



## FULL BOX-BUILD AND RAPID DELIVERY

### PROGRAM HIGHLIGHTS

The customer provides a broad range of products to the global cable television industry and PVNs (Private Video Networks). They approached Vexos to build their IP to analog product.

This product ingests programs in IP format and retransmits them in analog format and consists of 20 commercial encoders, a commercial IP switch, 20 custom RF converters, two custom RF motherboard/combiners, and a complex arrangement of CAT-5 and coax cabling, all packaged in a custom chassis.

The product was previously built by the customer in very low volumes in-house by their engineering team with little documentation and build instruction package. They had a sudden increase in demand of over 500 units that were to be delivered within a very short timeframe. RF testing on the product needed fine tuning for production, as well as the need to incorporate design enhancements into the product to include a new processor board.

### SOLUTION

Vexos assigned a dedicated team of program managers and engineers. The BOMs and documentation was reviewed and analyzed for build process and cycle times and recommendations were provided to the customer to reconfigure the product structure to maximize assembly time efficiencies.

A process was developed for automated solder application for RF shields and a paste-in-hole process was developed for a critical connector assembly. PCBA documentation was created for an open source assembly. DFM and product enhancements were incorporated into the final design; and a complete test strategy for PCBAs and sub-assemblies was developed with the customer including RF sub-assembly tests, PCBA programming verification, and final assembly configuration and verification.

### RESULT

Meeting the customers deadline, Vexos was able to provide a large quantity of complete, tested, full box-build assemblies without compromising quality. The customer praised the high level of quality to which the products were produced and were pleased with the overall resulting cost reductions. Vexos continues to provide the customer ongoing quality products in the most cost effective ways.



Vexos locations hold industry-specific certifications and regulatory compliance approvals to include:

- ISO 9001:2015
- ISO 14001:2015
- ITAR and UCNi compliant
- OHSAS 18001:2007
- ISO 13485:2016
- IATF 16949:2016
- FDA registration (3010067461)
- RoHS and non-RoHS

# FLEXIBLE, FULL-SERVICE PROVIDER OF ELECTRONIC MANUFACTURING AND MATERIAL SERVICES

With over 25 years of manufacturing experience, Vexos offers a wide range of EMS services including NPI, rapid prototyping, PCB assembly, test development, complete box-build, logistics and repair solutions; as well as material services such as PCBs, plastics, metals, and electro-mechanical components.

Vexos production facilities meet strict quality standards and are certified to industry certifications including ISO 9001:2015, ISO 13485:2016, ISO 14001:2015 and IATF 16949:2016. All our facilities are equipped with automated high speed, high volume, multiple surface mount assembly lines capable of producing the simplest, to the most complex design with various surface finishes and mixed material compositions. Located globally, customers have the ability to develop effective supply chain strategies and leverage benefits associated with cost control and volume demand.



## LOCATIONS

### USA

**LAGRANGE, OHIO, USA**  
MANUFACTURING FACILITY

### CANADA

**MARKHAM, ONTARIO, CANADA**  
MANUFACTURING FACILITY

### ASIA

**DONGGUAN, CHINA**  
MANUFACTURING FACILITY

**HCM CITY, VIETNAM**  
MANUFACTURING FACILITY

**HONG KONG**  
ASIA LOGISTICS