Honeywell’s My SOI Foundry is a complete foundry solution for all your RFIC manufacturing needs. We fuse our proven reliability with innovative technology solutions to offer the value, quality and service you need in a RF foundry partner.

Given our long-standing history as a flexible foundry leader for a variety of markets, we are equipped to develop your state-of-the-art ICs using our proven Silicon On Insulator (SOI) technology, remarkable service and expertise that's second to none.

By partnering with Honeywell, you’re teaming up with a world leader in SOI technology with 24 years of experience in SOI IC designing, development and manufacturing. Our ISO 9001 certified, on shore, 150mm wafer fab uses the latest six sigma based process controls to ensure your products are developed the way you designed them. In addition to offer the staying power of a Fortune 50 Company, we have the manufacturing capacity, cycle time and six sigma quality programs to guarantee your success.
A Multi Project Wafer Run
Foundry Service to Save You Money

Honeywell offers a very cost-effective Multi Project Wafer Run (MPWR) foundry service to enable you to quickly verify your latest RFIC design ideas in our most advanced SOI CMOS fabrication process. Our service includes access to electrical design and layout rules for our 0.35µ SOI CMOS process.

Once we receive your product designs and either a completed test chip or tile layout, we expedite the following steps to the agreed tile size 1400 X 1100µ, 1400 X 2380µ or 2980 X 2380µ:

- Integrate your tile into a common reticle set with other designs
- Fabricate the wafers
- Verify that the wafers meet our process specifications
- Dice out your tile before returning it to you for verification

Many customers have already validated new product concepts optimized for RF performance using our 0.35µ SOI CMOS fabrication process.

Foundry Process Access
to Save You Time

With My SOI Foundry services, you have the advantage of our 0.35, 0.5 and 0.8 micron SOI CMOS processes. You can reduce cost and increase performance of your mixed mode designs by integrating RF, analog, digital and passive elements into a single monolithic component.

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<thead>
<tr>
<th>Capability</th>
<th>0.8µ MOI</th>
<th>0.5µ MOI</th>
<th>0.35µ MOI</th>
<th>0.25µ RFCMOS</th>
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<td>Yes</td>
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More Than A Foundry

My SOI Design Services
With Honeywell design services, we offer detailed design support from a dedicated, experienced microwave designer or design team with over 20 years experience in developing IC solutions.

Our design services enable fast creation of custom RFIC designs tailored from the world’s leading process technologies. Whatever your needs – co-development, conversion or transfer – our team of designers are highly experienced with architectures, designs and production of wireless systems and products. We offer flexibility and adaptability to ensure your products match the market, performance and speed needed today.

We can accomplish your design needs with our expertise in SOI, CMOS, GaAs RF and Mixed Signal Design, and constantly seek ways to help our customers reach the market as swiftly and cost-efficiently as possible.

My SOI Test Services
To consistently ensure our high standard of quality wafers, Honeywell conducts thorough standard testing as well as customized test services, from PM testing of wafers to DC and RF characterizations, of package components. We utilize onshore as well as offshore test facilities to provide high accuracy DC and RF production testing.

My SOI Packaging Services
You have a variety of options available with My SOI Packaging to ensure you’re able to meet and deliver products that delight your customers. We guarantee high quality, fast delivery and custom packaging for large volume or limited production needs. By partnering with the highest quality high-volume packaging companies, you can receive customized options – from wafer thinning, back-side gold and solder bumping – to provide flexibility and quality you can rely on.

Our array of services is just another way we provide flexible solutions for you at any sophistication level.

Honeywell As Your Foundry Partner
Along with a foundry service agreement that you establish with us, you receive a comprehensive set of design models for 0.8µ, 0.5µ and 0.35µ Silicon On Insulator processes, including:

- A Process Design Kit (PDK), including BSIM3V3 models.
- A complete and proven digital standard cell library with over 100 standard cells for designs requiring the integration of digital functions.
- A foundry manual with electric rules and layout rules.
- A comprehensive set of design models.

Additionally, we provide PM tested proof of development wafers and dedicated project managers to ensure your projects are delivered upon the committed time and price.

We understand that you put your design on the line when you select a manufacturer. That’s why all of our products are backed by Honeywell, recognized around the world as a leader in manufacturing, technology, and quality. Whether your needs are on a project-by-project or ongoing basis, we provide you with the flexibility you need, offering you an a la carte menu of services.

Our customers trust us to deliver solutions. And we’re committed to providing “solid solutions” and a new level of service. Solutions that both you and your customers can count on now and in the future.

Contact us today at 1-800-323-8295 or mysoiservices@honeywell.com to discuss how we can partner together to develop dynamic products for the future.
**Benefits of Silicon On Insulator**

Using your designs and the Honeywell SOI RF/Microwave foundry collaboratively, we can produce the ideal solution for low power cellular, PCS, GSM base-station and broadband applications in the 900Mhz to 5.8GHz frequency bands. We pioneered the production of Silicon-On-Insulator or SOI technology, which makes it possible for us to help you build superior products. We’re aggressively scaling our SOI technology to provide industry-leading performance, density, and minimized power solutions.

Whatever your product requires, our SOI technology offers advantages for your next-generation designs in RF/microwave and fiber optic applications.

High isolation, reduced cross talk and integration latitude of SOI CMOS makes your products from Honeywell’s foundry perform optimally. Here’s how:

**High Isolation Provides Better Performance**

- Reduces substrate coupling and cross talk.
- Provides 10-30 dB less coupling between analog and digital circuits on a single substrate.

**Easy Integration Expands Customized Options and Reduces Cost**

- Integrates mixed signal and high voltage applications and allows complex control functions to perform at low power on a single chip.
- Offers customized integration of complex control functions with passive RF elements.

You are assured the support needed every step of the way from our experienced team of SOI designers, engineers and project managers.