We Make It Easy!



RF Chip & Wire Assembly | Passive/ Active Test | Inspection Services

RF CHIP & WIRE ASSEMBLY

- * Brazing using AuSn/AuGe
- * Automated Die Bonder (epoxy dispenser and die placement)
- * Manual and Automated Wire and Ribbon bonding
- * Waffle Bonding
- * Plasma and Ultrasonic Cleaning
- * All operators certified in MIL-STD-883 and Stellant Workmanship Standards
- * J-STD

TEST CAPABILITIES

- * From UHF through Millimeter Wave
- * PNA test system for ATE test beds
- * Automated LabVIEW test systems
- Cal Pods provides robust test data collection including family behavior test data trending

INSPECTION SERVICES

- * Traceability IAW with AS9100
- Keyonce VHX Ultra High Power/Resolution 3D Camera
- * Keyonce 3D Digital CMM/Profilometer
- * MIL-STD-883 Inspection
- * IPC-J-STD-001H and SA (Space Addendum)
- * Stellant Workmanship Standards
- Minimized test and calibration variances with statistical measures of mean and standard deviation
- Rapid post-processing of test data





STATE-OF-THE-ART FACILITY | FOLSOM, CA

- > 57,000 square feet building
- > Two Class 100K clean rooms
- Complete range of RF/Microwave Active & Passive Components & Integrated Assemblies
- > Commercial, Military and Space applications
- > Design, Assembly, Integration and Test expertise
- In-house Hermetic Laser Sealing and Environmental Testing
- > Fully Integrated Proposal, Program Management and Product Teams
- > ISO 9001:2015 and AS9100:2016 Certified



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sales@stellantsystems.com



RF Assembly | Test & Inspection



EQUIPMENT SPECIFICATIONS

Manual Wedge Bonder	
.0005 Au Wire	Hand Wedge Station, Westbond Model 1200 temp control
.0007 Au Wire	Westbond Model 7400E, 7600A, Westbond Model 1200 & K1200D Temperature Controller
.0008 Au Wire	Westbond Model 7400E, 7600A, Westbond Model 1200 & K1200D Temperature Controller
.0008 Au Wire Deep Access	West Bond Deep Access Model 7476E-79, West Bond Model 1400 ultrasonic Generator, West Bond Model1200 & K 1200 D Temp Control
.001 Au Wire	West Bond model 7700B-44A, West bod Model 7476E, West Bond Model 1400 Ultrasonic Generator, West Bond Model 1200 & K1200D Temp Controller
.001 Al Wire	Westbond Model 7400E, 7600A, Westbond Model 1400 Ultrasonic Generator

Epoxy Die Attach		
Ablebond 84-1 LMI Silver Epoxy	Epoxy die Attach station, Microscope 10x-60x, Controlled Curing Oven	
Ablebond 85-1 Gold Epoxy	Epoxy die Attach station, Microscope 10x-60x, Controlled Curing Oven	
Silver Epoxy Paste ME8456	Epoxy die Attach station, Microscope 10x-60x, Controlled Curing Oven	
EPO-TEK H74 Non-Conductive Epoxy	Epoxy die Attach station, Microscope 10x-60x, Controlled Curing Oven, Scale MDL EK 200G	
Ablefilm ECF561E (sheet)	Epoxy die Attach station with hot plate adjustable to 60C, compression tool, Controlled Curing Oven	

Automated Wire Bond	
.00008 Au wire	FK Delvotek Auto Wedge Machine Model 6400DA G5
.001 Al wire	FK Delvotek Auto Wedge Machine Model 6400DA G5
1x4 Gold ribbon	FK Delvotek Auto Wedge Machine Model 6400DA G5

Thin Film Circuit Assembly		
Cleaning Process	Ultrasonic and Plasma	
Substrate Braze	Gold Germanium (AuGe) and Gold-Tin (AuSn)	
Eutectic Die Attach	Gold-Tin (AuSn)	

Ribbon Weld		
.001"x.004"AU	Parallel Gap Welder, UNITEK	
to .0005"x.025"AU	Model UB25 Controller	

About Stellant Systems

Stellant Systems is a premier manufacturer of critical spectrum and RF power amplification products to the space, defense, medical, science and industrial markets for both domestic and international customers. Stellant has 5 domestic manufacturing facilities and approximately 1100 employees.

For more information, visit <u>StellantSystems.com</u>.



