

# **SIENNA GROUP**



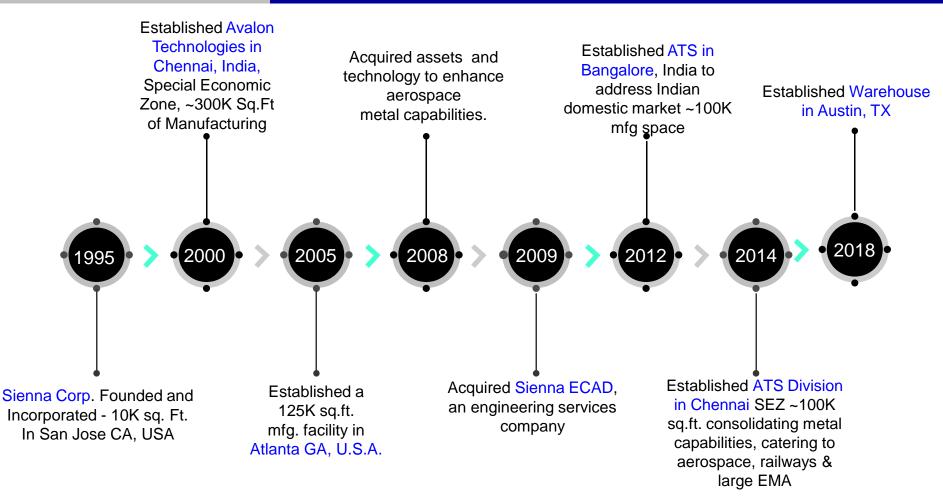


#### **Corporate Overview**

- Founded in 1995.
- Controlled and sustained growth through organic sales.
- US Ops in Atlanta, GA and Fremont, CA totaling 150,000 sq. ft. of Mfg space.
- Additional Warehouse and Distribution in Austin, TX.
- 2 sites in India with ~ 500,000 sq. ft of manufacturing space.
- Over 1500 employees worldwide.
- Servicing the industrial, medical, telecommunications, transportation, defense and aerospace markets.
- Highly flexible Mfg model Made in USA, Made in India and Hybrid.
- Highly focused on a strong base of 30+ core customers.
- Vertically integrated Mfg model with in-house PCBAs, Cables, metal fabrication and machining, plastic injection molding, magnetics, box build, system integration and test capabilities.
- · Focus on strategic customer fit in our targeted markets.
- · Focus on quality, superior customer service, and flexibility.
- Stocking in USA for Just In Time delivery. End to End product life cycle support.
- World class SAP ERP, integrates Sienna group companies.



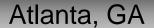




History – 20+ Years of Growth & Stability Across the Globe







- 140,000 Sq Ft
- 3 SMT Lines
- Selective soldering
- Thru Hole & Splicing
- Sub-Assemblies
- Box Build
- Fulfillment Services
- ICT, FPT, FCT, AOI, X-Ray
- RoHS lead free lines
- Leaded Lines
- RF assembly / test
- PCBA thru Systems Level Test
- Conformal Coating
- Temperature Cycling



# Fremont, CA

- 10,000 Sq Ft
- Box Build-BTO/CTO
- Fulfillment Services
- System level testing



#### India

- 500,000 Sq Ft
- 6 SMT Lines
- · Selective soldering
- Thru Hole, POP
- Sub-Assemblies
- Box Build
- Fulfillment Services
- ICT, FPT, FCT, AOI, X-Ray
- RoHS & Leaded lines
- Conformal Coat & Potting
- Magnetics, Metal, Plastics
   & Cable Assembly
- Chassis Build
- Ruggedization
- Temperature Cycling



#### **ELECTRONIC MANUFACTURING SERVICES**



**PCB** Assembly



System Integration – Box Builds & Electro-mechanical



Cable Assembly & Wire Harness

# **Vertically Integrated Manufacturing Supporting Box Builds**



**Plastics** 



**High-Current Magnetics** 



**Metal Machining** 



**Sheet Metal Fabrication** 



# **PCB Layout Design and Proto Build**



#### **Complex Layout**

- Fine pitch BGA upto 0.37mm, 2mil/2mil technology.
- Layers up to 72.
- Components more than 10000, Connections more than 97000.
- Stringent Thermal, Mechanical and Electrical requirements.
- Flexi rigid designs, Embedded passives, Composite stackups.

#### **Simulation & Analysis**

- Signal Integrity upto 100 GBPS differential.
- EMI Analysis.
- Power Integrity Analysis.
- Thermal & Reliability Analysis.

#### Library

- Validated Library of > 30,000 PCB and Valor Parts.
- 4 stage validation process for each part.

#### **DFX-Valor**

- Fabrication checks 275.
- Assembly and other checks 420.

#### **Prototype Build**

Use dedicated Avalon PCB assembly Line.

>10,000 layouts Gerbered

**ISO** Certified

**Robust IT Setup for Data Security** 

**Multi Tool Expertise** 

>99% First time Right Designs

150 Engineers at 3 Indian Locations

**Onsite Support 18x6 support** 

**Expedite delivery options** 

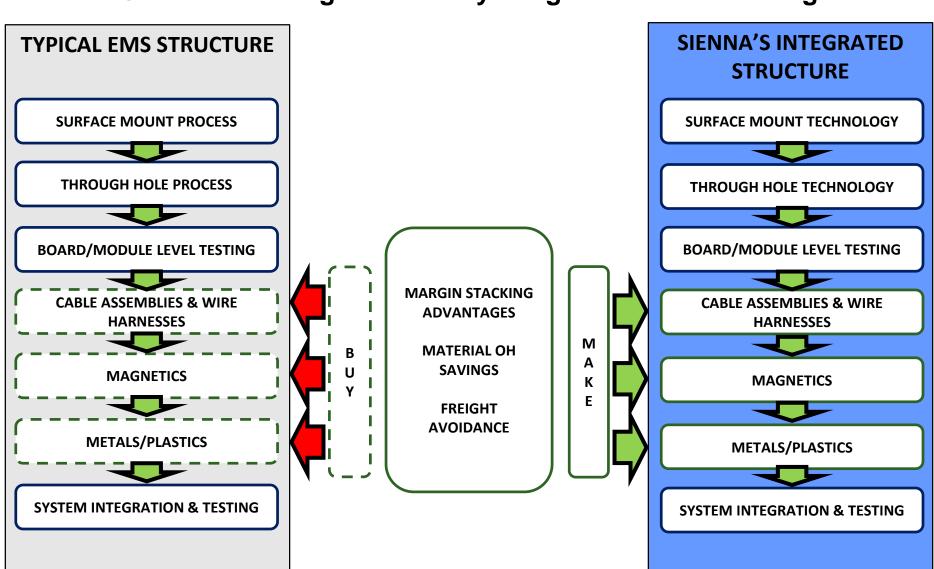
# Add-on Services and Offerings

- Design for Mfg (DFM)
- Design for Test (DFT)
- BOM Scrubbing
- Test development
- ICT Fixturing
- Sustaining Engineering
- Certification Assistance

- Powder Coating
- Wet Paint
- Silk Screen
- Tools, Jigs and Fixtures
- Ultrasonic Welding
- RF Testing
- Robotic Gluing

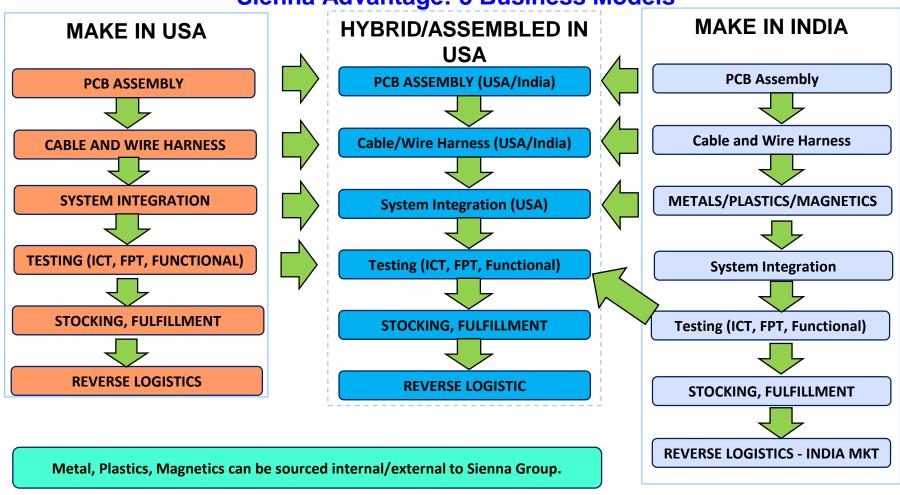


# Sienna Advantage: Vertically Integrated Manufacturing





Sienna Advantage: 3 Business Models



#### FOR:

- Make in the USA
- Americas and Europe

#### FOR:

- Make/Assembled in USA
- Americas and Europe

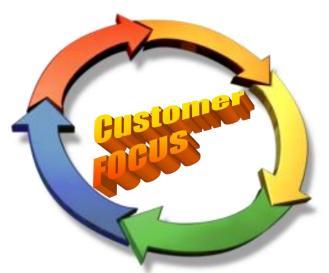
#### FOR:

- Make in India
- Americas, Europe and ROW



#### **Program Management**

- Single point contact
- Customer Focus Team Leader
- Communications flow
- Customer Advocate
- Build Schedules
- Weekly meetings



#### **Customer Focus Team**

- Senior Program Manager
- Material Planner / Buyer
- Document Control
- Manufacturing/Test Engineer
- Production Manager
- Quality Team member

#### **Business Reviews**

- Quarterly meetings
- Formal agenda
- Metrics review
- Materials review
- Joint cost reductions

- Value Engineering
- Growth opportunities
- Business status
- Open action review
- Joint goal setting



GESPECTRUM

# **LOCAL SOLUTIONS. GLOBAL REACH**

#### SIENNA'S TARGET SEGMENTS & GLOBAL CUSTOMERS

COMMUNICATION	POWER	INDUSTRIAL		AEROSPACE	RAILWAYS	DEFENSE
ZONAR° CONNECTED.	<u>-</u>	ABB	GILBARCO VEEDER-ROOT	GE Aviation	HITACHI	TOP THE PERSON OF THE PERSON O
<b>com</b> verge*	TESLA	Wayne FUELING SYSTEMS	Haas Automation Inc.	UTC Aerospace Systems	AnsaldoSTS	Rockwell Collins Building trust every day
SYSTECH	G&W	MITSUBISHI ELECTRIC COOLING & HEATING	HUBBELL	Kidde	KYOSan	Defying Boundaries by Design
EMERSON.	Bloomenergy <sup>.</sup>	United Technologies	Honeywell	CRANE AEROSPACE & ELECTRONICS	ALST©M	Ultra ELECTRONICS 3eTI
	<b>(4 ± t</b>	BUSCH				

Conducting Business With Leaders in Target Segment

**DOVER** 

**MEGGITT** 

**Faiveley** 



# Warehousing, Distribution, JIT & Reverse Logistics





Sienna ships globally from multiple warehouses in United States and India



### **CERTIFIED QUALITY SYSTEMS**





Robust Quality Certifications Ensuring Controlled Processes and High-Quality results





**Test and Inspection Capabilities** 



**Flying Probe** 



Automated Optical Inspection



X – Ray



In - Circuit Test



# **Cable Assembly Facility**





























# **Plastics Facility**







# Rack / System Integration, Test - Power, Railways















# **Box Build - Industrial, Communication, Medical**



Kiosk, ATM



Chassis



Pumps, Bedding



Cabin Box



Renewable Energy



Instrumentation



**Outdoor Units** 



Signaling



**Display Units** 



Medical-Fluidics



Communication



Networking



# **TRANSPORTATION - RAILWAYS**

**HVAC System** 

Black Box Recording System







Signaling System





# **TRANSPORTATION - RAILWAYS**













# PCB Assemblies (SMT,THT,BGA,POP)











# **CABLE AND WIRE ASSEMBLIES**



**Potting** 



**RF Cables** 



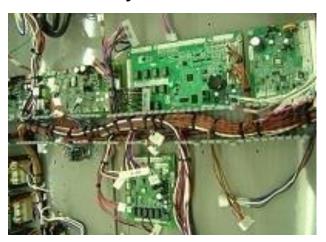
**Over-Molded Cables** 



**Automotive Cable Assembly** 



**Dinrail Cable Assembly** 



**Wire Harness with PCBA** 



# **METALS (SHEET METAL, MACHINED PARTS)**















# **METALS - AEROSPACE VERTICAL**











# **INJECTION MOLDED PLASTICS – SUPPORTING BOX BUILDS**













**AEROSPACE PLASTICS** 









# **HIGH CURRENT MAGNETICS**















# Sienna Corporation – Summary Make in USA, Make in India, Hybrid/Assembled in USA

- PCBA, Box Builds and Cable Assembly offerings
- Vertical model for box builds supporting cables, plastic injection molding, metal fabrication, metal machining and magnetics.
- Inhouse PCB Layout design and NPI Launch
- Program Management in USA and India
- Global Supply Chain Management
- Stocking, Distribution and JIT Delivery
- Proto, Pilot, Production in USA and India One Stop Solution







**Sienna Corporation** 41758 Christy Street, Fremont, CA 94538. USA.



Avalon Technologies Pvt Ltd., B7 & B8, First Main Road, MEPZ-SEZ, Tambaram, Chennai 600045. India.

Avalon Technologies & Services Pvt. Ltd
MFAR Silverline Tech park,
No.180,EPIP II Phase, White Field,
Bengaluru 560066. India



Sienna ECAD Technologies 775/a 1st & 3rd Floor, 100 Feet Ring Road, Banashankari 3rd Stage, Bengaluru 560085. India.

#### **Contact Us:**

sales@siennagroup.com www.siennagroup.com

