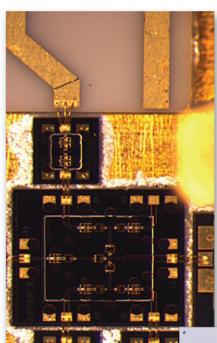
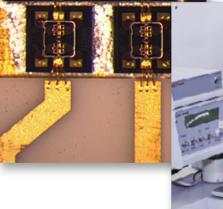


RF/Microwave Manufacturing Services







Anritsu RF/Microwave Manufacturing Services

Your Agile Manufacturing Resource Partner

If you are considering a partner for rapid prototyping and assembly of microelectronic components, choose the company that has the expertise, equipment, processes and facilities that you need to complete your project quickly and reliably.

Conveniently located south of Silicon Valley in Morgan Hill, California, Anritsu is a world leader in RF/Microwave test equipment for laboratories and field applications.

Our manufacturing organization has expertise in mechanical assembly, microelectronic assembly, complete machining, and thin film manufacturing. We have an on-site accredited calibration laboratory and are ISO 17025 and ISO 9001 accredited.

From product development through shipping, you will be ensured that our staff is responsive to your needs, will deliver reliable products through continuous improvement, and will do so at a great value.

Our experienced team offers superior agility and technical capabilities to ensure that your requirements are met. Let us collaborate with you to understand your needs and complete your project on time and with the highest quality.

Manufacturing Services Offered

Microelectronic Assembly

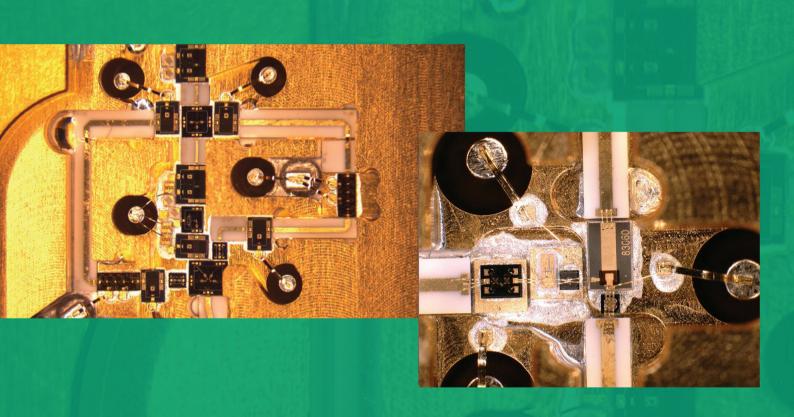
We Offer:

- · Eutectic die attach
- Epoxy die attach
- Gap welding
 - Solder reflow and gold ribbon
- Auto and manual wedge bonding with 0.7 mil gold wire
- Tack bonding
- Ball bonding
- · Flip chip

- Sheet epoxy attach
- Non-conductive epoxy attach
- Hermetically sealed connectors up to 110 GHz
- · Connector assembly up to 145 GHz
- Soldering
 - Gold tin, indium based solders, SnPb, RoHs compliant solders, gold germanium
- Repair of all above processes

Examples of Components Being Manufactured

| N, K, V, W, 0.8 mm Connector assemblies | Bias Tees | VNA Modules | Down Converting Modules | Quadruplers |
|--|------------------|--------------------|----------------------------|---------------|
| Coaxial Filters | Detectors | Source Modules | Up Converting Modules | Oscillators |
| DC Blocks | Step Attenuators | Splitters/Dividers | Doublers | Power Sensors |
| Frequency Extension Modules | Couplers | PIM Filters | Calibration Kits | |





Your OEM Parnter

We partner with world leading organizations to design and manufacture OEM products. While other manufacturers can only assemble products up to 40 GHz, we utilize our RF/Microwave expertise to assemble microelectronic circuits up to 220 GHz.

Leveraging our thin film lab, machine center, assembly, test, and supply chain resources, we are able to meet your requirements consistently and efficiently. We are able to react to changing demand quickly with our vertically integrated capabilities.

If you would prefer to design your own products and let us manufacture, we can provide DFx services to ensure your design is manufacturable, reliable, and produced at the lowest cost possible. Partner with us to ensure your products are delivered on time with superior high frequency performance.

Testing Resources

Our testing capabilities cover DC-220 GHz range, either manually or automated depending on volume.



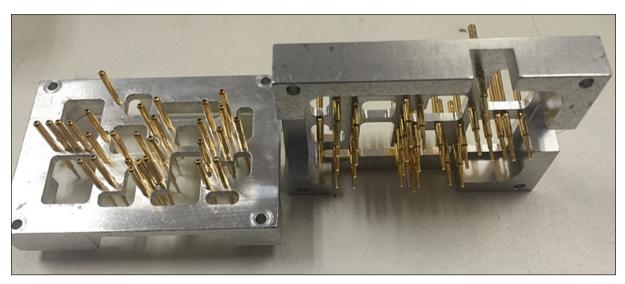
Exmple of an automated test station

We Offer:

- S-parameters ISO 17025 certified for S11
- · Noise figure
- · Noise floor
- Dynamic range
- IIP3, OIP3
- Harmonic levels
- · Phase noise

Process Engineering Support

Our experienced engineering staff can help develop new manufacturing techniques for your project as well as design, manufacture and document test and assembly fixtures.



Assembly fixture example

Reliability Testing

If your specifications require reliability testing, we currently offer the following testing.

- MMIC amplifier gate temperature thermal imaging
- Material analysis
- · HALT and HASS chambers
- Environmental chambers
- Burn in room
- · Temperature chambers for active testing
- Power cycling
- · EMI/EMC testing
- Drop testing
- · Eutectic die attach void testing
- · Temperature cycle chambers with and without testing

To learn more about our services or to schedule a tour or our facilities, please email us at Microelectronics@Anritsu.com.

Anritsu RF/Microwave Manufacturing Services

Anritsu Company is the United States subsidiary of Anritsu Corporation, a global provider of innovative communications test and measurement solutions for 120 years. Anritsu's "2020 VISION" philosophy engages customers as true partners to help develop wireless, optical, microwave/RF, and digital instruments, as well as operation support systems for R&D, manufacturing, installation, and maintenance applications. Anritsu also provides precision microwave/RF components, optical devices, and high-speed electrical devices for communication products and systems. The company develops advanced solutions for 5G, M2M, IoT, as well as other emerging and legacy wireline and wireless.







