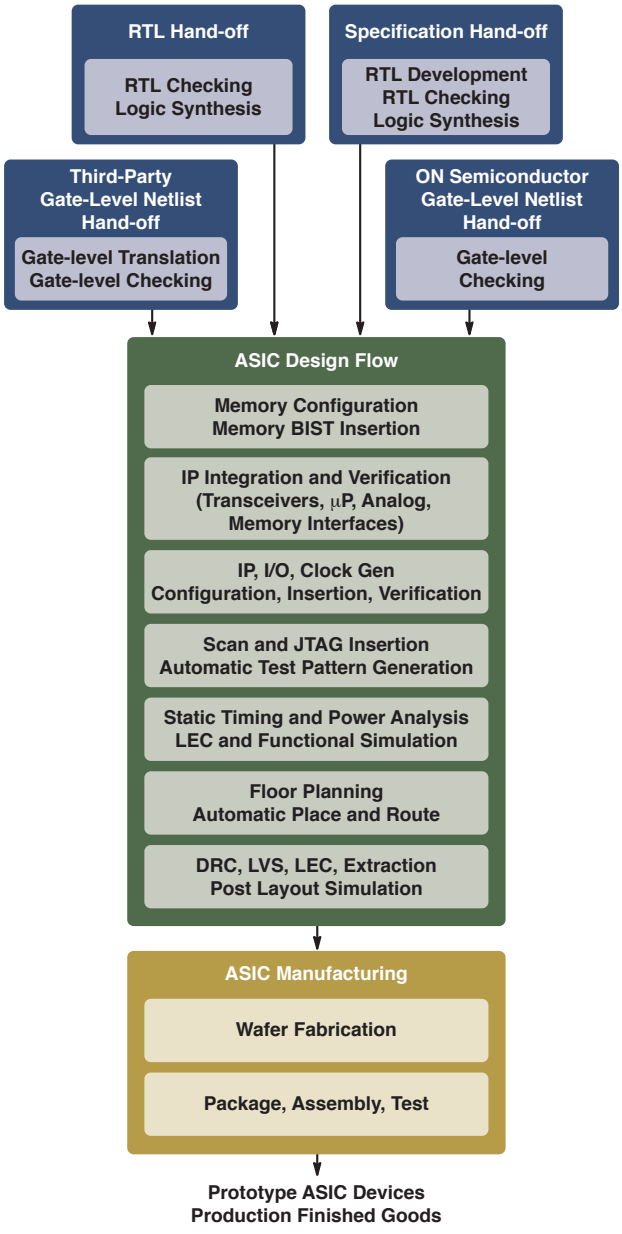
Digital ASIC Solutions

Proven Expertise

The comprehensive digital ASIC offering from ON Semiconductor includes multiple manufacturing locations with state-of-the-art to legacy technologies to support your design requirements. We provide complete solutions from product development, manufacturing, test, and packaging, to quality engineering support and supply. We offer early engagement with our System Architects to assess the best overall technical solution enabling a strong partnership throughout each step of the project lifecycle, from concept to production. ON Semiconductor supports reliable long-term manufacturing to meet the requirements of mil/aero, industrial, communication and other markets. With more than 40 years of IC experience, we guide our customers to the best technical and most economical ASIC solution.

Solutions for Your Requirements

- Complete value stream offering including product development, test, package engineering, quality engineering, and failure analysis
- Proven state-of-the-art and legacy technologies
- System architects consultation for best overall solution
- Extensive IP offering
- Secure, long term, continuous supply
- Support of small volume applications
- Multiple design interface support (RTL, Netlist, GDS, etc.)
- FPGA-to-ASIC, ASIC-to-ASIC, and multi-chip-to-ASIC conversions
- Big D (Digital) / Small A (Analog) ASIC capability to increase integration and simplify board design
- High reliability, high temperature, special packaging and handling
- Full ITAR handling available
- DO/254-ED80 compliance solutions



Digital Standard Cell Product Families

Standard Cell Product Families

Family	Core Voltage	I/O Voltage	I/O Types	System Performance	Special Features
SC5 0.5 µm	5 V	5 V, 3.3 V	PCI, TTL, LVTTL, LVCMOS	75 MHz	Long-Term 5 V Support, High Temp
SC3 0.35 µm	3.3 V, 2.5 V	5 V, 3.3 V	PCI, GTL, HSTL, SSTL, LVTTL, LVCMOS, LVPECL	100 MHz	EEPROM, High Temp
ONC18 180 nm	1.8 V, 1.5 V	3.3 V, 2.5 V, 1.8 V	PCI, DCI, HSTL, SSTL, LVTTL, LVCMOS, LVPECL, LVDS	266 MHz	NVM, OTP, High Vt, High Temp
SP110 110 nm	1.2 V	3.3 V, 2.5 V, 1.8 V, 1.5 V, 1.2 V	PCI, DCI, HSTL, SSTL, LVTTL, LVCMOS, LVPECL, LVDS, CML	450 MHz	OTP, Dual Source Capability, Mil Temp
SP65 65 nm	1.2 V, 1.0 V	3.3 V, 2.5 V, 1.8 V, 1.5 V, 1.2 V	PCI, DCI, HSTL, SSTL, LVTTL, LVCMOS, LVPECL, LVDS, CML	600 MHz	Extensive IP Portfolio
SP40 40 nm	1.1 V, 0.9 V	3.3 V, 2.5 V, 1.8 V, 1.5 V, 1.2 V	PCI, DCI, HSTL, SSTL, LVTTL, LVCMOS, LVPECL, LVDS, CML	850 MHz	Extensive IP Portfolio

Comprehensive Intellectual Property Offering

ON Semiconductor offers a suite of system IP suitable for a variety of applications, including those requiring high-speed serial I/O (SerDes), external high performance memory interfaces, processors and a variety of other hard and soft IP. Combined with support for a rich family of I/O standards, our digital ASIC technologies and IP provide optimal solutions for military/aerospace, communications, industrial, consumer, computing, and medical applications. ON Semiconductor is an ARM® microprocessor licensee, and has access to multiple ARM cores for integration into silicon products.

Category	IP Cores
Hi-Speed SerDes	PCI Express Gen 1/2/3, XAUI, SATA I/II/II, EPON, Serial Rapid I/O (SRIO), 1G Ethernet, 10G Ethernet
Source Synchronous Links	Multiprotocol memory interface (DDRx), System Packet Interface
Serial Interfaces	USB 3.0/2.0/1.1, HDMI, I2C, CAN, UART
Application Layer Support	10/100 Ethernet, 1G Ethernet, 10G Ethernet, PCI Express Gen 1/2/3, SATA I/II/III, SRIO, USB 3.0/2.0/1.1, DDRX Controllers, EMAC4, MII, RMII, SMII, XFI, HDMI
Bus Interfaces	PCI, AMBA/AHB, ARM7, PLB, PCMCIA
Microprocessors	ARM, PowerPC, R-Core, M8051, AMBA/AHB Peripherals
Memory Interfaces	DDR, DDR2, DDR3, QDR-II
Data Converters	ADC, DAC
Memory	SRAM, DPRAM, Register File, ROM
Clocking	PLLs, DLLs, MSDLL
Error Correction, Encryption & Anti-Tamper	ECC, DES, 3DES, Reed-Solomon, RNG, PK Processor, Secure SRAM
DSP Functions	FFT, Mult, Divide, Accumulate, Up/Down Converter, FIR
FPGA Conversion IP	Memory Wrappers, LUT RAM, I/O Standards, Hardware DSP Functions, FIFOs, Clocking Emulation

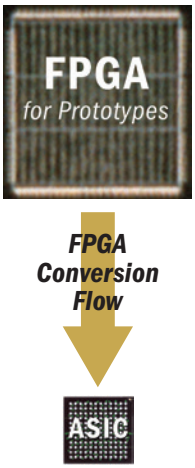
ASIC Conversions
FPGA-to-ASIC, ASIC-to-ASIC

ASIC Conversions and EOL Solutions

ON Semiconductor's End-of-Life (EOL) support program is designed to provide a long-term solution to customers facing device or process obsolescence with their current ASIC or FPGA vendor. We provide reliable second sourcing options as well as cost reduction solutions to help you maintain your competitive edge. Conversion of an older technology to an optimized ASIC solution can provide a mid-life kicker, enhancing your product performance and reducing cost.

FPGA Conversions

ON Semiconductor is the industry leader specializing in converting FPGAs to ASICs. We provide significant cost savings, performance enhancement, and product assurance. Our customers have been able to reduce system costs considerably by successfully substituting their high cost FPGAs with drop-in ASIC replacements in over 4,000 applications. In most cases, higher performance, lower power and better thermal performance can be achieved in the ASIC. ON Semiconductor offers a parallel development path for FPGA development. This leverages the FPGA development benefits while accelerating the path to production with an ASIC.



FPGA to ASIC Conversion

The Best of Both Worlds

METRIC	FPGA	ASIC	
Development Cost	▲		
HW/SW Co-Design	▲		
ECO Turn-Around	▲		
Time to Market	▲		
System Performance		▲	*Single-chip solution*
Power Consumption		▲	*3-4x typical power reduction with ASIC solution*
Unit Cost		▲	*ASIC price 25 to 75% of the FPGA piece price*
Security		▲	*No configuration boot-up vulnerabilities*
Non-volatility (LAPU)		▲	*Cold-start, Hot-swap enabling*
Life Cycle Support		▲	*ASIC production stability*
Harsh Environments		▲	*Radiation effects, flight-criticality, on-shore*

Conversion Features and Benefits

- Automatic design migration to a Standard Cell ASIC
- Low NRE, low cost drop-in replacements
- Multiple-to-one conversions for higher level of integration
- Original circuit functionality and performance maintained
- Optional performance enhancements for a competitive edge
- ASIC IP optimized for FPGA migrations
- Single-chip, non-volatile solution results in Live-at-Power-Up (LAPU); enhanced security; immunity to configuration logic errors resulting from SEE
- Significant reduction in power usage
- Improved cost through die size reduction
- Directly owned and operated fabs, plus access to industry standard third-party foundries
- Long fabrication process life
- On-shore production paths for most technologies

Integrated Passive Devices (IPD)

Efficient RF System-in-Package Solutions

Integrating passive devices into our HighQ™ copper platform gives a cost-effective, space-saving solution for all RF needs.

IPD Technology Characteristics

- Target frequency: 500 MHz to 40 GHz
- Low profile, minimal footprint
- Tight tolerance

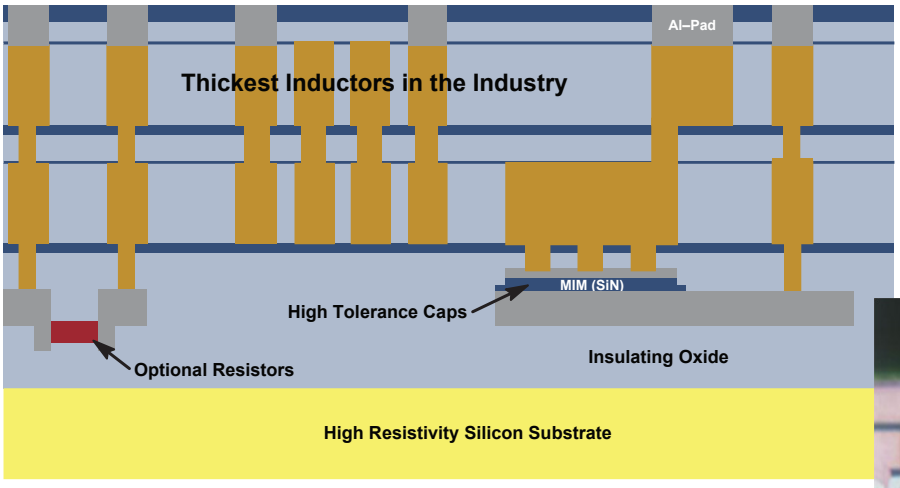
Typical Applications

- Antenna Switch
- WiFi/Bluetooth
- Power Amplifier
- Zigbee

Typical IPD Designs

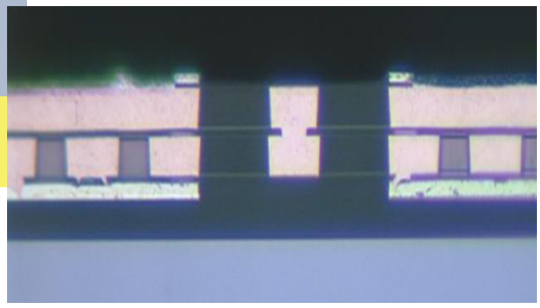
- Baluns
- Couplers
- Diplexers
- Balanced Filters
- Splitters
- Matching networks

IPD Technology (R, L, C)



Performance

- Guaranteed ±5.0% capacitor tolerance
- Typical < 1% variance between capacitors on common IPD
- Dual Cu stack up of 12 µm for high Q inductors

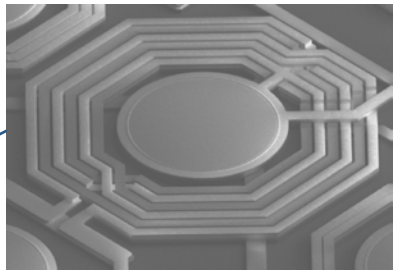


Dual Copper Stackup with Full Length Stitched Via

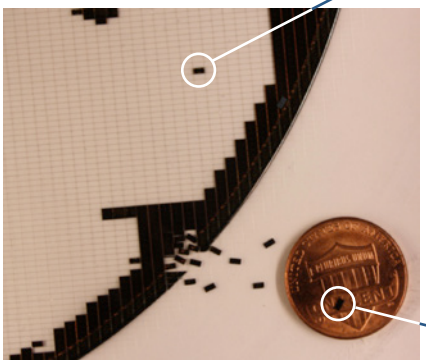
IPD Technology

Advantages

- Smaller than discrete solutions
- Thinner & higher precision than LTCC
- Lower cost than GaAs
- Best performance among silicon-based IPDs



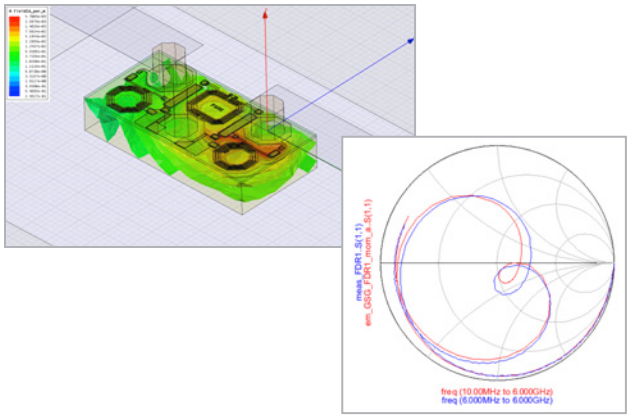
Inductor Coil



Dual Low Pass Filter

State of the Art Fab

- Standard Mechanical InterFace system (SMIF) results in high and consistent yields
- Located in Gresham, Oregon
- Fab Certifications:
  - » ISO14001
  - » ISO/TS16949
  - » AS9100B
  - » OHSAS18001
  - » QML (DoD)
  - » ITAR (DoD)
  - » Trusted Foundry Status



Design and Foundry Services

- Complimentary feasibility study
- Design services available
- Self-service design with full featured PDK for Cadence and Agilent
- Four 8-inch dedicated prototype wafers
- Shuttles with multiple designs/variants

Custom Foundry Services Overview

ON Semiconductor has a broad portfolio of custom and standard foundry offerings, including mixed-signal processes and the HighQ℠ copper-on-silicon integrated passive device (IPD) process.

Our mixed-signal processes with high voltage and low power options are ideally suited for products in sensor applications and in the communication, mil/aero, automotive, medical and industrial markets.

The HighQ copper-on-silicon IPD process offers cost competitive technology produced in an advanced 200 mm manufacturing facility and is ideal for RF applications.

Other offerings include front-end services, such as probe, silicon ingots and custom short flow wafer processing, and back-end services, such as backgrind, packaging, test, and logistics.

Service Oriented

ON Semiconductor understands customer needs and is dedicated to meeting them, from unsorted wafers to tested and packaged units. Customers are paired with a single contact for all business and technical issues for consistent support from initial engagement to production.

With high quality manufacturing facilities in the U.S., Europe and Asia, ON Semiconductor delivers prompt, cost-effective solutions to electronic manufacturers worldwide.

Our technology is design ready with excellent, easy to download design kits through MyON link on the **www.onsemi.com** Web site.

Secure Partner

ON Semiconductor has put extensive protection in place to safeguard valuable customer IP. Trusted Foundry Certification was received in 2012.

Quality Certifications

ISO/TS 16949, ISO 9001, AS 9100, ISO 14001, MIL-PRF-38535, CTPAT, STACK, and QML.

Process Longevity

ON Semiconductor's philosophy for process longevity means we keep needed processes around to accommodate your long-term needs. We are committed to supporting long-life products and are dedicated to building long-term relationships. Supporting this is the company's financial strength and commitment to effective use of resources. As a result, our customers have the confidence to make long-term product decisions without the concern of process obsolescence.

Process Name	Min Drawn Poly (μm)	No. Metal Layers	Wafer Size (in)	Max Operating Voltage (V_{gs})	NVM	Linear Cap	Trans Char	Other Devices
I4T 45V75V*	0.18	4-6	8	1.8/3.3	Y	MIM	Salicide	Resistors
ONC18 18V18V*	0.18	4-6	8	5/18	Y	MIM	Salicide	Resistors
ONC18 5V30V*	0.18	4-6	8	1.8/5	Y	MIM	Salicide	Resistors
ONC18G/MS	0.18	4-6	8	1.8/3.3	Y	MIM	Salicide	Resistors
ONC25	0.25	2-5	8	2.5/3.3/5	Y	MIM	Salicide	Misc
ONBCD25	0.25	2-5	8	5/12	Y	MIM	Salicide	Misc
C3/D3	0.35	3-5	8	3.3/5	Y	PIP	Salicide	Resistors
I3T25	0.35	3-5	8	3.3/12	Y	MIM	Salicide	Resistors
I3T50	0.35	3-5	6 & 8	3.3	Y	MIM	Salicide	Misc
I3T80	0.35	3-5	6 & 8	3.3	Y	MIM	Salicide	Misc
C5	0.6	2-3	8	5/12	Y	PIP	Poly	Misc
I2T30	0.7	2-3	6	5	N	PIP	Poly	Misc
I2T100	0.7	2-3	6	5	N	PIP	Poly	Misc

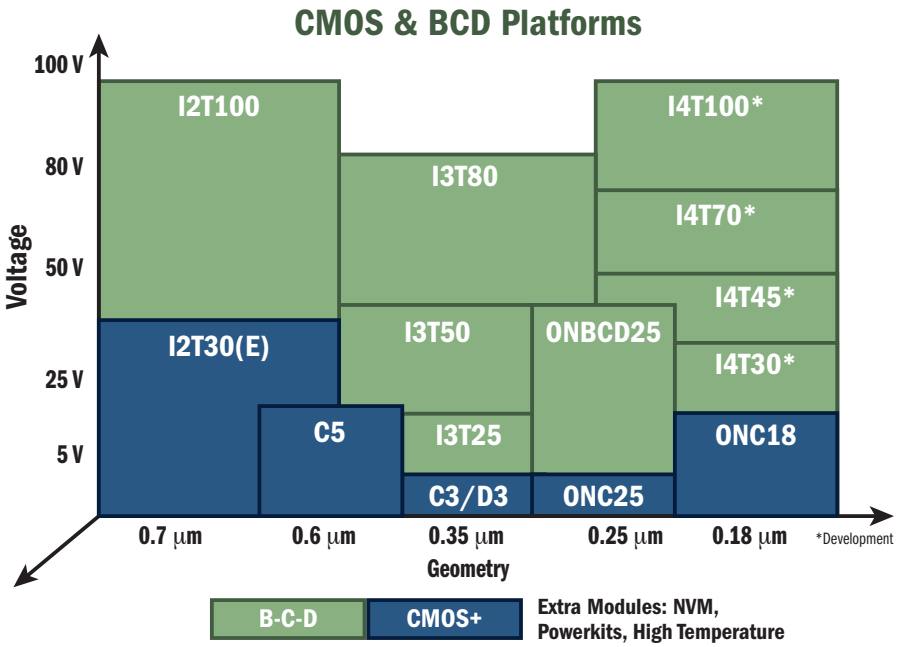
Specialty Offerings

• Integrated Passive Device – HighQ Copper-on-Silicon IPD for RF Baluns, Filters, 3D Cap, etc.	• Assembly & Sort / Test Processing
• MOSCAPS	• Low Temperature Coefficient TaN Resistor
• Partial Fab Processing	• Thru Silicon Via

* Pending 1Q14

Flexible Manufacturing

- Wide variety of standard CMOS, BCD and high voltage process offerings
- Flexible manufacturing available (process modifications, lot splits, etc.)
- Multiple fab strategy with dual sourcing possible
- Specialty services such as advanced die stitching, shuttle services for prototyping in 0.25 μm and 0.18 μm technologies
- Low volume strategic engagements
- Partial fab processing, and assembly and test services



Our commitment to long-term technology support and a wide range of process offerings enable our customers to provide the highest quality end products at the most cost effective rate.

Custom ULP Memory

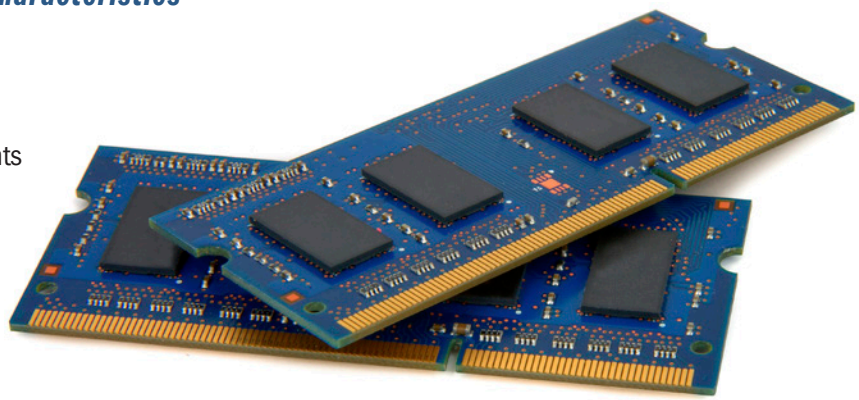
In addition to our standard ultra-low power SRAM products, ON Semiconductor can also supply a variety of custom and semi-custom memory intensive offerings.

SOC Products with Large and Varied Memory Arrays

- Built-in die level ID traceability
- Built-in design for test circuitry

Customized SRAMs with Unique Operating Characteristics

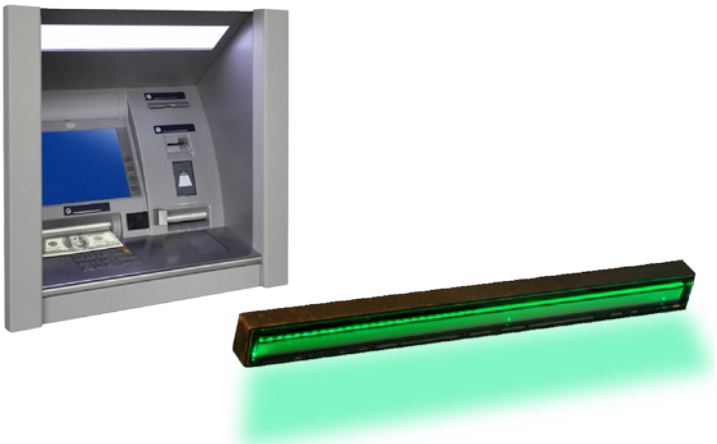
- Low voltage ~1.0 V operating power supply
- Typical standby currents as low as 50 nA
- Built-in design for test circuitry
- Customized testing around customer requirements
- Soft error protection expertise
- Advanced packaging and die stacking



Custom Electro-Optical Solutions

ON Semiconductor supplies fully assembled CIS modules for scanning applications, such as currency verification, gaming, and balloting machines. Our devices leverage the performance benefits of CMOS active pixel technology over CCD devices providing superior noise performance. Due to design expertise and flexibility, the company can provide quick turn around times from concept to production.

Our industry leading custom light sensor solutions combine our expertise in silicon photo-diode technology, analog and digital circuit design and custom optical filters to provide individual customers with unique and innovative solutions for ambient light sensors and optical proximity sensors. Custom light sensors perform in applications such as smart phone gesture detection and display power management; TV screen intensity management; and general LED lighting intensity control.



Light Sensor Features and Options

- Ambient light sensors
- Proximity sensors
- Integration of optical sensors, LED drivers and high speed digital interfaces
- Custom optical filters can mimic human eye light response or other desired behaviors
- Accurate low light level operation, especially in the presence of filtering and smoked glass
- Analog or digital outputs
- Linear or logarithmic outputs
- Very low power consumption

CIS Module Features and Options

- CMOS based linear image sensors
- Internally owned and operated fabrication facility
- Flatbed, sheet-fed style
- Resolutions from 50 to 1,200 dpi
- A3 to A8 and custom scan widths
- IR to UV LED illumination (white, red, green, etc.)
- RGB, single, or multiple LED colors in either light pipe or bar
- 1 MHz to 20 MHz (4 x 5 MHz) scan speed
- Analog, binary, inverted and multi-channel outputs
- Trilinear color sensors
- Fixed or programmable resolution, high scan speed, extended temperature range
- Reflective and transmission illumination methods

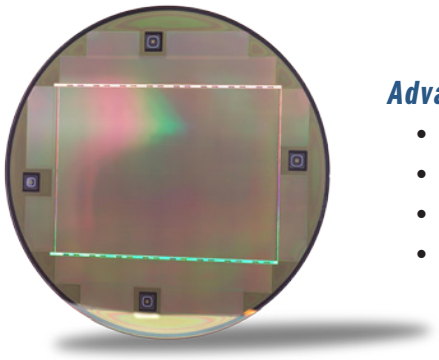
Photodiode Array Features and Options

- Self-scanning solid-state linear imaging arrays
- Optimally designed for spectroscopy applications with high dynamic range
- Large signal-to-noise ratio
- 65 pC saturation capacity
- Wide spectral response (180 – 1000 nm) for UV and IR response
- UV damage resistance
- Low dark current
- Integration time up to 9 seconds at room temperature
- Integration time extended to hours by cooling
- High linearity
- Low power dissipation (less than 1 mW)
- Geometrical structure for enhanced stability and registration
- Standard DIP-22 package

Custom CMOS Image Sensor Solutions

ON Semiconductor offers custom and application-specific CMOS image sensors that help our customers create unique products with state-of-the-art performance. Custom designs can be based on internally developed parametric functional blocks or a radical new approach, resulting in previously unseen performance and functionality.

Proprietary design and manufacturing technologies from ON Semiconductor help to optimize key parameters and create the perfect fit for our customers' applications. Pixel size, shape and global/rolling shutter, saturation and noise level, dynamic range and sensitivity, outputs and frame rate are defined per the customer's needs.

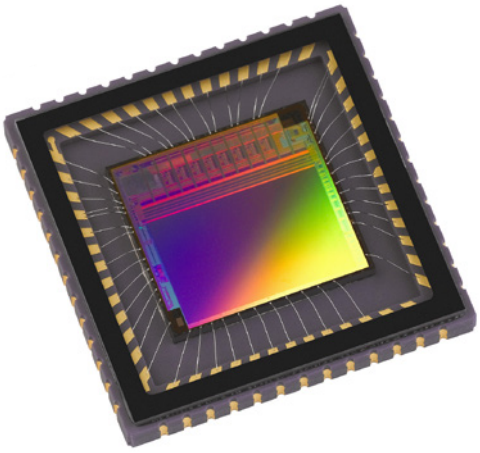


Advantages

- Full flexibility in specifications
- Create key differentiators in the end application
- Long-term supply chain security
- High level of architectural and operational flexibility resulting in optimized performance

Custom CMOS Image Sensors Capabilities

- Frame rates up to 18 K frames per second at Megapixel resolution
- Windowing to 1 M frames per second
- Sensor sizes from less than 1 mm by 1 mm up to wafer scale
- Radiation tolerant designs
- ADC's in 8, 10, 12, 14 and 16-bits
- High speed parallel and serial digital outputs
- Various application optimized pixel architectures
- Range of in-pixel noise reduction techniques
- Commercial, industrial and military qualification grades available



Applications

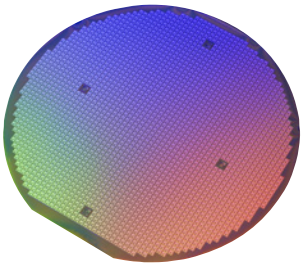
- Machine vision
- Biometrics/fingerprint scanning
- X-ray
- Endoscopy
- 1D/2D barcode
- Cinematography/HDTV
- Security
- Space/military

Automotive Die/Wafer Sales

The automotive die sales program from ON Semiconductor is designed to meet the requirements of today's automotive market. The increasing complexity of electronic systems is accompanied by demands for increased component density, improved subsystem reliability, and reduced functional costs. ON Semiconductor offers thousands of discrete and integrated circuit devices in chip form to address today's market needs. Built around our manufacturing Center of Excellence, we offer thorough electrical testing and visual inspection of every die we produce under our bare die program.

The ON Semiconductor Advantage

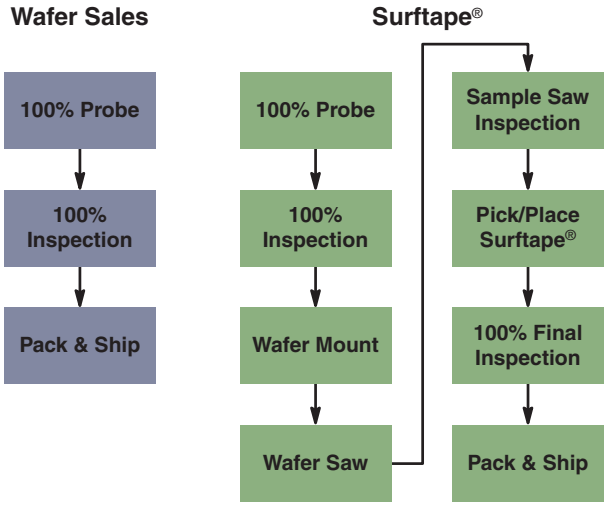
- Dedicated die center of excellence
- 100% electrical testing per device specification
- 100% visual inspection
- Whole wafers or Surftape®
- TS16949 certified factories
- Registered to ISO 9001:2000
- AEC qualified die/wafers available

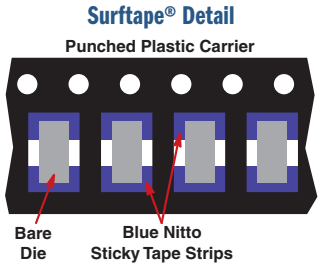


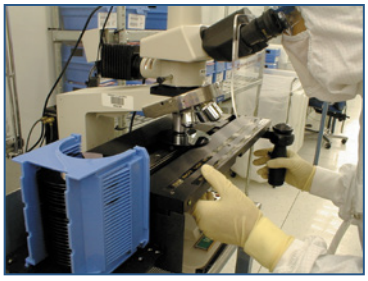
Available Product Families*

- Analog
- BJTs, Digital Transistors (BRTs), CCRs, JFETs
- EEPROMs
- ESD Protection Diodes
- IGBT
- Logic
- MOSFETs
- Op Amps
- Schottky
- SmartFET
- Smart Card ICs
- Ultrafast
- Video & Audio Amps
- Voltage Regulators
- Zeners

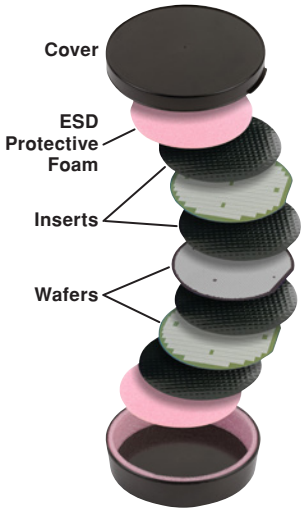
* Operating Temperatures to 175°C. Maximum operating temperature contingent upon mounting configuration and higher temperature operation may not be supported by all products.







100% Probe and Inspection



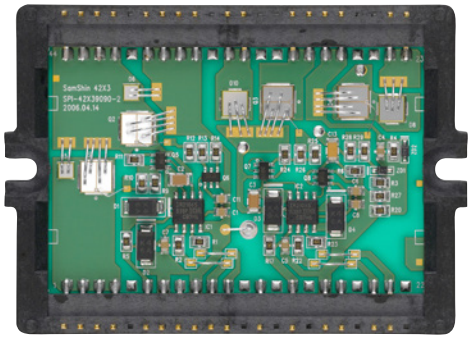
Stacked Wafer Carrier

Commercial Die/Wafer Sales

The commercial die sales program from ON Semiconductor is designed to meet the challenges of today's consumer market. Rapid device miniaturization, increased thermal and electrical performance and improved reliability requires module designs utilizing bare die. ON Semiconductor offers thousands of products in various packaging options to meet these evolving market requirements. Our manufacturing Center of Excellence performs the electrical and visual inspection testing to ensure our bare die exceed customer requirements.

The ON Semiconductor Advantage

- Dedicated die center of excellence
- Sample electrical testing per device specification
- Whole wafers or Surftape®
- Registered to ISO 9001:2000



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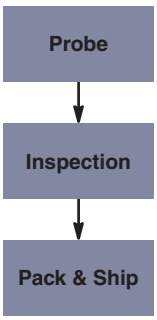
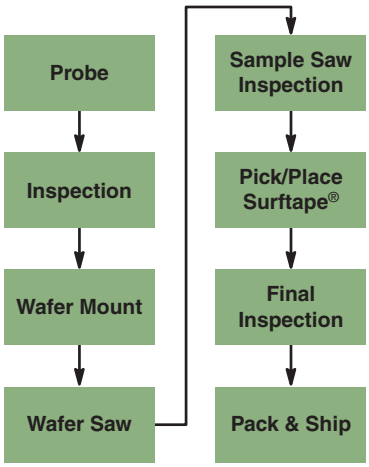
- ESD Protection Diodes
- IGBT
- Logic
- MOSFETs
- Op Amps
- Schottky
- SmartFET
- Smart Card ICs
- Ultrafast
- Video & Audio Amps
- Voltage Regulators
- Zeners

Wafer Sales

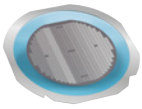


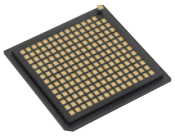
Surftape®



Third-Party Partners

- Micross
- Mincotech
- Semi Dice





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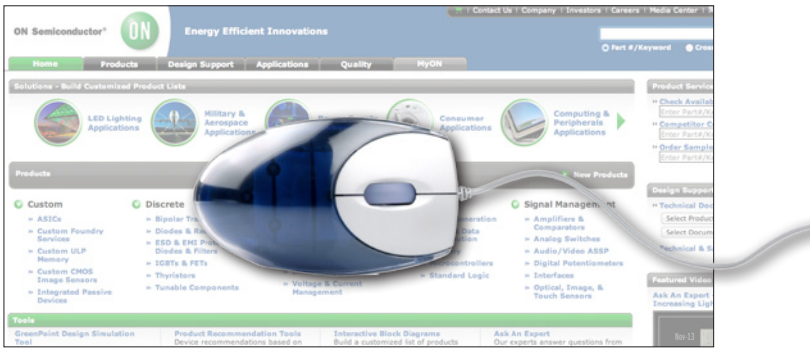
www.onsemi.com/salessupport



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