



ABOUT SHENGYANG

盛洋科技概况



人民东路1417号厂区

Zhejiang Shengyang Science and Technology Company Limited is a joint stock limited company which originated from "Zhejiang ShengYang cable Co., LTD".

Initially established as Zhejiang Shengyang Cable Co., Ltd in 2003, the company listed on Shanghai Stock Exchange on 23rd April, 2015 as Shengyang Science and Technology (stock code is 603703).

Key product lines include

- 75ohms coaxial cables
- data cables
- communication electronic equipment

These products are primarily deployed in Cable & Satellite TV markets as well as fixed data networks.

The Company has UL, ETL, TLC, ISO9001, ISO14001 and Environment system certification

HISTORY OF SHENGYANG 品牌历练 铸就辉煌



- **2013** Awarded the title of 'the top 100 of key enterprise in the industry'
- **2014** Passed the safety production standardization inspection.(Provincial level two)
- The company is the first batch of Chinese electronic components industry credit rating AAA credit enterprise.
- Awarded 3rd Prize of the provincial Sci-Tech Advance Award.
- **2015** Listed on Shanghai Stock Exchange.
- New office building was established and operational.
- **2016** Received AEO certificate.
The company obtained the invention patent(for cable).
- **2017** Acquired FTA.
- **2018** Established Advanced Products design and manufacturing team (Mwave design Engineering)

Advanced Products Design Team

- UK Design Facility –MWave Consulting Ltd
Located at Aldermaston, Berkshire
- Key team members
 - Jon Walker (Technical Director)
 - Andy Baird (Managing Director)
 - Laurence Marris (PCB Layout Engineer)



MWAVE[®]
CONSULTING LTD

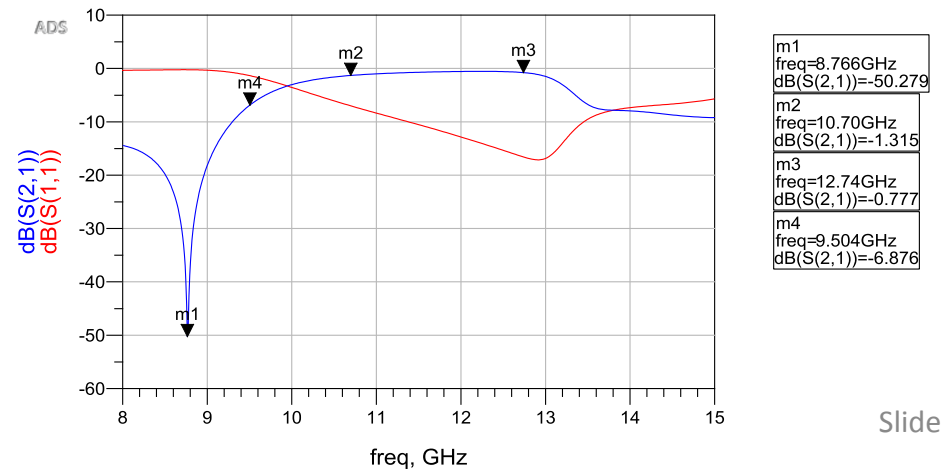
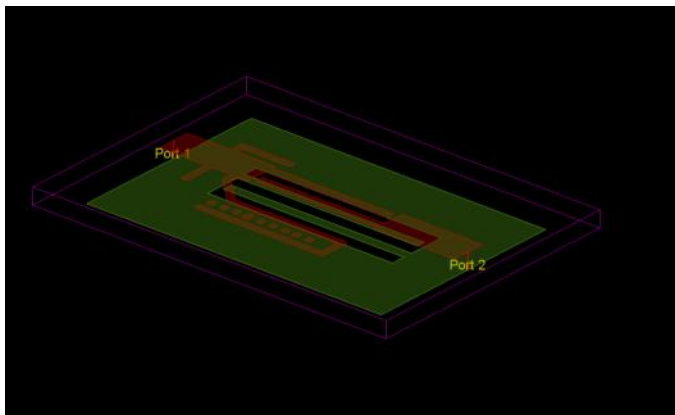
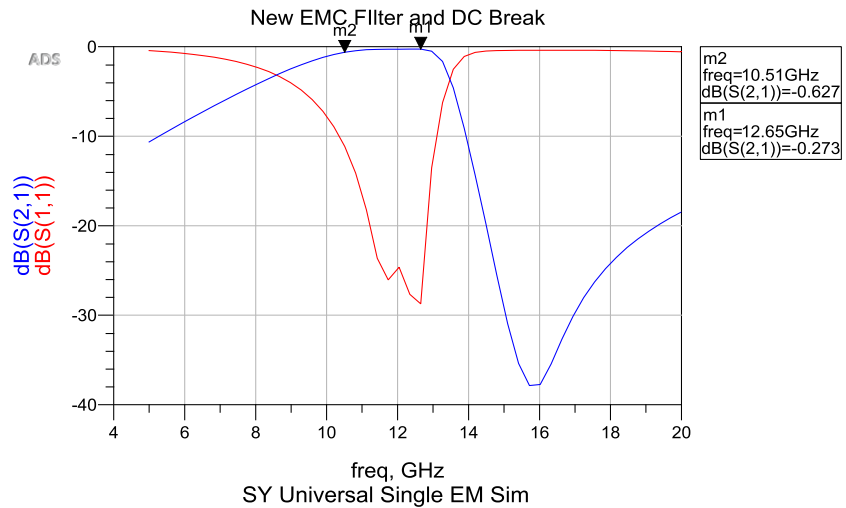
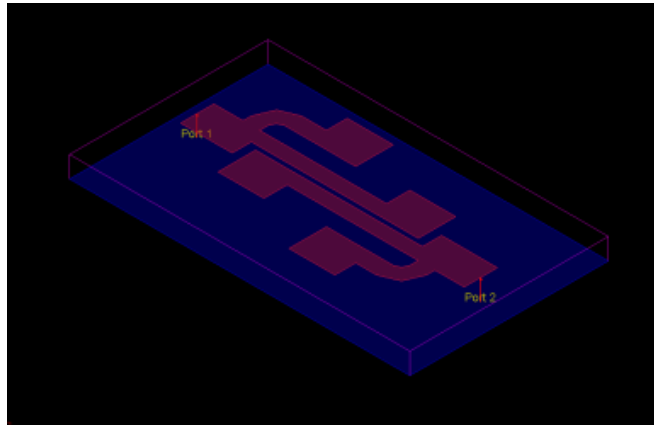


UK Facility CAD Software Design tools

Keysight ADS 2017

Linear and non-linear microwave circuit design and simulation

Momentum 2.5D FEM simulation



Altium 18 Designer

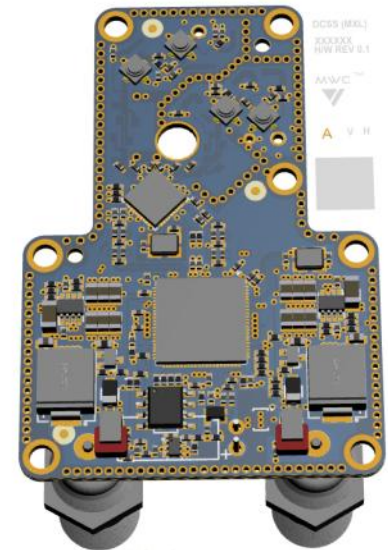
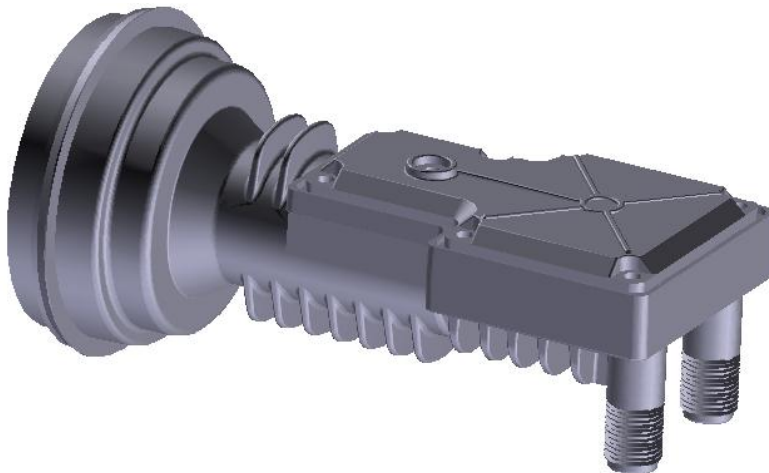
MCAD CO-DESIGNER:
SOLIDWORKS®

The extension for Altium Designer aims to eliminate the current barriers between electrical and mechanical design teams by tightly integrating the design data between ECAD and MCAD software environments.



Altium designer

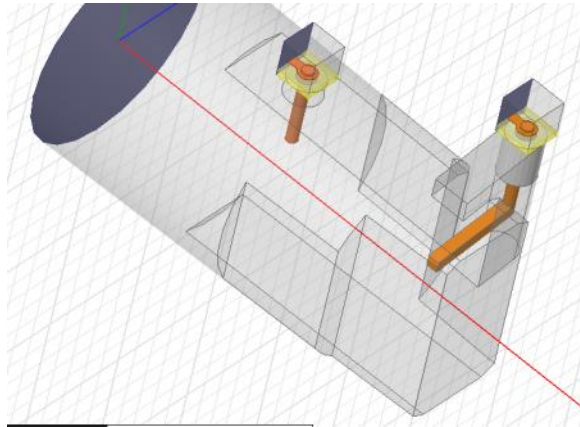
PCB Layout, Schematic and BOM generation also integrates full 3D export to Mech design team



CAD Software Design tools (contd)

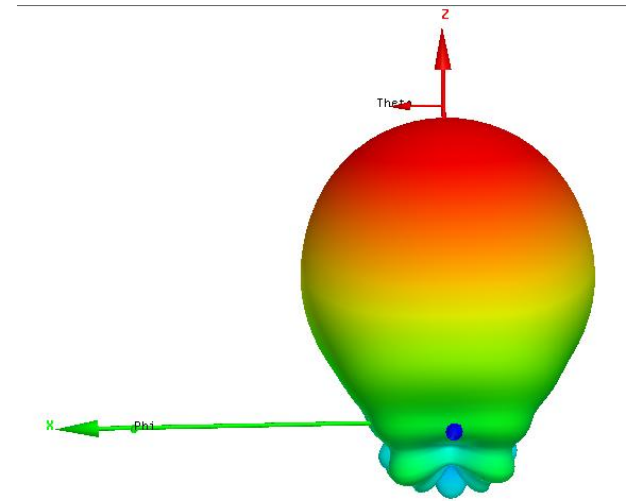
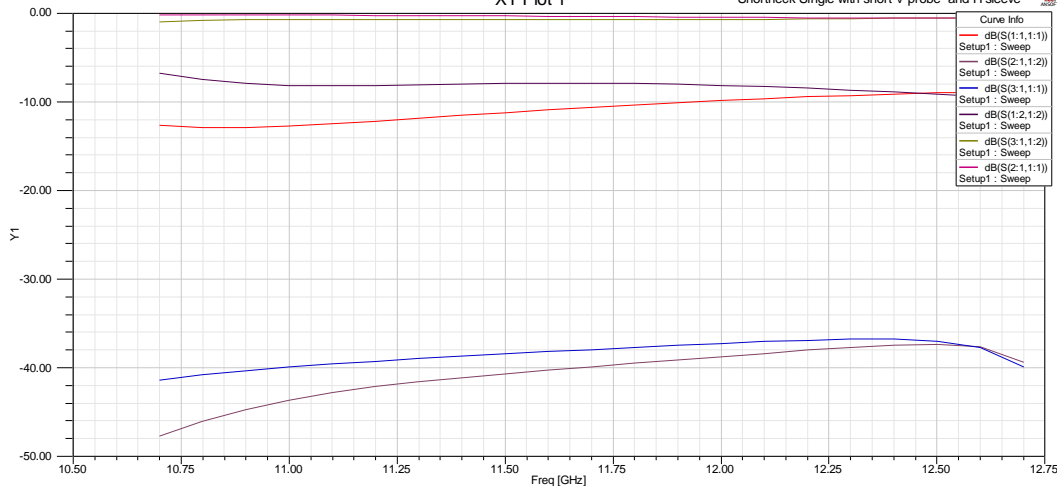
Ansoft HFSS

Full 3D EM simulation of passive structures eg filters, antennas



XY Plot 1

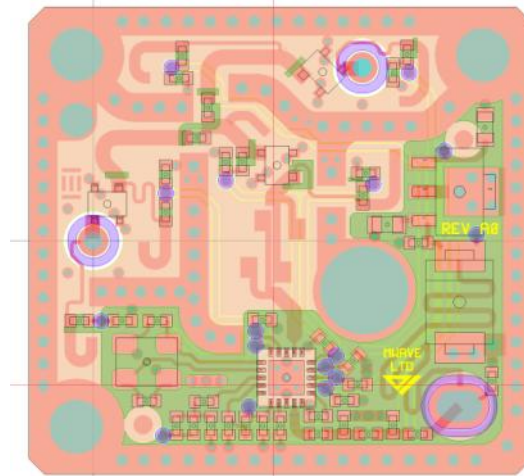
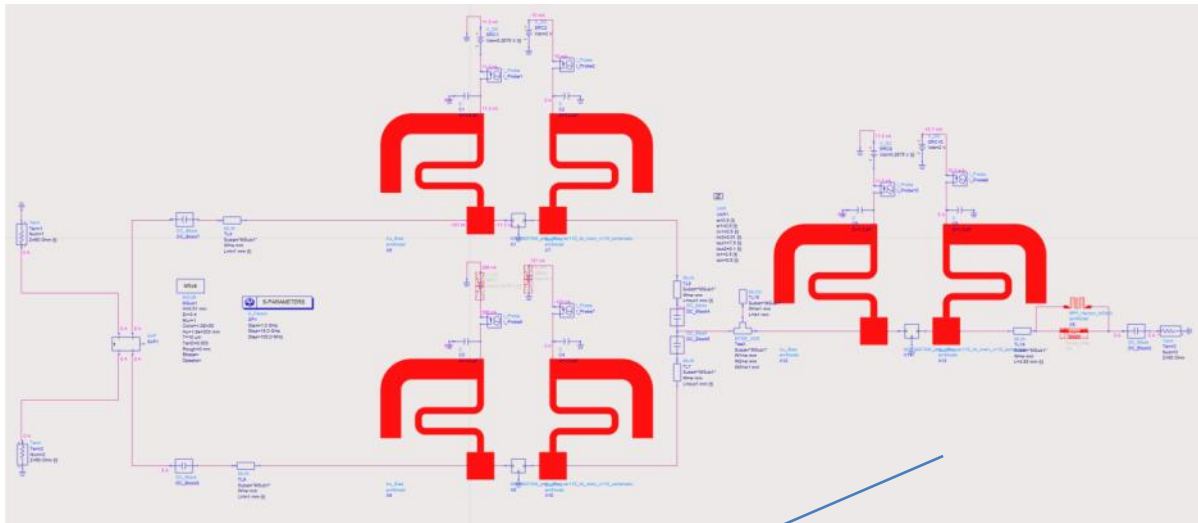
Shortneck Single with short V probe and H sleeve



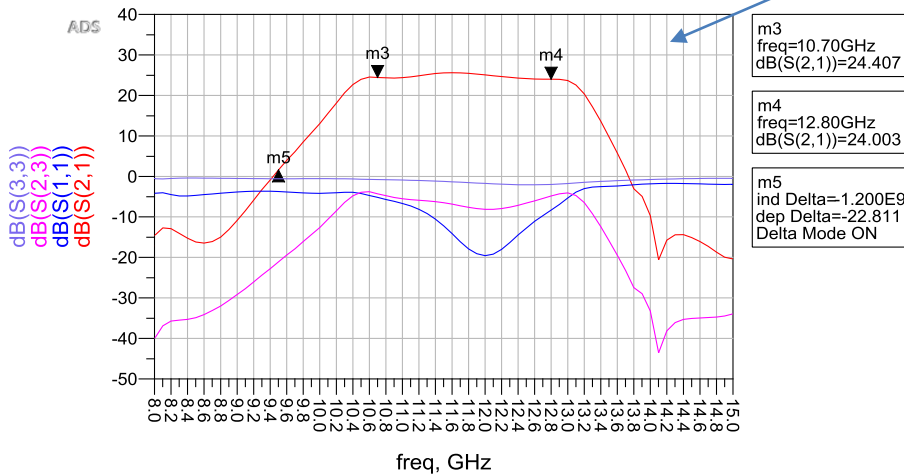
Radiation characteristics of horn antenna

Dual Pol waveguide system model and s-parameter simulation

Co-Simulation Front end HFSS + Momentum EM + Linear and Non-Linear models



Universal Switching Junction (0V,0V switching)



Integrating 3D EM, Momentum EM (planar) with extracted linear and non-linear models results in the design meeting specification targets on the very first PCB iteration.

UK Facility Lab test equipment

Wide range of equipment covering DC-26.5GHz
Vector and scalar Network Analyzers
Spectrum/Signal Analysers
Noise figure analysers, environmental testing.
Signal sources
Precision assembly stations



Luxembourg – Embedded Firmware capability

Group based in Luxembourg has experienced team

Key Team Members

- Frederic Roelens (Software Manager)
- Mariusz Curkrowski (Software Engineer)
- Patrick Lui (Hardware Manager)

Many years of experience in the set-top box industry
In recent years have implemented a wide range of innovative solutions for dCSS based LNB and multiswitch products as well as the Satpal installation aid with associated smartphone/tablet application.

Advanced Products Manufacturing Team

- Team based in Shengyang factory
- Key team Members
 - Robert Xu (VP)
 - John Orr (Director of Projects and Quality)

Advanced Products Manufacturing

- High Speed S.M.T. Line
- We use the latest technology high speed S.M.T. line capable of making 120,000 placements per hour, per line.



Advanced Products Manufacturing

- SMT line includes 100% SPI and AOI inspection and control.



Advanced Products Manufacturing

- Production assembly and test line is set up using the latest Keysight test equipment, all test sites connected to a data base which can record all test site data based on unit serial number.



Advanced Products Manufacturing

Other test capabilities include:

- 3D laser scanner for sample testing of all mechanical parts



ROHS testing

Advanced Products Manufacturing

Other test capabilities include:

- Hot and Cold test chambers for 100% testing over temperature.



- Humidity / Temp testing

Advanced Products Manufacturing

Other test capabilities include:

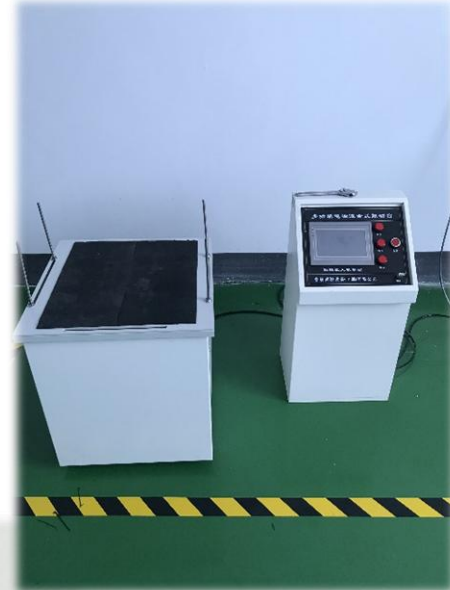
- UVA / UVB testing



- Package Drop Test



- Vibration testing



Salt Spray testing



Advanced Products Manufacturing

Product Design and Manufacturing Capabilities

- LNB's
- Multiswitches, Pairing Bridge
- Power inserters
- Splitters



Advanced Products Manufacturing

In house Diecasting and Plastics Moulding capability



Partner 合作伙伴



BELDEN
SENDING ALL THE RIGHT SIGNALS



COMMSCOPE®



TFC



盛洋科技
SY Science & Technology



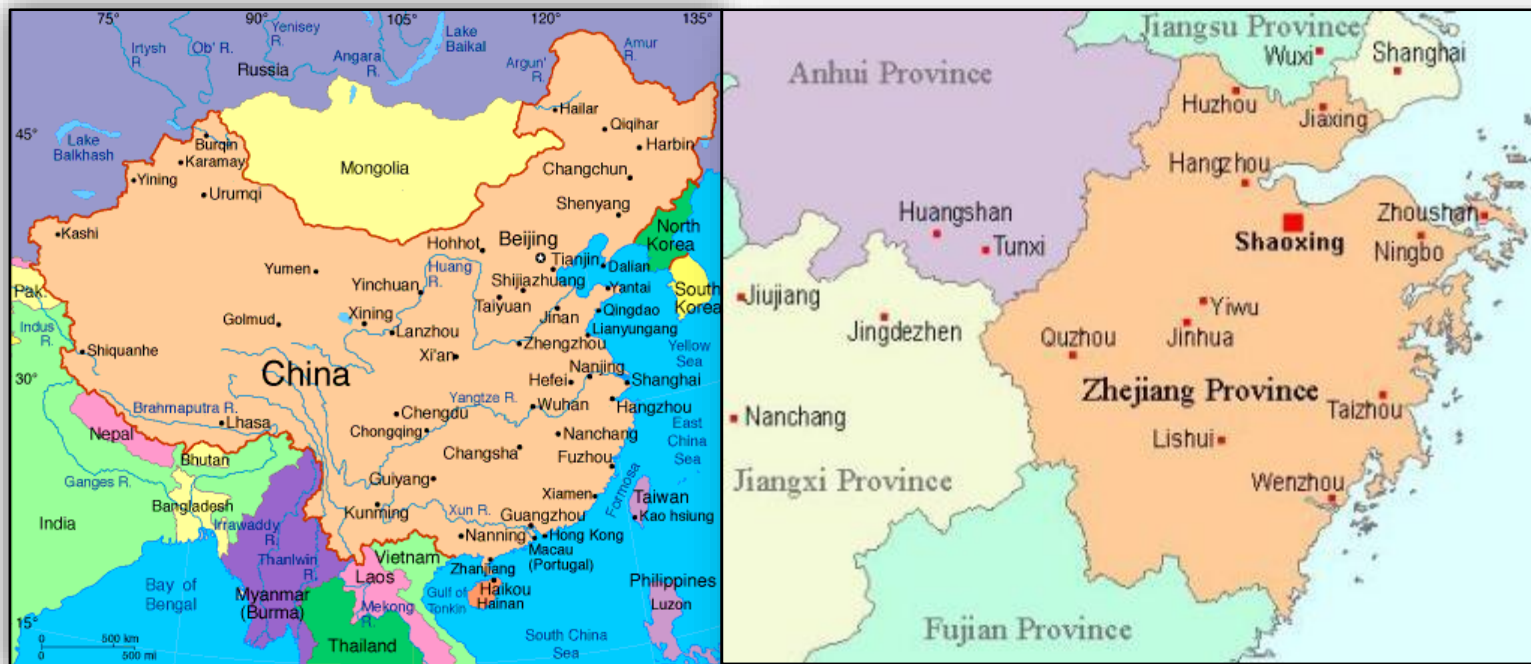
General Cable



dish
NETWORK

The main market in North America, South America, Europe, Africa and Asia.

ShengYang factory is located in the Shaoxing Ecological Sector Park, in the northern region of the Zhejiang Province of China.





- **Over 1.64 million square feet of plant**
- **1.43 million square feet of property**



Existing plant and future expansion



Manufacturing capability

Coaxial Cable Production

- currently has 5 plants dedicated to coaxial cable production.
- Capacity to produce up to 60,000 kilometers (\approx 200 million feet) of coaxial cable per month.
- (20) Dielectric Lines
- (336) High-speed Braiders
- (10) Jacketing Lines
- Separate dedicated Warehouse.
- Future expansion planned.



Manufacturing capability

- Extensive vertical integration ensures low cost materials, stable supply chain management and quality control.
- Over 700 dedicated employees.
- Regional sales & program management offices in the United States and China.(United States:Garner,NC;China:Shaoxing,ZheJiang)



Manufacturing capability

DATA Cable Production

- A dedicated plant for Category Cable.
- CAT 5e ,CAT 6,CAT 6A and CAT7.
- ANSI/TIA 568-C.2
- UL and ETL verified products.
- 20 million feet/month.



Manufacturing capability

Jumper Cable and Patch Cord Production

- A dedicated plant capable of producing over 1.2 million units per month.
- OEM Production for CATV Industry.
- Bulk and Installation Kits.



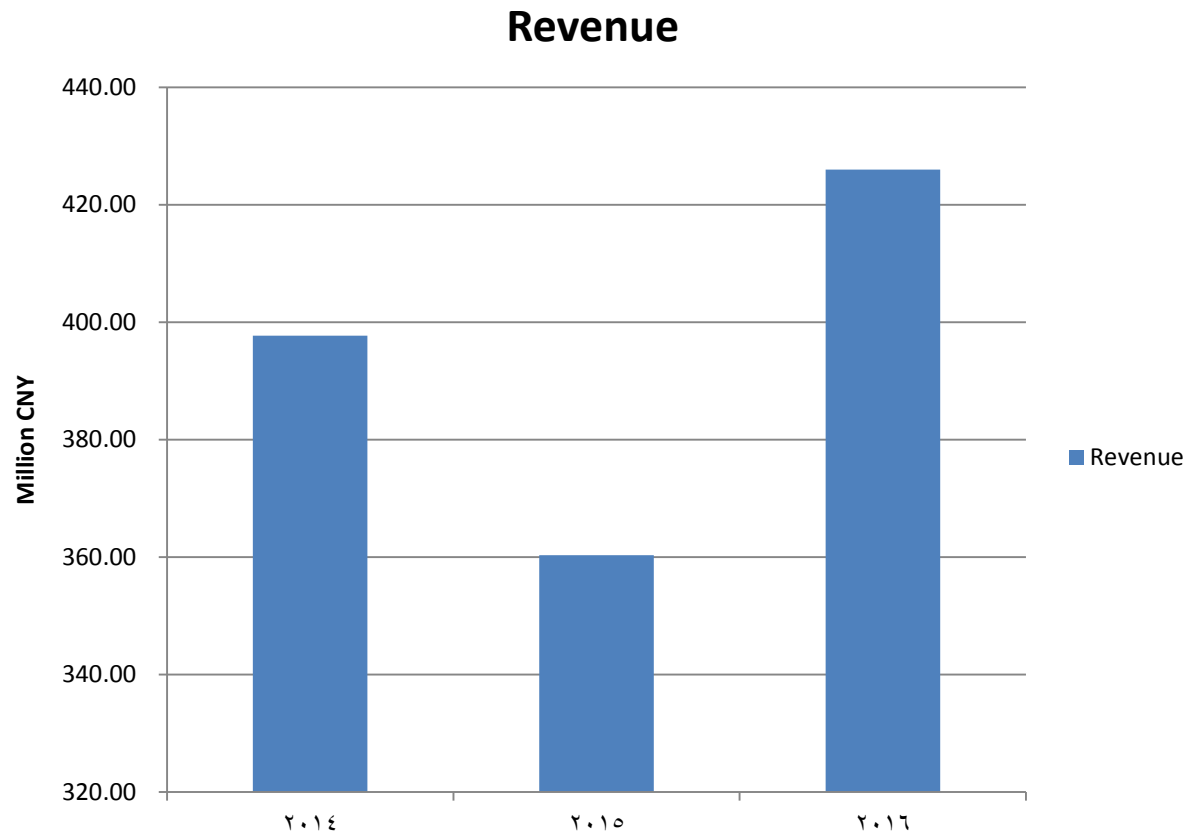
Manufacturing capability

LNBF Production

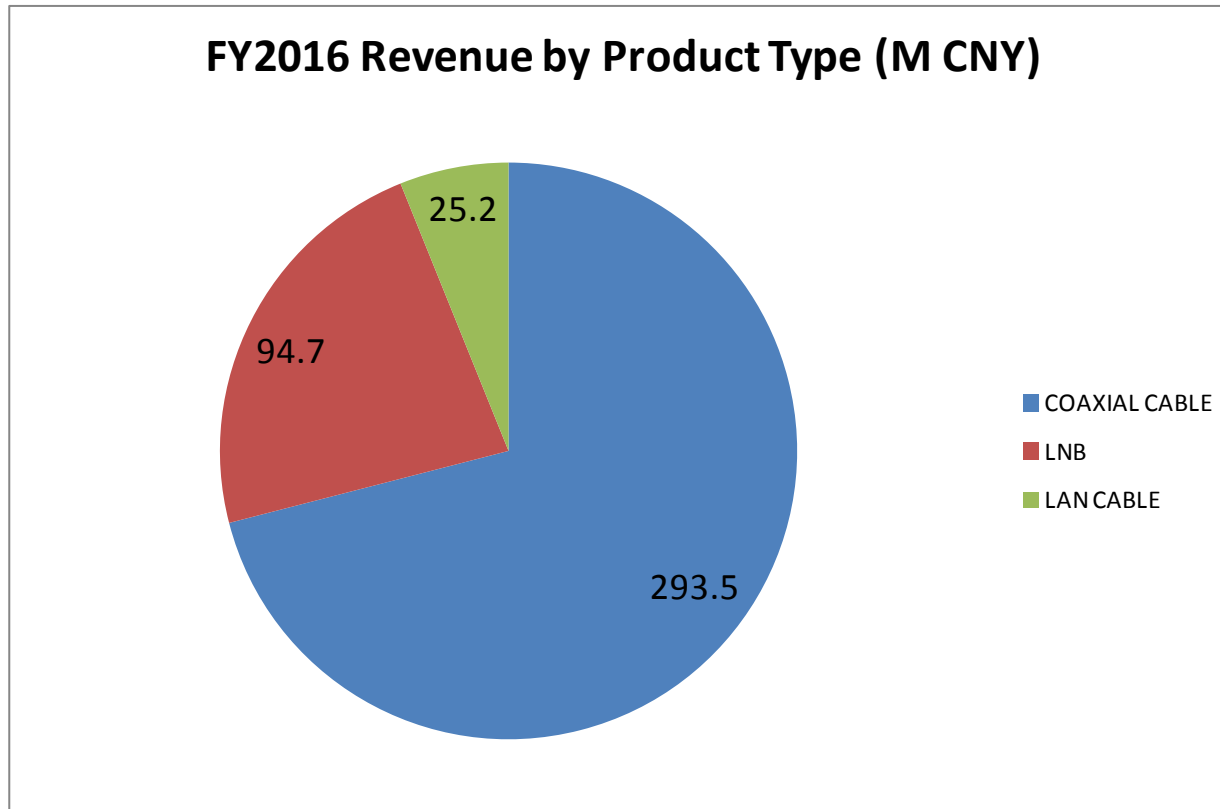
- Dedicated Facilities capable of producing 1,000,000+ units per month.
- Currently producing as OEM for Satellite TV Industry in **South America ,Europe, Asia, Middle East market**



Shengyang Revenue 2014-2016



Revenue breakdown per product type FY2016



Total LNB Volume:
12M units

60% Single
25% Twin
10% Quad
5% Switch, Octo